2022

Α

## THESIS

ΒY

## **RAMESH GHIMIRE**

## IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

## MASTER IN MATHEMATICS EDUCATION

SUBMITTED TO

DEPARTMENT OF MATHEMATICS EDUCATION

**CENTRAL DEPARTMENT OF EDUCATION** 

UNIVERSITY CAMPUS

TRIBHUVAN UNIVERSITY

KIRTIPUR, KATHMANDU

2022

#### LETTER OF CERTIFICATE

This is to certify that Mr. Ramesh Ghimire, a student of academic year **2072/73** with Campus Roll Number **426**, Thesis Number **1512**, Exam Roll Number **7228370** and TU Registration Number **9-2-180-29-2011** has completed his thesis for the period prescribed by the rules and regulations of Tribhuvan University, Kirtipur, Kathmandu, Nepal.

This thesis entitled **"Mathematics Teachers' Perception on Their Profession**" has been prepared based on the results of his investigation. I hereby recommend and forward that his thesis be submitted for the evaluation as the partial requirements to award the degree of Master of Education.

Date: 24 March 2022

(Prof. Dr. Bed Raj Acharya)

Head of the Department

### LETTER OF APPROVAL

This thesis entitled **''Mathematics Teachers' Perception on Their Profession**" submitted by Mr. Ramesh Ghimire for partial fulfillment of the requirements for the Master's Degree in Education has been approved.

Viva-Voce Committee	<u>Signature</u>
Prof. Dr. Bed Raj Acharya	
(Chairman)	
Assoc. Prof. Laxmi Narayan Yadav	
(External)	
Prof. Dr. Binod Prasad Dhakal	
(Member)	

Date: 6 April 2022

#### **RECOMMENDATION FOR ACCEPTANCE**

This is to certify that Mr. Ramesh Ghimire has completed his M.Ed. thesis entitled **''Mathematics Teachers' Perception on Their Profession**" under my supervision during the period following the rules and regulations of Tribhuvan University, Kirtipur, Kathmandu, Nepal. I recommend and forward his thesis to the Department of Mathematics Education to organize final viva-voce.

Date: 6 April 2022

.....

Prof. Dr. Binod Prasad Dhakal

Supervisor

#### DECLARATION

This thesis contains no material which has been accepted for the award of other degree in any institutions. To the best of knowledge and belief, this thesis contains no material previously published by any authors except due acknowledgement has been made.

.....

Ramesh Ghimire

#### © 2022

## Copyright @ Ramesh Ghimire

This document is copyright material. Under law, no parts of this document may be reproduced without the expressed permission of the researcher.

All Rights Reserved

Defense Date:

## Dedication

To My Respected mother

Sita Ghimire

#### ACKNOWLEDGEMENTS

I would like to thank several individuals for making the completion of this thesis possible. First of all, I would like to thank my thesis supervisor Prof. Dr. Binod Prasad Dhakal, for providing invaluable advice, guidance, insight and encouragement which are ever memorable. His efforts made me complete and present this research work in this form. Thank you for believing in my ability to create a finished product worth being proud of.

I would like to express my gratefulness to Prof. Dr. Bed Raj Acharya, Head of the Department of Mathematics Education, Kirtipur, who provided me the opportunity to write this thesis. I equally owe my sincere gratitude to my external supervisor Assoc. Prof. Laxmi Narayan Yadav and all the respected Professors, Readers and Lecturers of Department of Mathematics Education, Kirtipur for their valuable cooperation, comments and suggestions to bring this thesis into present form.

Finally, to my family and friends: there are not enough words to express my deep gratitude for all of your love and support. Especially, my thanks go to my friend Amrit Bhandari and Ganesh Pathak who helped me in every situation during this study. I could not have persevered without having all of you to lean on. Thank you all for providing the guidelines and supports, you have done, in any way, for me.

.....

Ramesh Ghimire

#### ABSTRACT

This is a survey research related to find the mathematics teachers perception on teaching profession. The purpose of this research was to find the difference between mathematics teachers' perception on their profession on the basis of gender, the place of origin and stream of education. To accomplish this objective, the researcher used the purposive sampling design with stratified techniques. The sample of the study contained 110 secondary level mathematics teachers including 38 schools from banke district in Nepal. There were two research questions to determine differences in perception of mathematics teachers about teaching career and individual beliefs in teaching profession viewed by others on the basis of their gender, area and stream of education. The researcher surveyed a questionnaire that contained 35 items which are related to teaching career and individual beliefs in teaching profession viewed by others. The researcher analyzed the questionnaire data using both descriptive and inferential statistical techniques by performing SPSS 22.0 setting 0.05 levels of significance. The results of this research showed that there is a positive perception on teaching profession of mathematics teachers. It also showed that there is significance difference between female and male mathematics teachers perception on teaching profession. And, there is significance difference between mathematics teachers from rural and urban on the perception on teaching profession. But, there is no significance difference between teachers from education background and non education background on the perception on teaching profession.

## CONTENTS

	Page No.
Letter of Certificate	i
Letter of Approval	ii
Recommendation for Acceptance	iii
Declaration	iv
Copyright	V
Dedication	vi
Acknowledgement	vii
Abstract	viii
Contents	ix
List of Tables	xiii
List of Figures	xiv
Abbreviations	XV
Chapters	
I: INTRODUCTION	1-8
Background of the Study	2
Statement of the Problem	3
Objectives of the Study	5
Research hypothesis	6
Justification of the study	6

	Delimitation of the study	7
	Definition of the terms	7
II: F	REVIEW OF RELATED LITERATURE	9-21
	Job Satisfaction, its Levels, Dimensions and Factors	9
	Theoretical Literature	11
	Empirical Literature	13
	Conceptual Framework of the Study	19
III:	METHODS AND PROCEDURES	22-27
	Design of the Research	22
	Population of the Study	22
	Sample of the Study	22
	Research Instruments	23
	Survey questions in Different Categories	23
	Pilot Test	24
	Validity and Reliability	24
	Reliability test	25
	Summary Item Statistics	25
	Data Collection	26
	Data Analysis Procedures	26
	Ethical Consideration	26
IV:	ANALYSIS AND INTERPRETATION OF DATA	28-48
	Analysis and Interpretation of Data	28
	Teachers' Perception on Their Profession	29
	Teachers' Perception on Different Aspects of Their Profession	29
	Comparison of Teachers' Perception on Their Career	31

Comparison of Male and Female Teachers' Perception on Their Career	32
Comparison of Rural and Urban Teachers' Perception on Their Career	34
Comparison of Education and Non Education Background Teachers'	
Perceptionon Their Career36	
Comparison Teachers' Perceived Individual Beliefs in Teaching	
Profession Viewed by Others	38
Comparison of Male and Female Teachers' Perceived Individual	
Beliefs on Their Profession Viewed by Others	40
Comparison of Rural and Urban Teachers' Perceived Individual	
Beliefs on Their Profession Viewed by Others	42
Comparison of Education and Non Education Teachers'	
Perceived Individual Beliefs on Their Profession Viewed by Others	44
Comparison of Teachers' Perception on Their Profession	
On Different Categories	47
V:SUMMARY, FINDING, CONCLUSION AND RECOMMENDATI	ON
FOR THE FUTHER RESEARCH	49-52
Summary	49
Findings of the Study	50
Conclusions	51
Implication of the Study	51
Implication for Further study	52

\

## References

## Appendices

## List of Tables

Table 1: Survey questions in Different Categories	23
Table 2: Reliability test	25
Table3: Summary Item Statistics	25
Table4: Teachers' Perception on Their Profession	29
Table5: Teachers' Perception on Different Aspects of Teaching Profession	29
Table6: Comparison of Teachers' Perception on Teaching Career	31
Table7: Comparison of Male and Female Teachers' Perception on	
Teaching Career	33
Table8: Comparison of Rural and Urban Teachers' Perception on	
Teaching Career	35
Table9: Comparison of Education and Non Education Teachers'	
Perception on Teaching Career	36
Table10: Comparison Teachers' Perceived Individual Beliefs in	
Teaching Profession Viewed by Others	37
Table10: Comparison of Male and Female Teachers' Perceived Individual	
Beliefs in Teaching Profession Viewed by Others	39
Table10: Comparison of Rural and Urban Teachers' Perceived Individual	
Beliefs in Teaching Profession Viewed by Others	41
Table10: Comparison of Education and Non Education Teachers' Perceived	
Individual Beliefs in Teaching Profession Viewed by Others	42

## Table10: Comparison of Teachers' Perception on Teaching Profession

0	n Different Categories	44
List of Figures		
Figure 1:	Conceptual Framework of the Study	20

## Abbreviations

3D	: Three Dimensional
AD	: After the Death of Christ
BCE	: Before Christ Era
d.f.	: Degree of freedom
Т	: T-distribution
ICT	: Information and Communication Technology
i.e.	: That is
NCTM	: National Council of Teachers of Mathematics
SD	: Standard Deviation
TU	:Tribhuvan University
SPSS	:Statistical Package for Social Science
TAI	:Teacher Attitude Inventory
SQ	:Survey Question
<del>x</del> :	: Mean
r	: Reliability of coefficient
	: Level of significance
%	: Percentage

#### **CHAPTER I**

#### **INTRODUCTION**

Mathematics is essential for understanding variousdisciplines. Without the knowledge of mathematics, it is very difficult for the better understanding of other disciplines like economics, Social Science, Physics, chemistry and so on. In this connection, Roger Bacon (1968) says "Mathematics is the gate and key of science. Neglect of mathematics causes injury to all knowledge, since he/she is ignorant of it cannot know the other Sciences or things of the world. And what the result is? It is that it produces such the worse men who are thus ignorant and so do not seek a remedy". But, mathematics needs to have competitive knowledge and skill in solving the daily life problems. This implies that students having strong abilities in mathematics get success easily in each level. Mathematical abilities are not only affected by the intuitive power of the student, but it is also affected by so many secular factors.

Mathematics has been accepted as an important component of formal education from ancient period to the present day. People have been utilizing mathematics to solve the difficulties arisen due to natural calamities. Political propose, economic development planning and other social event can be planning and other social event can be perceived from the early history of mathematics of different civilization. Mathematics is taken as the science of all science and the art of all arts. It is also the queen of science. Today mathematics is used in every activity to mankind, mathematics is so many significant to human lives that no one is the main subject, taught all is considering as essential for all citizen. The usefulness of mathematics is worshipped in different way.

#### **Background of the Study**

Education plays a very important role in any advanced and backward countries. No Country can dream of increasing the socio-economic status of its population without a strong educational system. Strong educational system depends on the quality of education that is provided to the population of the countries. The quality of education depends on the countries budgetary allocation to the education and the teaching learning process. For the teaching learning process teachers are the fundamental aspects of formal educational system. In the classroom, the teacher is a change agent and is responsible person for the reconstruction of the society. Hence it is said that the education is an instrument for the social change. As Ruskin's says" teaching is a painful, continuous and difficult work to be done by kind kindness". A number of studies have been conducted to assess the influence of attitude towards teaching on the teacher's performance inside and outside the classroom and the factors which have bearing open it.

In a society, people are inter-dependent with each other through various types of jobs. Some produce crops, some manufacture tools, some transports products and some teach how to do all these things. Though, all the jobs have same values. Because of the inequality in the perceived significance among the jobs, there is stratification in training for the job, remuneration and social prestige of the workers.

