## FACTORS INFLUENCING STUDENTS' DECISION TO SELECT MATHEMATICS IN FURTHER STUDY

THESIS SUBMITTED BY

NGAWANG CHHIRING TAMU

PRITHVI NARAYAN CAMPUS

ROLL NO: 204/071

SYMBOL NO: 480027

T.U. REGD. NO: 9-1-48-2043-2007

# IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE MASTER'S DEGREE OF MATHEMATICS EDUCATION

ТО

## THE DEPARTMENT OF MATHEMATICS

## MATHEMATICS EDUCATION

## PRITHVI NARAYAN CAMPUS POKHARA

### TRIBHUVAN UNIVERSITY

JANUARY, 2020

#### **ACKNOWLEDGEMENT**

I would like to thank especially Mr. Bishnu Thapa, a lecturer of Department of Mathematics, Prithvi Narayan Campus, Pokhara for his proper guidance as a research supervisor. His honesty and availability helped me to finish my research within the expected time period.

I would like to extend my special thanks to Lecturer Mr. Maheshwor Pokharel, a member of research committee and Lecturer Mr. Gangadhar Paudel, a member of the Department of Mathematics, Prithvi Narayan Campus, Pokhara for assisting and providing me the required feedback. Similarly, I would like to express my sincere gratitude to Dr. Tribhuvan Sharma, the Head of Department of Mathematics, Prithvi Narayan Campus, Pokhara for his meaningful suggestions and encouragement to carry out the research.

I would like to thank all those headmasters and mathematics teachers for giving me permission to generate my research and for their valuable coordination during my research.

I am extremely obliged to my family members who are always there to support me in any way possible. Similarly, I am very thankful to my business partner Miss. Michelle Welsch and my staff Soni Gurung and Hema Gurung created a comfortable environment for my study.

Last but not the least, I would like to thank my friends Hema Gaha and Sunil Lamichhane for helping me providing good suggestions and cooperation.

#### Ngawang Chhiring Tamu

#### Date: 2076/10/10

#### ABSTRACT

This study has been carried out to find the "factors that influence students' decision selecting mathematics in higher study". Particularly, this study aims to find out the factors that impact students' decision. It also seeks to give suggestions to curriculum makers and the mathematics education. The previous research, which have already done that dealt with issues regarding high schools' mathematics and they are limited to narrow topics. In fact, those researches have been unable to study a bit broader one and nobody has ever tried to find the factors influencing students' decision choosing mathematics in higher study, Especially in Nepal. So, I found this gap between the researches which have been already conducted. To fill the gap, I conducted this study. I used qualitative research and did one-on-one interviews with the students and teachers to collect responses from five secondary schools including three public and two private in Kaski district. I targeted ten students and two teachers to get responses from. The study shows that there are eight main factors that influence students' decision, among them the "students' performance" stands as the main factor. This study is able to find some interesting facts that would have many benefits for students, teachers, parents, curriculum makers and education policy makers as well. Through the interviews with participants, the researcher came to know that the popularity of mathematics in higher study is decreasing day by day. Even students who are choosing to study mathematics in secondary school, they are less likely to select mathematics in higher study.

## TABLE OF CONTENTS

RECOMMENDATION LETTER	i
LETTER OF ACCEPTANCE	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF TABLE	vi

CHAPTER	PAGE NO
I: INTRODUCTION	(1-6)
Background of the Study	1
Statement of the Problem	4
Objective of the Study	5
Research Questions	6
Significance of the Study	6
Limitation of the Study	6
II: LITERATURE REVIEW	(7-13)
Review of Related Literature	7
III: METHODOLOGY	(14-16)
Methodology	14
Design of the Study	14
Study Size	14
Sample of the Study	15
Tool of the Study	15
Procedure	15
Data Analysis Procedure	16

IV: ANALYSIS AND INTERPRETATION	(17-29)
Major Subject they Choose before SEE	17
Mathematics Anxiety	18
Environment	19
Parents' Decision	20
Financial Decision	21
Students' Performance	21
Mathematics Experience Overall	22
Difficult to Make Mathematical Concepts	23
Memorizing Formulas	24
Job Opportunities	25
Applied Mathematics	26
Mathematics Learning Environment	26
Teacher Related Factors	27
Teacher Training	27
Accessibility of Teaching Materials	28
Consultation with Teachers	29
V: FINDINGS AND CONCLUSIONS	(30-38)
Findings	30
Findings Based on Students' Responses	30
Findings Based on Teachers' Responses	30
Conclusion	31
Limitation of the Study	32
Suggestion for the Future Research	33
References	(34-35)
Appendices:	
Appendix-A: List of Students and Teachers	

Appendix-B: Semi Structured Interview Questions