

**FACTORS AFFECTING LOW PARTICIPATION OF GIRLS IN
OPTIONAL MATHEMATICS**

**A
THESIS**

**BY
MADHU KUMARI RAY**

**FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF EDUCATION**

SUBMITTED

TO

DEPARTMENT OF MATHEMATICS EDUCATION

CENTRAL DEPARTMENT OF EDUCATION

UNIVERSITY CAMPUS

TRIBHUVAN UNIVERSITY

KRITIPUR, KATHMANDU

2016

**FACTORS AFFECTING LOW PARTICIPATION OF GIRLS IN
OPTIONAL MATHEMATICS**

**A
THESIS
BY
MADHU KUMARI RAY**

**FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF EDUCATION**

**SUBMITTED
TO
DEPARTMENT OF MATHEMATICS EDUCATION
CENTRAL DEPARTMENT OF EDUCATION
UNIVERSITY CAMPUS
TRIBHUVAN UNIVERSITY
KRITIPUR, KATHMANDU**

2016

Letter of Certificate

This is to certify that Mrs. Madhu Kumari Ray, a student of academic year 2067-2068 B.S. with thesis number 1021, Exam Roll No. 281449/068, Campus Roll No. 238/067 and T.U. Regd. No. **9-2-15-1818-2006** has completed her thesis under my supervision during the period prescribed by the rules and regulations of T.U. Nepal. The thesis entitled "**Factors Affecting Low Participation of Girls in Optional Mathematics**" embodies the result of her investigation conducted during the period of 2015-2016 to the Department of Mathematics Education, University Campus, Tribhuvan University, Kirtipur Kathmandu. I recommend and forward that her thesis be submitted for the evaluation to award the Degree of Master of Education.

.....

(Mr. Lok Nath Bhattarai)

Supervisor

.....

(Assoc. Prof. Laxmi Narayan Yadav)

Head

Date



त्रिभुवन विश्वविद्यालय
शिक्षा शास्त्र संकाय
शिक्षा शास्त्र केन्द्रीय विभाग
TRIBHUVAN UNIVERSITY
FACULTY OF EDUCATION
CENTRAL DEPT. OF EDUCATION

विश्वविद्यालय क्याम्पस
कीर्तिपुर, काठमाडौं, नेपाल
टेलिफोन नं. ४३३१०३२
UNIVERSITY CAMPUS
Kirtipur, Kathmandu, Nepal
Phone No, 4331032

पत्र संख्या:-
Ref.

मिति:.....
Date:

Letter of Approval

Thesis submitted by

Madhu Kumari Ray

Entitled

"Factors Affecting Low Participation of Girls in Optional Mathematics " has been approved in partial fulfillment of the requirements for the Degree of Master of Education.

Committee for the Viva-Voce

Signature

Assoc. Prof. Laxmi Narayan Yadav
(Chairman)

.....

Prof. Dr. Hari Prasad Upadhyay
(Member)

.....

Mr. Lok Nath Bhattarai
(Member)

.....

Date:

Acknowledgement

First of all, I would like to express my deep gratitude to my respected research supervisor Mr. Lok Nath Bhattarai, Lecturer, Department of Mathematics Education for his regular and constant guidances and suggestions. Similarly, my profound gratitude goes to Mr. Laxmi Narayan Yadav, Head, Department of Mathematics Education, T.U., Kirtipur, who extremely helped me by providing his valuable time, ideas, techniques and information during the research work from beginning to the end. His enthusiasm, patience, kindness and generosity are ever memorable.

At the same time, I would like to express my sincere gratitude to Prof. Dr. Hari Prasad Upadhyay, Prof. Dr. Min Bahadur Shrestha, Mr. Bed Prasad Dhakal and Mr. Krishna Prasad Adhikari, Department of Mathematics Education, T.U. Kirtipur, for their valuable suggestion. Similarly, I would like to express my sincere appreciation to all my respected teachers of Department of the Mathematics Education, T.U., Kirtipur for their suggestion, encouragements and support in my study.

I am very grateful to all the respondents of schools for their co-operation during data collection. I would like to give special thanks to my friend Mr. Hari Shanker Mandal, Sanjay Yadav, Arun Kumar Yadav and all my other friends for their co-operation and support during this work. I remember my family forever for their co-operation and support in completing my study. Lastly, I express my thanks to Mr. Durka Man Maharjan of Durka Computer System, Naya Bazar, Kirtipur for his computer typing, formatting and printing.

.....
Madhu Kumari Ray

ABSTRACT

The study entitled "**Factors Affecting Low Participation of Girls in Optional Mathematics**" aims at finding out the factors that affect the low participation of girls in optional mathematics. In order to fulfill the objective of the study, the researcher selected all secondary level girls of academic year 2072 of Bara district as a population. She collected the data from sampled population of one hundred twenty girl students and twenty math teachers from ten schools, five from urban area and another from rural area. Schools were sampled through non-purposive random sampling procedure. The research design of the study included survey design. The researcher used two tools to collect data. They were interview and questionnaire. After collecting the data, the researcher analyzed and interpreted the data in the percentage form and presented them in the tables. Triangulation was adopted to maintain the validity and reliability of the information.

The findings of the study show that interest of the girls' students, teacher's qualification, students as well as parents' expectation and their views and beliefs directly influenced on girl's participation in optional mathematics. Similarly, home environment such as gender bias at home, practice time given to solve problem, study hour at home, teacher and peers' behaviour towards girls had also direct influence on their participation in optional mathematics. Girls felt difficulty in reading, comprehending the overall meaning of mathematics and make mistake in solving the mathematical problems were the factors affecting mathematics achievements of girls. Thus, girls had very low participation in mathematics class. They were almost absent in class and had low interest in mathematics. More importantly, rural girl students were comparatively poor in learning mathematics.

TABLE OF CONTENTS

	Page No:
<i>Letter of Approval</i>	<i>i</i>
<i>Letter of Certificate</i>	<i>ii</i>
<i>Acknowledgement</i>	<i>iii</i>
<i>Abstract</i>	<i>iv</i>
<i>Table of Contents</i>	<i>v</i>
<i>List of Tables</i>	<i>vii</i>
Chapters	
I. INTRODUCTION	1-7
Background of the Study	1
Statement of the Problem	4
Objectives of the Study	5
Significance of the Study	5
Delimitation of the Study	6
Operational Definition of the Key Terms	7
II. REVIEW OF THE RELATED LITERATURE	8-16
Review of Theoretical Literature	8
Empirical Literature Review	11
Implications of the Review for the Study	13
Conceptual Framework	15
III. METHODS AND PROCEDURES	17-19
Design and Method of the Study	17
Population and Sample of the Study	18
Study Areas/Field	19

Data Collection Tools and Techniques	19
Data Collection Procedures	19
Data analysis and Interpretation Procedure	19
IV. ANALYSIS AND INTERPRETATION OF DATA	20-34
Student Related Factors	20
Teacher-related Factors	22
School-related Factors	26
Home-related Factors	29
Society-related Factors	31
V. SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS	35-42
Summary of the Study	35
Findings of the Study	36
Conclusion	37
Recommendations	39
) Recommendation for Policy Level	39
) Recommendation for Practice Level	41
) Further Research Related	41

REFERENCES

APPENDICES

LIST OF TABLES

Table	Page No.
4.1 Weighted Means for Student Related Factors	21
4.2 Weighted Means for Teacher Related Factors	24
4.3 Weighted Means for School Related Factors	27
4.4 Weighted Means for Home Related Factors	30
4.5 Weighted Means for Society Related Factors	32