Hussian (2002), states that the whole process of education is shaped and molded by the human personality called the teachers', who play a pivotal role in any system in education. It is the challenging profession and only those teachers' can shoulder the heavy responsibilities of nation building that have positive professional attitude and perception, satisfaction and commitment. The quality and performance of teachers' have always were a focus on concerns in education and teacher education research (Ballou &Podgursky, 1997). The quality of teaching is not only governed by the qualification, knowledge, skill and competence of teachers but also their positive perception, enthusiasm, dedication, commitment and willingness in teaching (Chan,2002). When a teacher is motivated and loves his/her profession, the students not only learn content taught by the teacher, but the students are also motivated towards learning (Czubaj, 1996). As well all know that youths (students) are the pillar of nation. When the students are motivated towards learning, they can contribute for the better of the nation.

#### **Statement of the Problem**

Teaching profession is not a new area of research and different approaches have been used in order to explain it. Teaching profession is based on vocational and personal skills and competencies, involves professional and ethical standards and models and entails a continuous process of professional development. In different countries, the recent implemented changes and reforms in educational field require teachers to demonstrate ongoing competences in their roles and adapt to new job requirements. Teachers' are often pressed to do more work with fewer resources and are required to obtain high outcomes in their professional activities. Extensive quantitative and qualitative research was based on investigation of teacher's beliefs and perceptions of their professional activity, job satisfaction, and motivation. Teacher's make decisions in teaching activity based on their experiences, perceptions, values and beliefs about their roles, activities and responsibilities in school. So many Researches has indicated that positive attitudes and perceptions are fundamental for effective teaching and teachers believe, perception and attitudes affect their practice and influence the student's performance, (Eggen&Kauchak, 2001). In order to understand teachers' attitudes, job satisfaction has been recognized as extremely

important for implementing any type of education reforms, for involving the teachers' in life-long learning and for the quality of the teaching learning process. As a process by which people attach meaning of experience (Eggen&Kauchak, 2001),theperception of teaching profession helps teachers to gain meanings and to understand the different aspects, experiences, roles and responsibilities and practices from their professional activity. The teachers psychological experiences and their perception of their work place can be sources of stress that have the potential to undermine teachers' effectiveness (Ransford et. Colab, 2009).

Teacher shortage are often subject related to Math and Science in new york, the southern regional education reported math teachers to be in short supply, in part because teachers in the math field could sometimes triple their salary in the computer field (Rodda,2000). A survey of 5000 middle and secondary mathematics teachers by National mathematics teacher Foundation [NMTF] (2000) revealed two major reasons why mathematics teachers gave for considering quitting teaching was their dissatisfaction with teaching. The second major reason was to pursue another career. When asked if they were considering leaving teaching approximately one out of three responded yes, with respondents having (1-15) years of experience (NMTF, 2000).

As a mathematics teacher, I know that in most of the vacancies advertised by various schools for the post of mathematics subjects, no candidate has applied till the last date of advertisement. In addition, there is a comparative reduction in the member of students studying mathematics in the university campuses and the constituent campuses of the university campuses. For instance, in academic year 2072/73, there were four sections of mathematics subject in Tribhuvan University and there were 50 students in each section but in academic year 2077/78, there is only one section of mathematics education. Also, there is a growing tendency among the new generation

to go abroad for better living standards, which has led to an exodus of talent from the countryi.e. brain drain. There is the shortage of mathematics teachers will be severe in the distance future if the talents continue to flee.From the above, there will be a crisis for mathematics teachers in the coming years. Furthermore, there is a growing tendency among the teachers involved in the teaching profession to leave the teaching profession and go to other professions. It cannot be denied that there will be shortage of teachers if the manpower involved in the teaching profession goes to other professions. Why did this happen? Will there be a shortage of math teachers in the future? Do mathematics teachers want to change their profession? What teachers think about their profession? Are they happy and satisfied with their profession? Such questions will make the researcher study about the perception of the mathematics teachers' towards their own perception. Hence this research intends to answer the following research questions:

- ) To what extends are their differences in the attitude of mathematics teachers' about teaching profession?
- ) Is there any significance difference between the perception of male & female, rural & urban and different stream of education (education/ non education) on teaching profession?

#### **Objectives of the Study**

Following were the objectives of the Study:

- ) To compare perception of male and female teachers on teaching profession.
- ) To compare perception of rural and urban area`s teachers on teaching profession.
- ) To compare perception of teachers' with education and non education academic background.

#### **Research Hypothesis**

The researcher formulated the following null hypothesis.

H<sub>0</sub>: There is no significant differencebetween the perception of male and female teachers' towards their profession.

H<sub>0</sub>: There is no significant difference between rural and urban areas' teachers' perception on teaching profession.

H<sub>0</sub>: There is no significant differencebetween the perceptions of education and non education academic background teachers' towards their profession.

#### Justification of the Study

"Mathematics is intimately involved in everyday life" (Devkota, 2008, p. 174 - 175). According to Mr.Devkota, the use of mathematics has been a part of human activities ever since human beings came into existence. When man first wanted to answers the questions; how many; how much; how big; etc. invented mathematics. Therefore, we can say that mathematics emerged from the needs of people. As we know that Nepal is developing country and the population is increasing rapidly, to develop the country, the quality of education is required. To provide quality of education to the students and to make education sector stronger, the nation must have record of potential teaching force. This study is concerned with the perception of mathematics teachers to teaching profession in the bank Banke district. Thus, the justification of this study is as follows: -

- ) This studyhelps to the mathematics teachers' perception on teaching profession.
- ) This study reflects the view of own perception of his or her profession.
- ) This study would be helpful for policymaker, educationist and students to find the perception of teachers' about their profession.

) This study would be helpful for future research at the secondary source of data.

#### **Delimitations of the Study**

Delimitations are boundaries of that are set by the researcher in order to control the range of the study. This study was concerned with the perceptions of secondary level mathematics teachers' to teaching profession in the Banke district. This study was conducted on secondary level mathematics teachers who teach in public and institutional schools. The delimitations of the study were as follows:

- ) This study was limited only in Banke district.
- ) This study was limited to find out the perceptions of mathematics teachers on their profession.
- ) This study was limited up to 35 statements to find out the perception of mathematics teachers' about their perceptions

#### **Definition of Terms**

**Profession.** In order for profession to be called profession it must have some indictors which have been accepted by the majority at a level of universe. Profession is the knowledge that a person needs to fulfill his/her needs. It can be anything physical or mental. It also provides for professional development.

**Teaching profession.** Teaching profession is among the oldest profession dating back to the 3rd century BCE. But current there have been debate on whether teaching is a profession or not. According to European traditional thinking, there were only four professions. These professions engaged people with a certain commitment to define principles and came up with four professions. Others were not qualified to be profession and remained to be called jobs or occupations. According to this thinking the four professions were doctors, lawyers, engineers and the clergy. Leaving this thinking, teaching has been a traditional profession which has the following criteria; (a) Knowledge base (b) Teacher's autonomy (c) Teacher's ethics / codes of conduct (d) Teacher's regulatory body / organization.

**Perception.** Perception is the process through which people take raw sensations from the environment and interpret them, using knowledge, experience and understanding of the world, so that the sensation become meaningful experiences.

#### **CHAPTER II**

#### **REVIEW OF RELATED LITERATURE**

This chapter is devoted to the discussion of related literature and related researches. This researcher went through books, journals and research studies conducted in national and international level to search how teachers' perceived their own perception on the basis of gender, area (location) and stream of education. In this chapter, the researcher has listed reviewed of some related document.

#### Job Satisfaction, its Levels, Dimensions and Factors.

Job satisfaction of teachers is essential for continuing growth of education system around the world, in which teachers are crucial element of educational opportunity, structure and success. Good working environment and its improved conditions were found the main factors of the job satisfaction of the teachers (Sirima&Poipoi, 2010). Job satisfaction of public sector teachers was not found homogeneous. Socio-economic and demographic factors had a great effect on job satisfaction level such as female young teacher's job satisfaction level was found statistically significant. No significant relationship was found between teacher's job satisfaction and their demographic variables such as gender, age, marital status, academic qualification and professional grade. Whereas, the significant relationship was found between job satisfaction levels and variables such as the age and teaching experience, which were found the best predicators of teacher's job satisfaction (Murage & Kibera, 2014). The demographic variables such as age and work place were found the factors that affect the job burnout in order to maximize the job satisfaction. Because, the negative consequences of job burnout are too costly for organizations, which directly and negatively affect the job satisfaction level of teachers and the quality of education (Goswami,2013).

Teachers were found satisfied by monetary, non monetary incentives, community support, fair remuneration packages, opportunity for career development, a welldefined individual appraisal system timely promotion, work place conditions, friendship, colleagues cooperation, the respect of community to its members, student's success and cooperation, sense of duty and responsibility. These all explored factors revolving around main three themes such as satisfaction with monetary incentives, school and the work environment, and the society and its rituals (Nyamubi,2017). Administrative support, compensation, human relation, professional development and labour safety factors were found directly associated with the job satisfaction of teachers. Enhancing the job satisfaction and motivation of teachers is the main solution to increase work performance in order to prevent the risk factors of teachers burnout (Wang & Tran, 2015). Working and sympathetic relationship; work assignments and workload; financial and fringe benefits were found the top most dimensions and factors of job satisfaction of the majority of teacher educators (Sahito&Vaisanen, 2016). The 55% high school teachers were found highly satisfied with their job due to high job security, attractive market based salaries, professional growth, development and training, and fringe and other benefits were found the main positive factors teacher's job satisfaction (Parveen, Sahito, Gopang, & Khamboh, 2015). Job security interpersonal and intrapersonal relations involvement of teachers in decision making, moderate working hours, flexible curriculum and good communication network were the prime factors of job satisfaction of teachers (Christopher, 2014). The relationship between teacher job satisfaction and institutional undertakings in the context of public and private schools of Karachi, Pakistan was explored through questionnaire. Working conditions, principal's leadership styles,

collegial support, monetary rewards and career advancement were found significantly and positively related to teacher's job satisfaction (Rahim & Razzak,2013).

#### **Theoretical Literature**

Researches and theories are interrelated and inseparable. A theory provides a conceptual framework for research in term contribute to the development of theory. A theory plans and directions the research studies. Any philosophies must be supported by any theory for is pedagogical implementation. Thus, all aspects of this research is related to theory of perception. Perception, according to Yolanda Williams (2017), a psychology professor; can be defined as our way to recognize and interpret information we have gathered through our senses. This also includes how to respond to a certain situation with the given information (Williams, 2017). Psychology is the study of behavior and mental processes (milnes, 2017). Perception relates to psychology because as discussed in the notes, psychology is the study of behavior and mental processes, while perception is how we react to situations. Another word often associated with perception is sensation. They are often used interchangeably, however; sensation is the process of re-evaluating information from the world into the brain (Coren, Porac& Ward, 1984). We use our senses to detect and recognize something which then allows us to process the information and discover the emotions and react to the situation we see, which is perception.

There are two types of theory of perception; there is the self Perception theory, and the cognitive dissonance theory. There are many theories about different subjects in perception. There are also disorders that relate to perception even thought you may think perception is just a person's view point.

First, the self-perception theory, inspired by B.F. Skinner's analyses, is Individual come to "know" or better understand their own attitudes, emotions, and other personal States mostly by concluding them from observing their own behavior and the situations in which this behavior occurs. One example would be an individual who describes "butterflies in the stomach". We have all identified this feeling for ourselves, on our own (Bam, 1972).

The cognitive dissonance theory is a person having two thoughts that contradicts each other. For example, a person that thinks eating sugar is bad for you, but then continues to eat sugar because they believe that by not eating sugar, it wouldn't change anything, so nothing will change the current health and individual is in. These thoughts are contradicting, almost hypocritical. According to Leon festinger(1957), the existence of dissonance causes the individual to be psychologically uncomfortable, which then allows the individual to try to remain constant in his or her thoughts. Also, while the individual will try to avoid situations that include that subject that causes dissonance (Festinger, 1957).

Survey questions are used to understand a person's perception or opinion. To understand such perceptions, various questions are formulated to understand the response from the respondents. Attitudes and perceptions vary from person to person. So, self-perception theory and cognitive dissonance theory have been used in this research. Accordingly, it has been used in a set of questions created by a researcher to understand perception of a math teacher.

All the domain of this research; job satisfaction & happiness and individual beliefs in teaching profession viewed by othersare related to attitude and perception of the persons which are individual beliefs. For individual beliefs self perception and cognitive dissonance theory are used. So, this research is based on the theory of perception. In both the theories stated that different person has different thought, the ability to see, hear or become aware of something the senses. So, these theories help to understand the perception of mathematics teachers' on teaching profession.

#### **Empirical Literature**

The review of empirical literature of the study was very important and necessary. If researcher did not review this literature then the researcher cannot proceed ahead and cannot be clear about the research way, concept, design and analysis process. It provides the psychological, sociological, philosophical, contextual, historical knowledge, concept and traditional way of study.

When someone is satisfied with his/her job, that is job satisfaction or when any job is fulfilled one's expectation that is job satisfaction. It combines an individual's feeling and emotions about their and how their job affects their personal lives. How individual teacher's view their own profession is an important factor to their level of satisfaction beyond the classroom and school culture environment (Lortic, 1975). Paul Spectors (1985) defines job satisfaction as a cluster of evaluation feeling about the job. He identified nine facets of job satisfaction as pay, promotion, supervision, benefits, contingent procedures, operating procedure, nature of work, coworkers, communication. These above mentioned points play important roles in the satisfaction of teaching profession. The researcher reviewed the following literatures:

Singh (1974) conducted a study of the relationship between verbal interaction of teachers in classroom and attitude towards teaching. The findings revealed that; indirect influence, pupil talk, indirect to direct ratio, pupil initiation ratio, teacher response and question ratios instantaneous teacher response and question ratios appeared to be significantly related to attitude towards teaching in male and female groups, teaching subject groups and teaching classes. There was a significant relationship between attitude towards teaching and classroom verbal interaction of student teacher of secondary level. Lecturing, criticizing and justifying authority, direct influence and restrictiveness was found to be negatively correlated with attitude towards teaching in male and female groups and language, social study and Science Mathematics groups; Pupil talk, and pupil initiation ratio were found to be associated with attitude towards teaching in male and female groups; teaching subject groups and teaching classes. Teacher response ratio, teacher question ratio instantaneous teacher response and question ratios were found to be related to attitude towards teaching. The restrictiveness, restrictive feedback and negative authority were found to be negatively associated with attitude towards teaching and. The teacher talk was found to be independent of or not related to attitude towards teaching at any level.

Nevels and Ralph (1984) conducted a study on "Analyzing the relationship between teacher's self-efficacy perceptions and their professional commitment levels". The aim of this study is to determine teachers' perception and professional commitment levels and to determine whether their self-efficacy perceptions and professional commitment levels change according to various variables. This study was conducted with 349 teachers working at the district of van province of turkey. They used questionnaire as the tool of data collection which as categories in five likert's scale. And they used statistical tools for interpretation of the data. They conducted a study of the relation between teachers attitude toward professionalism and teacher's satisfaction/dissatisfaction with their job. The study revealed that (i) a significant inverse relationship was found between teacher autonomy and intrinsic facets of teacher job satisfaction. (ii) A significant inverse relationship was found between teacher autonomy and extrinsic facets of teacher job satisfaction. A significant inverse relationship was found between teacher autonomy and the total job satisfaction of teachers. (iv)Pay and chances of advancement are the greatest sources of dissatisfaction among these classroom teachers. (v) The chance to do things for others is the greatest source of satisfaction among these classroom teachers.

Bhaker (1996) conducted a study of "attitude of teachers towards teaching profession". The study revealed that; Pupil teachers of regular course were superior in attitude towards teaching profession than pupil teachers of correspondence course. Regular and continuous training improves the attitude of teachers towards teaching profession. In service teachers and pupil teachers were equal or similar in attitude towards teaching profession. Due to lack of in service training, the level of attitude remains the same. It showed that not only pre service training, in service training was also needed to maintain the quality of teaching. Male teachers were inferior in attitude towards teaching profession than female teachers. Female teachers shows more favorable attitude towards teaching profession then male teachers. Government school teachers have low attitude than private school teachers.

Beijaard, Verloop&Vermunt(1999) investigated the "Teachers' perceptions of professional identity: an exploratory study from a personal knowledge prospective". The purpose of this study was to investigate experienced secondary school teachers' current and prior perceptions of their professional identity. A questionnaire was used to explore the way teachers see themselves as subject matter experts, didactical exports and pedagogical experts. The sample of the study was 80 secondary teachers from 12 secondary Schools in the southwestern part of the Netherland. The teachers currently see their professional identity as consisting of a combination of the distinct aspect of expertise. Most of teachers current perceptions of their professional identity reportedly the significantly from their prior perceptions of this identity during their period as beginning teacher's. On the basis of their current perceptions of their professional identity, five groups of teachers could be distinguished. Also, teachers from differences subject's areas did not undergo the same changes in their perception of their professional identity.

Kafle(2002) studied on "A study on attitude of secondary level students and teachers towards compulsory curriculum". He selected for 15 teachers and 160 students from kavre district and concluded that second level students had a positive attitude where as teachers has negative attitude towards secondary level compulsory mathematics curriculum. The secondary level boys and girls had similar attitude towards compulsory mathematics curriculum. The mean attitude scores of students towards compulsory mathematics had no difference than their teacher's attitude scores on compulsory mathematics.

Rai (2004) conducted a research on "Attitude of teacher and students towards secondary level mathematics and student's achievement in Dhankuta District". The study was to investigate various information regarding to the relationship between attitude of trained and untrained teachers, attitude and achievement of student taught by trained and untrained teachers. The sample of this study included 20 teachers and 240 students in total from Dhankuta District. He classified the attitudes of teachers and students providing five category rating scales are as follows; i) strongly agree ii) agree iii) undecided iv) disagree v) strongly disagree for each item arranged in the likert's format. He found that secondary level trained mathematics teachers had positive attitude than untrained mathematics teachers. Attitude of students taught by trained teacher was good.

Bhattarai (2006) Studied on "Attitude of secondary level students towards mathematics (A case study of Kailali district)". He selected 112 boys and 95 girls purposively fromfour Secondary Schools.He used questionnaire having 48 statements based on modified fennema Sherman mathematics attitude scale. The findings of this

16

study are, the second level students had a positive attitude towards mathematics, both boys and girls students had a positive attitude towards mathematics, there was no significant difference between boys and girls attitude towards mathematics.

Chaisir (2012) did the research entitled on "Teachers perception of quality mathematics teaching". To find out the teacher's perception of quality mathematics learning. This study was based on the descriptive survey. To collect information, five teachers including administrator as well as trainers were taken as the participants. Using interview with the participants, the finding of the research showed that learning process and pillars of learning such as teachers, students and school climate as the dimensions of quality of math learning.

Khan, Nadeem and Basu(2013) conducted a study of "professional attitude: A study of secondary teachers". This study was conducted to examine the professional attitude of teachers at higher secondary level of education. The study sample comprised of 480 teachers taken from government higher secondary schools of Kashmir province. Teacher Attitude Inventory (TAI) having six subscales was administered to collect the data from sample teachers. Certain Statistical Techniques like percentage and t-tests were used to analyze the data. The results showedthat majority of the teachers were having moderate and less favorable attitude towards teaching profession and its allied aspects. This study yield the following important findings, majority of the teachers has a moderate or less favorable attitude towards teaching and is allied aspects. These teachers reported that teaching is a stressful profession. Science teachers establish a positive relationship with students and encourage them to seek education and to be more enthusiastic. The male teachers. They

consider teachers as role models for their students and understand that student have certain needs that must be met before learning can take place. Female teachers lack the Essential zeal required by the teaching profession.

Olufemi and James (2014), in this study "Gender Comparison of Attitude of Senior Secondary school students towards mathematics in Ekiti State, Nigeria". This study investigated the comparison of male and female students towards mathematics. This study employed descriptive research design of the survey type. The population for the study consisted secondary school of Ekite State, Nigeria. The sample for the study was 600 senior secondary school students consisting of 300 male and 300 female. They found that the attitude of senior secondary school students towards mathematics was positive and there was no difference between male and female students towards mathematics.

Bhattarai (2016) conducted a dissertation entitled "Mathematics teachers perception towards mathematics". This study was conducted with 120 teachers working at banke district. He used questionnaire and interview as the tools of Data Collection where questionnaire are categories in five likert's scale. And he used descriptive and inferential statistical tools for interpretation and analysis of the data. The study indicated that, there is no significant difference in perception of secondary level teachers towards mathematics, there is positive perception of secondary level mathematics teachers towards mathematics as male and female teacher, and there is no significant difference in perception between male and female teachers and education background and non-education background mathematics teachers towards mathematics.

Srilatha,(2017) conducted a study on "Differential Attitude of Student Teachers towardsTeaching Profession". She selected different kinds of domain in 18

teaching field such as trivial, non-trivial male and female student's teachers to analyzed using statistical tools as mean, standard deviation and student t- test. The finding of this research paper is (i) significant difference between the entry and exit attitude of student teachers towards teaching profession with respect to their gender is observed. (ii) Significant difference in the in entry and exit attitude of student teachers towards teaching profession is found with respect to the management, methodology and educational qualification. (iii) There is a significant difference the between the entry and exit attitudes of student teachers towards teaching profession with respect to female group, students studying in Govt. colleges and methodology and Qualification.

All the above Empirical literature are related in teacher's professional development, job satisfaction teaching efficacy, students teachers perception on teaching profession, in service and preservice teachers attitudes of teaching profession in abroad as well Nepal.

#### **Conceptual Framework**

A conceptual framework is graphical representation forms which depict the relation between the variables, brings clarity, focus to see and organized the research question more clearly. The following conceptual framework is constructed based on the theoretical framework with the consultancy of different theories and domain of the study related to this research and the help of literature review.



# Figure1: conceptual framework of mathematics teachers' perception on teaching profession

Perception is a broad concept, which differs from person to person. The purpose of this study is to identify the differences in perception regarding various elements of teaching mainly teaching career, and individual beliefs in teaching profession viewed by others on the basis of their locations, gender wise and education background wise. Much of the perception of the individual teacher derives from his or her own self-estimation to the career and working environment. The character and
personality of the specific teacher must surely play a major part in how they perceive their role. Is she or he happy and fulfilled in the career? Is there complete job satisfaction? Teaching should be deserving of respect and should carry a salary that befits the qualifications and level of work. However, there must be others who teach due to other reasons that may have little to do with either their aptitude or their preference in choice of career. A further factor that may bring about a positive or negative attitude in the teachers' psyche is the success rate of their pupils. A teacher would naturally be encouraged by a steady improvement in their students' development.

#### **CHAPTER III**

## **METHODS AND PROCEDURES**

#### **Design of Research**

"Research design is the conceptual structure within which research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data" (Creswell, 2003). The research designed was survey. The research method was designed to involve the collection of data through a questionnaire administered to the chosen population and answer questions pertaining to their perception of teaching profession. The researcher calculated averages of different categories with the help of excel. Statistical software package "Statistical Package for Social Science" (SPSS) was used for analysis of the data and testing the hypothesis. To analyze the differences in the perception of among mathematics teachers, t- test of two independents means were used.

#### **Population of the Study**

Population is defined as a group of individual with at least one common characteristic which distinguishes that group from other individual and groups (Best & Kahn, 2006, p.13). So, the population of the study was total number of mathematics teachers of Banke district.

# Sample of the Study

The purpose of selecting sample is to obtain data about population to draw the results (Gupta, 1991, p.4). For the purpose of selecting sample size of teachers from 38 secondary schools(community and institutional) from banke district, a purposive samplingor deliberate sampling was used. The total number of sample was 110 which are selected from stratified sampling method. There were 85 males and 25 females

whereas 68 from rural and 42 from urban and 59were from education background and 51 were from non education background.

#### **Research Instruments**

The data collection tool of this study was questionnaire. In the absence of an existing instrument as required by the nature of this study to identify perception of mathematics teachers, the researcher has developed a questionnaire (See Appendix 1) in order to meet the research objectives. A five-point Likert-type response instrument containing positively and negatively weighted 35 statements was using information from relevant literature, the experts and researcher's colleagues who have been in teaching field for long time. The statements were mainly in two categories: teaching career and individual beliefs in teaching profession viewed by others. There were 21questions altogether related to teaching career. There were14 questions altogether under individual beliefs in teaching profession viewed by others. The details of survey questions are given the table

Different Categories	Survey Questions (SQ)
A. For Teaching Career	
1. Job Satisfaction and Happiness	SQ: 1,5,8,9,10,15,19
2. Respectful Job	SQ: 2,6,11,34,35
3. Good Career	SQ: 3,13,16,18
4. Enough Income to Fulfill Basic Needs	SQ: 7,12,14,17,26
B. For Individual Beliefs in Teaching Profession Viewed by	
Others	
1. Students	SQ: 20,21,30,32
2. Colleagues	SQ: 22,23,24,33

Table 1 Survey Questions (SQ) in Different Cate	egories
---	---------

3. Parents	SQ: 4,25
4. Administrations	SQ: 27,28,29,31

# **Pilot Test**

Since this was survey research, it was necessary to prepare a scale to measure the perception of mathematics teachers'. The researcher prepared questionnaire ready using a five point Likert scale with the help of his colleagues, and the concept the researcher gained from the literature review. In the beginning, the researcher has prepared 40 questions. After consulting with supervisor, the set was modified and finalized to 35 questions. For the pilot test, people who study mathematics at Tribhuvan University in academic year 2072/73 are taken. For this, 25 mathematics students were select. When they tried to give them the survey questionnaires prepared for the pilot test, only 15 people responded, so the researcher prepared the pilot test from it. After collecting data, all the data were entered into excel 2007. The excel 2007 has given different results regarding different categories shown in the table 3.

#### Validity and Reliability

Validity is an indication of the "extent to which the instrument measures what it purposes to measure" (Tuckman, 1999, p. 200). Light, Singer and Willet (1990) defined reliability as "the extent to which two sets of measurements of the same characteristics on the same people duplicate each other"(p.165). According to the Mueller (1986), reliability is a necessary, but not sufficient condition for validity. Mueller stresses that "if an instrument is not measuring anything consistently (reliability), then it can't possibly be measuring the right thing (validity)" (p.63). Validity can be measured in internal and external ways (Alrecjk& Settle, 1995). For external validity, it can be approved by the exports (Alrecjk& Settle, 1995). Validity of instruments is important to the extent that it has close relationship with the testing the hypothesis (Hopkins & Hopkins, 1979). A reliable instrument enhances the power of tests. Cohen, Manion and Marrison, (2000) state "It is unwise think that threats to validity and reliability can ever be erased completely; the effects of these threats can be attenuated by attention to validity and reliability throughout a piece of research (p.105). Cronbach's alpha provides a lower-bound estimate for a test's reliability, using scores based on one administration of the test instead of test/retest or parallel-forms. A value of 0.7 - 0.8 is typically an acceptable value for Cronbach's alpha. Kline (1999) has noted that for cognitive tests such as intelligence test or ability tests cut-off of 0.7 is more suitable. The instrument adopted for this study, the values of Cronbach's alpha is 0.842 which is given in the table below:

 Table 2 Reliability Test of Questionnaire from Pilot Survey

Cronbach's Alpha	Number of items
0.842	35

Here; the cronbach's Alpha =0.842 (out of 35 questions in the survey)

Cronbach's Alpha above 0.7 is considered reliable. So, the researcher'spilot testing showed a reliable result.

### **Table 3 Summary Item Statistics**

	Mean	Min	Max	Variance	No. of items
Item means	3.65	2.03	4.65	0.234	35

According to Denbel (2015) and Shadaan and KwanEu(2013) mean value above 3.0 is considered good. Here, mean value of pilot test is 3.65, which is very good. In this way, researcher test reliability of pilot testing with 15 samples.

## **Data Collection**

The study was basically based on the data from the primary sources. Schools are initially identified based upon their area. After identifying the location of schools, the researcher has personally visited schools taking permission of school management or authorized persons and in agreement of the concerned teachers. They were requested to fill up demographic from and answer the questionnaire in presence of the researcher.

#### **Data Analysis Procedures**

The collected data was entered in excel first. The researcher calculated means of different categories with the help of excel2007 and SPSS was used for analysis of the data and testing significance of the hypothesis. To analyze the differences in the perception of mathematics teachers, t-tests of two independent means were used. The analyses were conducted at an alpha level of 0.05.

### **Ethical Consideration**

Ethical considerations play the significant role in research. This binds researchers within the periphery of norms and values. A researcher cannot successfully accomplish the task of research ignoring them. They are fundamental norms of the research and major responsibility of the researcher to complete the research. In the case of this study, the researcher had actively considered the following ethical issues in course of doing the study:

- ) The identification and background of the respondents were fully disclosed.
- ) The purpose, significance and procedures were fully explained to the respondents.
- ) The respondents were ensured that the research would be beneficial for the pedagogical practices.

- ) The participants were not forced to participate in my study.
- ) The dignity, integrity, privacy or anonymity was respected of the respondents.

#### **CHAPTER IV**

## **Analysis and Interpretation of Data**

The researcher has used different statistical tools with the help of SPSS for tabulation, testing the statistical hypothesis as mentioned. Theinstrument administered to collect the data was questionnaire to obtain the perception of mathematics teachers of secondary level of Banke District. The survey questions consisted of 35 statements in different categories related to teaching career (job satisfaction & happiness,respectful job, good career and enough income to fulfill basic needs) andthe individual beliefs in teaching profession viewed by others (parents,students, colleagues and administrators). The data analysis was done by comparing mean and standard deviation of teachers' perception on teaching profession in first. And independent t-test was used to compare mathematics teachers' perception on different domains of teaching profession on the basis of their gender, the place of origin (area) and stream of education.

An independent t-test was used to compare hypothesis. The data analysis was done by comparing mathematics teachers 'perception on different aspects of teaching profession on the basis of their gender, region and stream of education. The analysis of the data was carried out under the following major heading corresponding to the set objectives of the study.

- ) Comparison of teachers' perception on their teaching career.
  - a. By gender wise
  - b. By origin of the place(Area) wise
  - c. By academic background wise

) Comparison of teachers' perception on individual beliefs on their

profession viewed by others.

- a. By gender wise
- b. By origin of the place(Area) wise
- c. By academic background wise

# **Teachers' Perception on Their Profession**

For descriptive statistics, mean and standard deviation of teacher's perception was calculated. The results have been shown in table 4.

# **Table 4: Teachers' Perception on Their Profession**

Domains	Ν	Mean	S.D.	
Perception on teaching profession	110	3.29	031	

The table 4 shows that mean score of 110 teachers is 3.29. According to Denbel (2015) and Shadaan and KwanEu(2013), a mean score of 3.0 or higher indicates a positive feedback or opinionnaire. This indicates that teachers have positive perception on their profession. They are happy and satisfied with their profession. The overall teachers are satisfied with their own profession and they want to continue it.

## **Teachers' Perception on Different Aspects of Their Profession**

The mean and standard deviation of teachers' perception on different aspects of teaching profession was calculated for descriptive statistics. The results are presented in table 5.

Aspects of teaching profession	Ν	Weighted	S.D	Min.	Max.
		Mean			
Teaching career	110	3.11	0.42	1.6	4.1
Individual beliefs in teaching	110	3.16	0.30	2.4	3.8
profession viewed by others					

**Table 5: Teachers' Perception on Different Aspects on Their Profession** 

Moreover, the objectives of this study was to find out the perception ofTeachers' perception about teaching profession, the data in the table 5 shows that the average value of 110 teachers on each domain is greater than 3. This implies that all teachers have positive perception towards their profession. They are happy and satisfied with their chosen career, ready to face the aspects and challenges of this profession. As perceived by others, they take their profession positively.

#### **Comparison of Teachers' Perception on Their Career in different categories**

The research question was "To what extent are their differences in perception of teaching career of mathematics teachers' on the basis of their gender, their geographical region and stream of education". This research question addressed perception towards the teaching career, job satisfaction and happiness, respectful job, good career and enough in to fulfill basic needs are the four domains of perception on teaching career. Survey questions 1, 2, 3, 5, 6, 7, 8,9,10,11,12,13, 14, 15, 16, 17,18,19,26, 34 and 35addressed to the perceptions of teachers on teaching career.

The hypothesis is that there is no difference between male and female, rural and urban mathematics teachers' and education and non education backgroundregarding their perceptions about the teaching career regarding each of the survey questions. The mean and S.D of each statement is presented below.

An independent t-test was used to compare Mean, S.D and t-values of teachers ' perception on teaching career in terms of their gender, locality and stream of education. The results of statistical Analysis of teachers' perception on teaching career of different categories has been presented in the form of table 6.

# Table 6: Comparison of Teachers' Perception on Their Career in DifferentCategories

Category of Respondents	Ν	Weighted	S.D	t-value
		Mean		
Female	25	3.35	0.323	2.004
Male	85	3.19	0.432	
Rural	68	3.29	0.392	2.0417
Urban	42	3.12	0.443	
Education	59	3.32	0.415	1.7349
Non - Education	51	3.18	0.428	

The table 6 shows that the mean of female teachers (3.35) is more than themale teachers (3.19), teachers from rural (3.29) is more than teachers from urban (3.12) and Education (3.32) is more than Non - Education (3.18). It means that female teachers' perception, on average, have positive than male teachers, rural teachers than urban teachers and Education background than Non Education background teachers. The standard deviation of female teachers (0.323) is less than male teachers (0.432), teachers from rural (0.392) less than urban (0.443) and Education background teachers' (0.415) less than Non Education background teachers (0.428). This shows that there is more consistency among female teachers than male teachers, teachers from rural than urban and Education background teachers than Non Education background teachers' on the perception of teaching career.

#### **Comparison of Male and Female Teachers' Perception on Their Career**

Teachers' perception on their career in terms of gender on the basis of four domains; job satisfaction & happiness, respectful job, good career and enough income to fulfill basic needs. When comparing job satisfaction and happiness by genderthe mean score of a female (3.43) is greater than male(3.21). It showed that the female teachers' have more perception than male teachers' in job satisfaction and happiness. That is female teachers' are happy with chosen her profession and proud to work as a mathematics teacher rather than male teachers. Similarly, when comparing respectful job by gender, the mean score of a female (3.53) is greater than male(3.21). That is female teachers' more encourage others to enter the teaching profession and find public respect teaching profession as it contributes to development in the society. It showed that the female teachers' have more perception than male teachers' inrespectful job. That is female teachers' more encourage others to enter the teaching profession and find public respect teaching profession as it contributes to development in the society. Also, when comparing good career bygender the mean scores of a female (3.46) is greater than male (3.13). It showed that the female teachers' have more perception than male teachers' in good career. That is female teachers' are feel the teaching profession is good place to developed her career and teaching career is fit for her rather than male teachers'. At last, when comparing enough income to fulfill basic need by gender, the mean score of a female (3.29) is greater than male

(2.97). It showed that the female teachers' have more perception than male teachers' in enough income to fulfill basic needs.

An independent t-test is used to compare mean scores of female and male teachers on each of the domains of teaching career. The summary of t- test and other information has been presented in the table 7.

# Table 7: Comparison of Male and Female Teachers' Perception on Each Domain of Their Career

Domains	Gender of	N	Weighted	S.D	t-value
	respondents		Mean		
Job satisfaction and	female	25	3.43	0.345	2.2941
happiness					
	male	85	3.21	0.614	
Respectful job	female	25	3.53	0.453	2.9304
	male	85	3.21	0.562	
Good career	female	25	3.46	0.488	2.8102
	male	85	3.13	0.602	
Enough income to	female	25	3.29	0.466	2.9189
fulfill basic needs					
	male	85	2.96	0.590	

The table 7 shows that the differences in mean scores between male and female teachers on each of the domains have been found insignificant at 0.05. Hence it rejects the null hypothesis that no difference existed between male and female teachers on different domains of teachers' perception of teaching career. It concluded thatthere is significant difference in perception onteaching profession among male and female teachers. It showed that the female teachers have more perception than male teachers in teaching career.

# Comparison of Rural and Urban Teachers' Perception on Each Domain on Their Career

Teachers' perception on their career in terms of their location on the same four domains; job satisfaction & happiness, respectful job, good career and enough income to fulfill basic needs. When comparing job satisfaction and happiness by their location, the mean score of a rural (3.57) is greater than urban (3.19). It showed that the rural teachers' have more perception than urban teachers' in job satisfaction and happiness. Similarly, when comparing respectful job by their location, the mean score of a rural (3.41) is greater than urban (3.17). It showed that the rural teachers' have more perception than urban teachers' in good career by location, the mean score of a rural(3.42) is greater than urban (3.13). It showed that the rural teachers' have more perception than urban teachers' in good career. At last, when comparing enough income to fulfill basic need by location, the mean score of a rural (3.15) is greater than urban (2.92). It showed that the ruralteachers' have more perception than urban teachers' in enough income to fulfill basic needs.

An independent t- test is used to compare mean scores of rural and urban teachers on each of the domains of teaching career. In region wise comparison there were 68 rural and 42 urban teachers. The summary of t - test and other information has been presented in the table 8.

Domains	Origin of	Ν	Weighted	S.D	t -
	respondents		Mean		value
Job satisfaction and	Rural	68	3.57	0.489	3.0941
happiness					
	Urban	42	3.19	0.697	
Respectful job	Rural	68	3.41	0.534	2.2327
	Urban	42	3.17	0.556	
Good career	Rural	68	3.42	0.586	2.4410
	Urban	42	3.13	0.617	
Enough income to fulfill	Rural	68	3.15	0.612	1.9942
basic needs					
	Urban	42	2.92	0.572	

# Table 8: Comparison of Rural and Urban Teachers' Perception on Each Domain on Their Career

Table 8 shows that the difference in mean scores between rural and urban teachers on each of the domains been found insignificant at 0.05. Hence it is rejected the null hypothesis that no difference existed between rural and urban teachers on different domains of teachers' perception of teaching career. It concluded thatthere is significant difference in perception onteaching professionbetween rural and urban teachers. It showed that the rural teachers have more perception than urban teachers in teaching career.

# Comparison of Education and Non Education Academic BackgroundTeachers' Perception on Their Career

Teachers' perception on their career in terms of their academic background on the same four domains; job satisfaction & happiness, respectful job, good career and enough income to fulfill basic needs. When comparing job satisfaction and happiness by their academic background, the mean score of an education background(3.37) is greater than non education background (3.16). It showed that the education background teachers' have more perception than non education backgroundteachers' in job satisfaction and happiness. Similarly, when comparing respectful job by their academic background, the mean score of aneducation background (3.42) is greater than non education background (3.23). It showed that the education backgroundteachers' have more perception than non education backgroundteachers' in respectful job. Also, when comparing good career by academic background, the mean score of an education background (3.30) is greater than non education background (3.12). It showed that the education background teachers' have more perception than non education background teachers' in good career. At last, when comparing enough income to fulfill basic need by academic background, the mean score of an education background (3.16) is greater than non education background (3.12). It showed that the education background teachers' have more perception than non education background teachers' in enough income to fulfill basic needs.

An independent t test was used to compare mean score of education and non education background teachers' on each of the domains of teaching career. In academic background wise comparison, there were 59 teachers'from education background and 51 teachers' non education background. The summary of t-test and other information has been presented to the form of table 9.

Ν

Weighted S.D

t-

# Table 9: Comparison of Education and Non Education Background

Teachers'Perception on Each Domain on Their Career	

emic Background

Domains

			Mean		value
Job satisfaction	Education	59	3.37	0.606	1.8324
and happiness					
	Non Education	51	3.16	0.594	
Respectful job	Education	59	3.42	0.439	1.9244
	Non Education	51	3.23	0.575	
Good career	Education	59	3.30	0.421	1.7613
	Non Education	51	3.12	0.616	
Enough income	Education	59	3.16	0.662	0.3388
to fulfill basic					
needs					
	Non Education	51	3.12	0.576	

The table 9 shows that the difference in mean scores betweeneducation and non education background teachers on each of the domainwas not found significant at 0.05 level of significance. Hence it accepted the null hypothesis that no difference between education and non-education backgroundteachers' on difference domains of teachers' perception on their career. It concluded that there is no significant difference in perception onteaching profession in the stream of education.

# Comparison of Teachers' Perceptionon Individual Beliefs on Their Profession Viewed by Others

The research question was "To what extent are their differences in perception of mathematics teachers' about how they feel their profession viewed by others on the basis of their gender, stream of education and the place of origin?" This research question addressed teachers' perceptions on teaching profession viewed by others. There are many stakeholders who are associated with school and teaching profession in this research, the main four stakeholders were colleagues, parents, administrators and students. Survey questions4,20,21,22,23,24,25,27,28,29,30,31 and 32 addressed to the individual beliefs in teaching profession viewed by others. The hypothesis is that there is no difference between male and female, rural and urban and education and non education background mathematics teachers' regarding their perceptions about the individual beliefs in teaching profession each of the following statements.

An independent t- test was conducted to compare teachers' perception of how they felt they were viewed by their colleagues, students' parents, administration and students on the basis of gender, location andacademic background. The result of statistical analysis of teachers' perception on how teachers' perceived teaching profession viewed by others of different categories has been presented in the form of table 10.

# Table 10: Comparison of Teachers' Perceived Individual Beliefs on Their

Category of Respondents	N	Weighted	S.D.	t - value
		Mean		
Female	25	3.37	0.249	3.5161
Male	85	3.16	0.304	
Rural	68	3.29	0.279	2.1398
Urban	42	3.16	0.327	
Education	59	3.31	0.395	0.2634
			0.070	0.2001
Non Education	51	3.29	0.399	

#### **Profession Viewed by Others in Different Categories**

The table 10 shows that the average value of females (3.37) is more than male (3.16), rural (3.29) more than urban (3.16) and education (3.31) is more than non education (3.29). This implies that the perception of female teachers' from rural and education background teachers' have an average positive than male teachers, urban and non-education background teachers respectively on teaching profession viewed by others. The Standard Deviation of female teachers (0.249) was less than male teachers (0.304), teachers from rural (0.279) was less than urban (0.327) and education (0.395) was less than non education (0.399). This shows that there is more consistency among female teachers than male teachers, teachers from urban than rural and non education thaneducation ones on the perception of viewed by others. The

table 10 also shows that the significance values of gender, location and stream of education. This implies that there is difference between female and male, rural and urban butthere is no difference between education non education background teachers on the perception of teaching profession viewed by others.

An independent t- test was performed to compare Mean, Standard Deviation and t- values for teachers' perception on each domain of how teachers perceived their profession viewed by others in gender, the place of origin and academic background wise.

# Comparison of Female and Male Teachers Perceived Individual Beliefs on Their Profession Viewed by Others

Teachers' perception on their individual beliefs in their profession viewed by othersis compared in terms of gender wise on the four domains; colleagues, parents, administration and students. Colleagues viewed on their profession to the basis of gender, the mean score of female (3.87) is higher than the mean score of male (3.29). That is, there is a positive perception of colleagues towards female teachers'. So, there is lots of sharing of an ideas among female teachers', cooperation was exchange and the working environment was found to be good as compare male. Similarly, parents viewed on their profession to the basis of gender, the mean score of male (3.76) is higher than the mean score of male (3.35). That is, there is a positive perception of parents towards female teachers'. Also, administration viewed on their profession to the basis of gender, the mean score of male (3.78). That is, there is a positive perception of administration towards male teachers'. It showed that, administrators respect the dignity and worth of male teachers' rather than female teachers'.But, school management shows a genuine

interest in teachers' career goals to all the teachers'. Finally, students viewed on their profession to the basis of gender, the mean score of female (2.75) is lesser than the mean score of male (3.05). That is, there is a positive perception of students towards male teachers'. That is students pay attention, respect, follow instruction and ask questions on leisure time to the male teachers' rather than female teacher'. But, sharing feeling and asked to their problem without any hesitation to the female teachers' rather than male teachers'.

An independent t- test was performed to compare Mean, Standard Deviation and t- values for 25 female 85 male mathematics teachers of secondary level. The results of statistical analysis and other informationhave been summarized in table 11.

 Table 11: Comparison of Female and Male Teachers PerceivedIndividual Beliefs

 on TheirProfession on Each Domain of Viewed by Others

Domains	Gender of	Ν	Weighted	S.D.	t - value
	Respondents		Mean		
Colleagues	Female	25	3.87	0.646	3.9739
	male	85	3.29	0.626	
Parents	Female	25	3.76	0.567	3.1215
	male	85	3.35	0.611	
Administration	Female	25	3.40	0.488	-3.0780
	male	85	3.78	0.697	
Students	Female	25	2.75	0.629	-2.0362
	male	85	3.05	0.707	

The table 11 shows that the difference in Mean scores between male and female teachers on each of the domains. Hence it rejected the null hypothesis that no difference existed between female and male teachers on different domains of teachers' perception of individual beliefs in teaching profession viewed by others. It concluded that there is significant difference in perception on teaching profession among male and female teachers. Over all, it showed that the female teachers have more perception than male teacher's perceived individual beliefs in teaching profession on each domain of viewed by other.

# Comparison of Rural and Urban Teachers'PerceivedIndividual Beliefs on Their Profession Viewed by Others

Teachers' perception on their individual beliefs in their profession viewed by othersis compared in terms of location wise on the four domains; colleagues, parents, administration and students. Colleagues viewed on their profession to the basis of gender, the mean score of rural teachers' (3.59) is higher than the mean score of urbanteachers' (3.33). That is, there is a positive perception of colleagues towards rural teachers'. So, there is lots of sharing of an ideas among rural teachers', cooperation was exchange and the working environment was found to be good as compare urban. Similarly, parents viewed on their profession to the basis of location wise, the mean score of rural teachers' (3.87) is higher than the mean score of urban teachers' (3.41). That is, there is a positive perception of parents towards rural teachers'. Also, administration viewed on their profession to the basis of location, the mean score of rural teachers' (3.20) is lesser than the mean score of urban teachers'. It showed that, administrators respect the dignity and worth of urban teachers' rather than rural teachers' and school administration valued the urban

teachers' rather than rural teachers'. But, school management shows a genuine interest in teachers' career goals to all the teachers'. Finally, students viewed on their profession to the basis of location, the mean score of rural teachers' (3.07) is lesser than the mean score of urban teachers' (3.67). That is, there is a positive perception of students towards male teachers'. That is students pay attention, respect, follow instruction and ask questions on leisure time to the male teachers' rather than female teacher'. But, sharing feeling and asked to their problem without any hesitation to the female teachers' rather than male teachers'.

An independent t - test was performed to compared Mean, Standard Deviation and t- values for 68 and 42 teachers from rural and urban region. The results of statistical analysis and other information have been summarized in table 12

Table 12: Comparison of Rural and Urban Teachers' Perceived IndividualBeliefs on TheirProfession on Each Domain of Viewed by Others

Domains	Origin of Respondents	N	Weighted	S.D.	t -
			Mean		value
Colleagues	Rural	68	3.59	0.657	2.1100
	Urban	42	3.33	0.612	
Parents	Rural	68	3.87	0.583	3.7602
	Urban	42	3.41	0.647	
Administration	Rural	68	3.20	0.549	2.1186
	Urban	42	3.34	0.778	
Students	Rural	68	3.07	0.738	4.3841
	Urban	42	3.67	0.671	

The table 12 also shows that the difference in Mean scores between rural and urban teachers on each of the domains (colleagues, parents and students) have been found insignificant at 0.05 and the t-test result has been found significant in favor of rural and urban teachers in the case of administrations. Hence it rejected the null hypothesis that no difference existed between rural and urban teachers on different domains of teachers' perception of individual beliefs in teaching profession viewed by others except in the case of in the case of administrations.

# Comparison of Education and Non Education Background Teachers' Perceived Individual Beliefs on Their Profession Viewed by Others

Teachers' perception on their individual beliefs in their profession viewed by othersis compared in terms of academic background wise on the four domains; colleagues, parents, administration and students. Colleagues viewed on their profession to the basis of academic background, the mean score of education background teachers' (3.39) is higher than the mean score of non education background teachers' (3.28). That is, there is a positive perception of colleagues towards education background teachers'. So, there is lots of sharing of an ideas among rural teachers', cooperation was exchange and the working environment was found to be good as compare non education background teachers'. Similarly, parents viewed on their profession to the basis of location wise, the mean score of education background teachers' (3.54) is higher than the mean score of non education background teachers' (3.38). That is, there is a positive perception of parents towards education background teachers'. So, the relation between the teachers' and their student's parents is positive and discuss student's performance frequently with education background teachers' rather non education background teachers'. Also, administration viewed on their profession to the basis of academic background, the mean score of education

background teachers' (3.03) is lesser than the mean score of non education background teachers' (3.13). That is, there is a positive perception of administration towards non education background teachers'. It showed that, administrators respect the dignity and worth of non education background teachers' rather than education background teachers' and school administration valued the non education background teachers' rather than education background teachers'. But, school management shows a genuine interest in teachers' career goals to all the teachers'. Finally, students viewed on their profession to the basis of academic background, the mean score of education background teachers' (3.11) is higher than the mean score of non education background teachers' (2.86). That is, there is a positive perception of students towards education background teachers'. That is students pay attention, respect, follow instruction and ask questions on leisure time to the education background teachers' rather than non education background teacher'. But, sharing feeling and asked to their problem without any hesitation to the non education background teachers' rather than education background teachers'. Over all, both education and non education academic background teachers' have positive perception towards their profession.

An independent t-test was performed to compare mean, standard deviation and t-values for 59 from education background and 51 from non education background teachers. The result of statistical analysis and other information has been shown in table 13.

Domains	Academic	Ν	Weighted	S.D.	t
	Background		Mean		
Colleagues	Education	59	3.39	0.502	0.9392
	Non Education	51	3.28	0.647	
Parents	Education	59	3.54	0.724	-1.9176
	Non Education	51	3.38	0.588	
Administration	Education	59	3.03	0.469	0.8484
	Non Education	51	3.13	0.720	
Students	Education	59	3.11	0.626	1.9397
	Non Education	51	2.86	0.713	

Table 13: Comparison of Education and Non Education Background Teachers'Perceived Individual Beliefs on TheirProfession Viewed by Others

The data in table 13 shows that the difference in mean scores between education and non education background teachers on each of the domains (colleagues, parents, students and administrations) have been found insignificant at 0.05. Hence it accepted the null hypothesis that no difference between education and non-education background teachers on difference domains of teacher's perception of individual beliefs in teaching profession viewed by others. It concluded that there is no significant difference in perception on individual beliefs in teaching profession viewed by others. It showed that the teachers from education background have same perception than teachers from non-education background of individual beliefs in teaching profession viewed by others.

# Comparison of Teachers Perception on Teaching Profession in different categories

At the end, the average of teaching career and individual beliefs in teaching profession viewed by others was calculated and the data were entered in SPSS to find the independent sample test. When the overall perception is calculated in terms of teachers' gender, locality and stream of education, the result of statistical analysis and other information has been summarized in table 14.

# Table 14: Comparison of Teachers' Perception on TheirProfession in differentCategories

Categories of Respondents	Ν	Weighted	S.D.	t
		Mean		
	25	2.4.4	0.011	2 (000
Female	25	3.44	0.211	2.6908
Male	85	3.18	0.273	
Rural	68	3.35	0.260	2.8829
Urban	42	3.19	0.296	
Education	59	3.26	0.297	0.9145
Non Education	51	3.21	0.276	

The table 14 shows that the average value of female (3.44) is more than male (3.18), rural (3.35) more than urban (3.19) and education (3.26) more than non education (3.21). This implies that the perception of female, rural and education background have on average positive perception on teaching profession than male teachers, urban and non education background teachers respectively. The standard

deviation of female teachers (0.211) is less than male teachers (0.273), teachers from rural (0.260) less than urban (0.296) and non education (0.276) less than education (0.297). This shows that there is more consistency male teachers than female teachers, teachers from urban than rural and non education background teachers than education background ones on the perception of teaching profession.

The table also shows that the t-value of the domains gender and locality is greater than the value of alpha 0.05 level of significance. It means that the null hypothesis is rejected. This implies that there is difference between female and male teachers' and rural and urban teachers' perception on their profession. But, the t-value of the domainacademic background is less than the value of alpha 0.05 level of significance. It means that the null hypothesis is accepted i.e. there is no difference between education and non education academic background teachers' on the teaching profession.

#### **CHAPTER V**

## SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary, findings and conclusion of study is difference between the perception on teaching profession on the basis of gender, place of origin and stream of education wise. Besides findings and conclusion, some recommendations have been forwarded which will be useful for further studies and educational implications.

# Summary

Among the different subjects, mathematics plays a vital role in individual's daily life and equally in school level to university level education. This study to identify the differences in perception of mathematics teacher's atbanke district regarding various elements of teaching profession in terms of their gender, area and stream of education. All the secondary mathematics teachers of banke district were considered as population of the study. The number of sample was estimated at 110. A frequent analysis of the demographic information indicated that 25 respondents were female and 85 were male teachers out of 110 respondents. Similarly, 68 were from rural and 42 were from urban and 59 were from education background and 51 were from non education background mathematics teachers.

To compare the perception of mathematics teachers on teaching profession on the basis of their gender, area and academic background wise. The researcher collected the data from questionnaire that was primarily incorporated a Liket-type format, was used as instruments for collecting data. Respondents were asked to rate their perceptions on the scale of 5 to 1, with 5 meaning they strongly agreed with thequestion, 4 indicating they agreed with the question, 3 meaning they had no option concerning the question, 2 referring they disagreed with the question, and I meaning they strongly disagreed with the question.

Collected data were coded and edited manually, and entered into computer using excel 2007 first. Using Statistical Package for the Social Science (SPSS), the data were analyzed. An independent samples t test was used to examine the differences among the variables identified in the survey and to address each of the two research questions. The analyses were conducted at an alpha level of 0.05.

The analysis of the data was carried out under the following major headings corresponding to the set of objectives of the study.

- N Comparison of teachers' perception on teaching profession and different aspects of teaching profession
- N Comparison of teachers' perception on teaching career by gender, area and academic background wise
- N Comparison of teachers' perception on individual beliefs in teaching profession viewed by others on the basis of gender, area and academic background wise

# **Findings of the Study**

On the basis of analysis and interpretation of the data, the researcher was able to draw the following major findings of the study:

- $\tilde{N}$  The results show that mathematics teachers have positive perception on teaching profession
- N There was a significant difference between male and female teacher's perception on teaching profession on the basis of the domains; teaching career and individual beliefs in teaching profession viewed by others.

- N There was a significant difference between rural and urban teacher's perception on teaching profession on the basis of the domains; teaching career and individual beliefs in teaching profession viewed by others.
- N There was no significant difference in perception on teaching profession between teachers from academic background on the basis of the domains; teaching career and individual beliefs in teaching profession viewed by others.

# Conclusion

The purpose of this study was to find the difference between mathematics teachers' perceptions of their profession on the basis of gender, the place of origin and academic background. There were two research questions raised in chapter I to determine differences in perception of mathematics teachers about teaching career and individual beliefs in teaching profession viewed by others on the basis of their gender, the place of origin and academic background at the significance level of 0.05. An independent t - test was performed to compare mean, standard deviation and t - values for 110 teachers, it has found that there is difference in the perception of female & male and rural & and urban but in the stream of education, there is no difference in the perception of education and non education background teachers on teaching career and individual beliefs in teaching profession viewed by others.

Finally, there is no perceived difference between education and non education background teachers' on their profession where as there is difference betweenfemale and male and rural and urban of teaching profession. Also, the study has shown that teachers have not negative perception on teaching profession.

### **Implication of the Study**

This research has done a comparative study of teachers' perception about their profession on the basis of their gender, areas and stream of education. This study

helped to find the perception of teachers towards on teaching profession regarding their career and individual beliefs in teaching profession viewed by others. It has helped to determine ways of establishing good relation between teachers and administration, teachers and students, teachers and parents. It has helped to promote in the society, to explore and implement ways to enable to feel safer in their schools and classrooms.

## **Recommendations for Further Study**

Since this study was limited in several aspects, the findings of this study can be generalized for secondary level mathematics teachers in banke district, but not to all levels of schools and colleges, and all over the country. Thus after analyzing the findings and conclusion of this study, following recommendations to further research has made.

- ) The study should be done on an extensive scale. Similarly study can be done in others subject teachers as well.
- ) Similarly study can be done in primary level, lower secondary level, higher secondary (10+2) level the profession.
- Additional research can be conducted concerning the reasons behind why teachers leave the profession.
- Additional research can be conducted to determine ways of establishing good relation between teachers and administration, teachers and students and teachers and parents.
- ) Study can be done only in service teachers but not for student's teachers and trainee teachers.

### References

- Akkaya,F. (2009). *Pre-service teachers' attitude towards teaching profession*. Inonu University Journal of the Faculty of Education, 9 (6), 27 42
- Anastasi, C. (1957). *Attitude of in-service and preservice primary school teachers*. Journal of education psychology.
- Balan, K. (1996). Attitude towards teaching profession and self concept of student teachers of kerala. Unpublished M.Ed. dissertation, University of Calicut.
- Bhaker, P. (1996). Attitude of teachers towards teaching profession. An UnpublishedM.Ed. dissertation, University of Lucknow.
- Bhargava,, A. &Pathy, M. K. (2014). *Attitudes of student teachers towards teaching profession*. Turkish Online Journal of Distance Education.
- Bhattrai, K. (2016). *Mathematics teachers perception towards mathematics*. An Unpublished thesis of M.Ed., T.U., Kirtipur.
- Bhattrai, R. (2006). Attitude of secondary level students towards mathematics, a case study of Kailali District. An Unpublished thesis of M.Ed., T.U., Kirtipur.
- Billingsley, B.S.(1993). Teacher retention and attrition in special and general education: A critical review of the literature. The Journal of Special Education, 27, 137 - 174.
- Bishay, A. (1996). Teacher motivation and career satisfaction: a study employing the experienced sampling method. Psychology journal of Undergraduate science, 3, pp.147-154.
- Celokoz, N. & Cetin, F. (2004). Anatilian teacher high school students' attitudes about the factos affecting the teaching profession. National Educ.J.,(162).
- Chan, K. (2005). *In-service teachers' perceptions of teaching as a career: motives and commitment in teaching.* Hong kong institute of education.

- Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Boston: Pearson.
- Ghosh, S. &Bairya, S. (2007). Attitude of secondary school teachers towards teaching profession in relation to some demographic variables. Educational Research, pp.55-58.
- Ghosh, S.M. (2015). *Job satisfaction among government and private school teachers Ranchi*. The international journal of Indian psychology, 2(2), pp.88-93.
- Ispir, O.A. (2010). Teachers' burnout levels and their attitudes towards teaching profession. EABR & ETLC conference proceedings. Dublin, Ireland, pp.229-233.
- Kafle, R. (2002). A study on attitude of secondary level students and teachers towards compulsory mathematics curriculum. An Unpublished dissertation of M.Ed., T.U., Kirtipur.
- Khan, F., Nadeem, N.A. &Basu, S. (2013). Professional attitude: a study of secondary teachers. Journal of Education Research and Behavioral Sciences, 2(8), pp.119-125.
- Lily, Pushpam, A. M. (2003). Attitude towards teaching profession and job satisfaction of women teachers in Coimbatore. Journal of Ed.
- Olufemi, N.J. & James, R. (2014). Gender comparison of attitude of senior secondary school students towards mathematics in Ekiti State, Nigeria. Journal Educational Research.
- Rai, M. (2004). Attitude of teacher and students towards secondary level mathematics and student achievement in dhankuta district. An Unpublished thesis of M.Ed., T.U., Kirtipur.

- Singh, P. (1974). A study of the relationship between verbal interaction of teachers in classroom and attitude towards teaching. Indian Online Journal of Distance Education.
- Yadav, R. (1992). Impact of teacher training on certain personality characteristics of B.Ed. trainees. Unpublished Ph.D. Thesis, Agra : Agra University.
- Yadav, S. (2008). A study of attitude of farmers and non farmers parents towards the school mathematics. An Unpublished thesis of M.Ed., T.U., Kirtipur.
- Yates, S.M. (2007). *Teachers' perceptions of their professional learning activities*. International Educational Journal, pp.213-221.

# **APPENDIX - 1**

## **Survey Questionnaires form**

Dear sir/ madam,

I am Ramesh Ghimire, student of M.Ed (mathematics education) of Tribhuvan University. I am going to conduct a survey research on "Perception of mathematics teachers on Teaching Profession" at Banke district. The survey intends to find out attitudes and perceptions regarding your choice of teaching career. Your response will be kept secret and will be used only for research and not for any other purpose. So, please fill up the form.

# **Personal Information**

1. Name: .....

2. Gender:	i. Male:	$\bigcirc$	i. Female:	$\bigcirc$
3. Area:	ii. Rural	$\bigcirc$	ii. Urban:	$\bigcirc$
4. Stream of Education:	iii. Educatio	on:	iii. Non Educat	tion:

# **Survey questions**

There are numbers of statements describing your attitudes and perceptions of teaching profession regarding job satisfaction and happiness and individual beliefs in
teaching profession viewed by others. So, please read each statement carefully and fill free to indicate your response putting a tick ( ) under the appropriate heading of each item:

Statements	SA	Α	Ν	DA	SDA
1. I am happy with my chosen career.					
2. Lyould appropriate others to enter the teaching					
2. I would encourage others to enter the teaching profession					
3. Teaching mathematics is a "Good Career" for me.					
4. I feel that I have a positive relationship with my					
students' parents and discuss their					
performance frequently.					
5. I feel inspired to do my best.					
6. I find public respect teaching profession as it					
contributes to development of society.					
7. Teacher income is barely enough to live on.					
8. I plan to leave teaching profession in the next four					
years.					
9. Teaching mathematics is boring profession to me.					
10. I am proud to work here.					
11. In my observation, people accept teaching as a					
normal profession in the society.					
12. Insufficient income keeps me from living the					
13 My college experience prepared me to teach					
mathematics.					
14. Teaching provides me with financial security.					
15. I feel happy at work.					
16. I would doubt to be a mathematics teacher if the					
financial situation was batter					
17. I am well paid in proportion to my ability.					
18. There is a good place for me to develop my					
career.					
10. I feel motivated by my work place					
17. Ther motivated by my work place.					
20. My students talk, share feelings and asked me					
their problems without any hesitation.					

21. Some of my students ask any questions in leisure time.			
22. My colleagues and I share ideas to solve the problems that exist in my profession.			
23. My colleagues are not helpful when I have a problem.			
24. I enjoy working with my team.			
25. Overall, parents rarely visit school.			
26. Teacher income is adequate for normal expenses.			
27. In my observation, the principal and administration respect the dignity and worth of all teachers.			
28. I feel the principal and administration concern other matter rather than teachers.			
29. I feel heard and valued by my school administrator.			
30. Students rarely follow my instruction.			
31. School management shows a genuine interest in my career goals.			
32. Students pay attention and respect to me.			
33. I trust my colleagues and the people on my team			
34. I have enough time to do my job well.			
35. I would refer a friend or a family member to this profession.			

### **Survey Questions Related to Teaching Career**

### A. Question related to job satisfaction and happiness

- 1. I am happy with my chosen career.
- 2. I feel inspired to do my best.
- 3. I plan to leave teaching profession in the next four years.
- 4. Teaching mathematics is boring profession to me.
- 5. I am proud to work here.
- 6. I feel happy at work.
- 7. I feel motivated by my work place.

### B. Questions related to respectful job

- 1. I would encourage others to enter the teaching profession
- 2. I find public respect teaching profession as it contributes to development of society.
- 3. In my observation, people accept teaching as a normal profession in the society.
- 4. I have enough time to do my job well.
- 5. I would refer a friend or a family member to this profession.

#### C. Questions related to good career

- 1. Teaching mathematics is a "Good Career" for me.
- 2. My college experience prepared me to teach mathematics.
- 3. I would doubt to be a mathematics teacher if the financial situation was batter.
- 4. There is a good place for me to develop my career.

#### D. Questions related to enough income to fulfill basic needs

- 1. Teacher income is barely enough to live on.
- 2. Insufficient income keeps me from living the way I want to live.
- 3. Teaching provides me with financial security.
- 4. I am well paid in proportion to my ability.
- 5. Teacher income is adequate for normal expenses.

### Survey Questions Related to Individuals Beliefs in Teaching Profession Viewed by Others

#### A. Questions related to students

- 1. My students talk, share feelings and asked me their problems without any hesitation.
- 2. Some of my students ask any questions in leisure time.
- 3. Students rarely follow my instruction.
- 4. Students pay attention and respect to me.

### **B.** Questions related to parents

- 1. I feel that I have a positive relationship with my students' parents and discuss their performance frequently.
- 2. Overall, parents rarely visit school.

### C. Questions related to colleagues

- 1. My colleagues and I share ideas to solve the problems that exist in my profession.
- 2. My colleagues are not helpful when I have a problem.
- 3. I enjoy working with my team.
- 4. I trust my colleagues and the people on my team.

### **D.** Questions related to administrators

- 1. In my observation, the principal and administration respect the dignity and worth of all teachers.
- 2. I feel the principal and administration concern other matter rather than teachers.
- 3. I feel heard and valued by my school administrator.
- 4. School management shows a genuine interest in my career goals.

### **APPENDIX - 2**

### Mean and Standard Deviation of each statements of the perception of teaching profession

Statements	Ν	Mean	Std.
1. I am happy with my chosen career.	110	3.45	0.342
2. I would encourage others to enter the teaching profession	110	3.23	0.543
3. Teaching mathematics is a "Good Career" for me.	110	3.57	0.324
4. I feel that I have a positive relationship with my students' parents and discuss their performance frequently.	110	3.42	0.563
5. I feel inspired to do my best.	110	3.12	0.981
6. I find public respect teaching profession as it contributes to development of society.	110	3.76	0.947

7. Teacher income is barely enough to live on.	110	3.12	0.897
8. I plan to leave teaching profession in the next four years.	110	1.05	1.282
9. Teaching mathematics is boring profession to me.	110	1.90	1.986
10. I am proud to work here.	110	2.98	1.546
11. In my observation, people accept teaching as a normal profession in the society.	110	3.05	0.679
12. Insufficient income keeps me from living the way I want to live.	110	3.87	0.476
13. My college experience prepared me to teach mathematics.	110	3.42	0.783
14. Teaching provides me with financial security.	110	3.34	0.664
15. I feel happy at work.	110	3.12	0.743
16. I would doubt to be a mathematics teacher if the financial situation was batter.	110	1.78	1.743
17. I am well paid in proportion to my ability.	110	3.76	0.217
18. There is a good place for me to develop my career.	110	3.43	0.737
19. I feel motivated by my work place.	110	3.33	1.873
20. My students talk, share feelings and asked me their problems without any hesitation.	110	2.98	1.832
21. Some of my students ask any questions in leisure time.	110	2.56	1.093
22. My colleagues and I share ideas to solve the problems that exist in my profession.	110	3.04	1.028
23. My colleagues are not helpful when I have a problem.	110	1.78	0.192
24. I enjoy working with my team.	110	3.04	0.764
25. Overall, parents rarely visit school.	110	3.12	0.934
26. Teacher income is adequate for normal expenses.	110	3.45	1.089
27. In my observation, the principal and administration respect the dignity and worth of all teachers.	110	3.12	1.873
28. I feel the principal and administration concern other matter rather than teachers.	110	2.97	1.843
29. I feel heard and valued by my school	110	3.05	0.732

administrator.			
30. Students rarely follow my instruction.	110	2.01	0.823
31. School management shows a genuine interest in my career goals.	110	3.56	0.873
32. Students pay attention and respect to me.	110	3.78	0.732
33. I trust my colleagues and the people on my team	110	3.45	0.876
34. I have enough time to do my job well.	110	3.54	0.734
35. I would refer a friend or a family member to this profession.	110	3.01	0.732

## Mean and standard deviation of each statement of teaching career in terms of gender

Statements	Gender	Ν	Mean	Std.
1. I am happy with my chosen career.	Female	25	3.88	0.428
	Male	85	3.78	0.453
2. I feel inspired to do my best.	Female	25	3.54	0.192
	Male	85	3.09	0.537
3. I plan to leave teaching profession in	Female	25	3.54	0.764
the next four years.	Male	85	3.23	0.536
4. Teaching mathematics is boring profession to me.	Female	25	3.59	1.934

	Male	85	3.52	0.374
5. I am proud to work here.	Female	25	3.67	0.089
	Male	85	3.23	0.653
6. I feel happy at work.	Female	25	3.68	0.873
	Male	85	3.12	0.637
7. I feel motivated by my work place.	Female	25	3.79	0.843
	Male	85	3.75	0.638
8. I would encourage others to enter the	Female	25	3.75	0.732
teaching profession	Male	85	3.08	0.543
9. I find public respect teaching profession	Female	25	3.85	1.823
of society.	Male	85	2.87	1.987
10. In my observation, people accept	Female	25	3.95	1.873
in the society.	Male	85	3.76	0.978
11. I have enough time to do my job well.	Female	25	3.67	0.732
	Male	85	3.54	0.426
12. I would refer a friend or a family	Female	25	3.56	1.876
member to this profession.	Male	85	3.07	0.687
13. Teaching mathematics is a "Good	Female	25	3.78	0.734
Career for me.	Male	85	3.34	0.562
14. My college experience prepared me to	Female	25	3.78	0.732
teach mathematics.	Male	85	3.53	0.567
15. I have enough time to do my job well.	Female	25	3.65	0.732
	Male	85	3.23	0.769
16. There is a good place for me to	Female	25	3.24	0.823
	Male	85	3.12	0.542
17. Teacher income is barely enough to	Female	25	3.64	0.873

live on.	Male	85	2.87	0.723
18. Insufficient income keeps me from living the way I want to live.	Female	25	3.78	0.732
	Male	85	2.76	0.832
19. Teaching provides me with financial security.	Female	25	3.64	0.876
	Male	85	2.78	0.262
20. I am well paid in proportion to my ability.	Female	25	3.98	0.734
	Male	85	2.43	0.526
21. Teacher income is adequate for normal expenses.	Female	25	3.65	0.732
<b>^</b>	Male	85	2.56	0.678

### Mean and standard deviation of each statement of teaching career in terms of place of origin

Statements	area	Ν	Mean	Std.
1. I am happy with my chosen career.	Rural	68	3.24	0.328
	Urban	42	3.14	0.443
2. I feel inspired to do my best.	Rural	68	3.89	0.292
	Urban	42	3.34	0.567
3. I plan to leave teaching profession in the next four years.	Rural	68	3.78	0.664
	Urban	42	3.36	0.546
4. Teaching mathematics is boring profession to me.	Rural	68	3.54	1.994
	Urban	42	2.68	0.274
5. I am proud to work here.	Rural	68	3.78	0.289
	Urban	42	3.43	0.658
6. I feel happy at work.	Rural	68	3.35	0.863

	Urban	42	3.21	0.647
7. I feel motivated by my work place.	Rural	68	3.89	0.823
	Urban	42	3.09	0.637
8. I would encourage others to enter the	Rural	68	3.67	1.833
teaching profession	Urban	42	3.54	1.986
9. I find public respect teaching profession	Rural	68	3.34	1.853
of society.	Urban	42	3.14	0.988
10. In my observation, people accept	Rural	68	3.56	0.872
in the society.	Urban	42	3.43	0.486
11. I have enough time to do my job well.	Rural	68	3.65	1.896
	Urban	42	3.08	0.987
12. I would refer a friend or a family	Rural	68	3.85	0.754
member to this profession.	Urban	42	2.84	0.782
13. Teaching mathematics is a "Good	Rural	68	3.19	0.732
Career for me.	Urban	42	3.09	0.506
14. My college experience prepared me to	Rural	68	3.57	1.873
teach mathematics.	Urban	42	3.44	0.754
15. I have enough time to do my job well.	Rural	68	3.89	1.832
	Urban	42	3.29	1.855
16. There is a good place for me to	Rural	68	3.56	1.093
develop my career.	Urban	42	3.34	1.875
17. Teacher income is barely enough to	Rural	68	3.76	1.028
live on.	Urban	42	3.28	0.764
18. Insufficient income keeps me from	Rural	68	3.83	0.192
nving the way I want to live.	Urban	42	2.84	0.998

19. Teaching provides me with financial security.	Rural	68	3.77	0.764
	Urban	42	3.21	0.675
20. I am well paid in proportion to my ability.	Rural	68	3.56	0.764
	Urban	42	3.19	0.556
21. Teacher income is adequate for normal expenses.	Rural	68	3.79	1.984
	Urban	42	3.36	0.286

## Mean and standard deviation of each statement of teaching career in terms of stream of education

Statements	Stream of education	Ν	Mean	Std.
1. I am happy with my chosen career.	Education	59	3.54	0.388
	Non - Education	51	3.24	0.483
2. I feel inspired to do my best.	Education	59	3.85	0.562
	Non - Education	51	3.27	0.897
3. I plan to leave teaching profession in the next four years.	Education	59	3.58	0.894
	Non - Education	51	3.26	0.536
4. Teaching mathematics is boring profession to me.	Education	59	3.54	1.904
	Non - Education	51	2.98	0.784
5. I am proud to work here.	Education	59	3.74	0.679
	Non - Education	51	3.42	0.976
6. I feel happy at work.	Education	59	3.36	0.893
	Non - Education	51	3.26	0.877
7. I feel motivated by my work place.	Education	59	3.79	0.823
	Non - Education	51	3.19	0.657

8. I would encourage others to enter the teaching profession	Education	59	3.68	1.033
	Non - Education	51	3.34	1.286
9. I find public respect teaching profession as it	Education	59	3.15	1.053
contributes to development of society.	Non - Education	51	3.14	0.980
10. In my observation, people accept teaching as a normal profession in the society.	Education	59	3.63	0.875
	Non - Education	51	3.18	0.578
11. I have enough time to do my job well.	Education	59	3.75	1.096
	Non - Education	51	3.64	0.887
12. I would refer a friend or a family member to this profession.	Education	59	3.79	0.954
	Non - Education	51	3.36	0.882
13. Teaching mathematics is a "Good Career" for	Education	59	3.47	0.832
	Non - Education	51	3.33	0.776
14. My college experience prepared me to teach	Education	59	2.93	1.863
munemates.	Non - Education	51	3.82	0.954
15. I have enough time to do my job well.	Education	59	3.65	1.432
	Non - Education	51	3.53	1.955
16. There is a good place for me to develop my career.	Education	59	3.74	1.593
	Non - Education	51	3.38	1.775
17. Teacher income is barely enough to live on.	Education	59	3.86	1.228
	Non - Education	51	2.67	0.564
18. Insufficient income keeps me from living the way I want to live.	Education	59	3.78	0.452
	Non - Education	51	3.62	0.945
19. Teaching provides me with financial security.	Education	59	3.75	0.784
	Non - Education	51	2.46	0.985
20. I am well paid in proportion to my ability.	Education	59	3.93	0.794

	Non - Education	51	2.45	0.986
21. Teacher income is adequate for normal	Education	59	3.67	1.904
expenses.	Non - Education	51	2.86	0.676

### Mean and standard deviation of each statement of individual beliefs in teaching profession viewed by others in terms of gender

Statements	Gender	Ν	Mean	Std.
1. My students talk, share feelings and	Female	25	2.55	0.468
any hesitation.	Male	85	3.83	0.463
2. Some of my students ask any questions in leisure time.	Female	25	3.36	0.432
	Male	85	3.54	0.577
3. Students rarely follow my instruction.	Female	25	3.48	0.764
	Male	85	3.78	0.566
4. Students pay attention and respect to me.	Female	25	3.83	1.924
	Male	85	3.88	0.364
5. I feel that I have a positive relationship with my students' parents and discuss	Female	25	3.88	0.129
their performance frequently.	Male	85	3.56	0.623
6. Overall, parents rarely visit school.	Female	25	3.76	0.893
	Male	85	3.65	0.747
7. My colleagues and I share ideas to solve the problems that exist in my	Female	25	3.96	0.553
profession.	Male	85	2.42	0.998
8. My colleagues are not helpful when I have a problem.	Female	25	3.64	0.852
	Male	85	2.89	0.763
9. I enjoy working with my team.	Female	25	3.98	1.883
	Male	85	3.42	1.937
10. I trust my colleagues and the people on	Female	25	3.52	1.893

my team.	Male	85	3.22	0.988
11. In my observation, the principal and administration respect the dignity	Female	25	2.45	0.798
and worth of all teachers.	Male	85	3.46	0.766
12. I feel the principal and administration concern other matter rather than	Female	25	2.83	1.826
teachers.	Male	85	3.65	0.684
13. I feel heard and valued by my school administrator.	Female	25	2.27	0.737
	Male	85	3.86	0.582
14. School management shows a genuine interest in my career goals.	Female	25	3.63	0.722
	Male	85	3.95	0.537

Statements	Area	Ν	Mean	Std.
1. My students talk, share feelings and	Rural	68	3.55	0.833
asked me their problems without				
any hesitation.	Urban	42	3.93	0.986
2. Some of my students ask any questions in	Rural	68	3.46	1.863
leisure time.				
	Urban	42	3.84	0.985
3. Students rarely follow my instruction.	Rural	68	3.23	0.874
	Urban	42	3.38	0.484
4. Students pay attention and respect to me.	Rural	68	3.89	1.893
	Urban	42	3.98	0.989
5. I feel that I have a positive relationship	Rural	68	3.34	0.734
with my students' parents and discuss				
their performance frequently.	Urban	42	3.21	0.792
6. Overall, parents rarely visit school.	Rural	68	3.67	0.752
	Urban	42	2.49	0.556
7. My colleagues and I share ideas to solve	Rural	68	3.36	1.823
the problems that exist in my				
profession.	Urban	42	2.82	0.794
8. My colleagues are not helpful when I	Rural	68	3.24	1.852
have a problem.				
-	Urban	42	2.49	1.895
9. I enjoy working with my team.	Rural	68	3.36	1.113
	Urban	42	2.42	1.435
10. I trust my colleagues and the people on	Rural	68	3.62	1.358
my team.				
	Urban	42	3.48	0.974
11. In my observation, the principal and	Rural	68	3.43	0.762
administration respect the dignity				
and worth of all teachers.	Urban	42	3.47	0.998
12. I feel the principal and administration	Rural	68	3.42	0.784
concern other matter rather than				

# Mean and standard deviation of each statement of individual beliefs in teaching profession viewed by others in terms of place of origin

teachers.	Urban	42	3.66	0.955
13. I feel heard and valued by my school administrator.	Rural	68	3.27	0.864
	Urban	42	3.87	0.956
14. School management shows a genuine interest in my career goals.	Rural	68	3.67	1.084
	Urban	42	3.93	0.886

### Mean and standard deviation of each statement of individual beliefs in teaching profession viewed by others in terms of stream of education

Statements	Stream of	Ν	Mean	Std.
	Education			
1. My students talk, share feelings and asked me	Education	59	3.75	0.838
their problems without any hesitation.				
	Non -	51	3.64	0.985
	Education			
2. Some of my students ask any questions in leisure	Education	59	3.88	1.868
time.				

	Non - Education	51	3.78	0.989
3. Students rarely follow my instruction.	Education	59	3.92	0.854
	Non - Education	51	3.36	0.434
4. Students pay attention and respect to me.	Education	59	3.85	1.793
	Non - Education	51	2.97	0.789
5. I feel that I have a positive relationship with my	Education	59	3.39	0.654
performance frequently.	Non - Education	51	3.29	0.992
6. Overall, parents rarely visit school.	Education	59	3.62	0.852
	Non - Education	51	2.41	0.656
7. My colleagues and I share ideas to solve the problems that exist in my profession.	Education	59	3.39	1.423
	Non - Education	51	2.62	0.894
8. My colleagues are not helpful when I have a problem.	Education	59	3.64	1.452
	Non - Education	51	2.89	1.395
9. I enjoy working with my team.	Education	59	3.76	1.313
	Non - Education	51	3.42	1.335
10. I trust my colleagues and the people on my	Education	59	3.62	1.858
team.	Non - Education	51	3.48	0.984
11. In my observation, the principal and	Education	59	2.43	0.782
administration respect the dignity and worth of all teachers.	Non - Education	51	3.87	0.965
12. I feel the principal and administration concern other matter rather than teachers.	Education	59	3.62	0.787

	Non - Education	51	3.69	0.958
13. I feel heard and valued by my school administrator.	Education	59	3.57	0.864
	Non - Education	51	3.67	0.956
14. School management shows a genuine interest in my career goals.	Education	59	2.97	1.088
	Non - Education	51	3.97	0.806