

Students' Perception and Anxiety towards Mathematics learning in Nagarjun Municipality, Kathmandu, Nepal

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Abstract

Mathematics learning at the secondary level is influenced by students' perceptions and anxiety towards subjects. This study aimed to examine students' perceptions, mathematics anxiety and mathematics learning at the secondary level in Nagarjun Municipality, Kathmandu. The study employed a quantitative research approach with a descriptive and correlational research design. The study was conducted among 200 secondary-level students selected randomly from schools in Nagarjun Municipality, Kathmandu. Data were collected using a structured questionnaire designed to measure students' perception, mathematics anxiety and mathematics learning. The collected data were analyzed using descriptive statistics such as mean, frequency, percentage and standard deviation and also inferential statistics like correlation. The study examined the relationships among students' perception, mathematics anxiety and mathematics learning and also determined the extent to which perception and anxiety predict mathematics learning. The findings indicated that students' perceptions and mathematics anxiety were associated with their mathematics learning. A more positive perception towards mathematics was generally related to better mathematics learning, whereas higher mathematics anxiety was associated with less favorable mathematics learning outcomes. The study concludes that improving students' perceptions and reducing mathematics anxiety are important for promoting effective mathematics learning at the secondary level. The findings may be useful to mathematics teachers, school administrators, parents, curriculum planners and educational researchers for developing supportive and student-centered strategies to improve mathematical learning.

Keywords: Students' perception, Mathematics Anxiety, Mathematics learning, Secondary level, Nagarjun Municipality, Kathmandu

Introduction

Mathematics is the core subject in secondary education and is essential for developing logical reasoning, problem-solving, critical thinking and analytical skills. Despite its

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importance, many secondary-level students experience difficulties in mathematics learning. These difficulties are not only related to mathematical content and teaching practices but may also be associated with students' perceptions and anxiety towards mathematics. Students who perceive mathematics positively are more likely to participate actively, develop confidence and engage in mathematical activities, whereas negative perceptions may reduce interest and engagement. Similarly, mathematics anxiety may create fear, tension, lack of confidence and avoidance of mathematical tasks, which can adversely affect mathematical learning. Students' perception refers to the student's beliefs, attitudes, feelings, interest, confidence and views about mathematics and its learning. Mathematics anxiety refers to the feeling of fear, nervousness, tension or comprehension experienced while learning, studying or performing mathematical activities. Mathematics learning. In this study, it refers to the students' learning outcomes in mathematics, particularly their understanding, application, problem-solving ability and achievement. These three variables are interrelated and provide an important basis for understanding students' experiences in mathematics education.

In the Nepalese context, Mathematics achievement at the school level remains an important educational concern. At the secondary level, students' mathematics achievement or learning is very weak in comparison to other levels. So, this study is of great importance to explore the students' perceptions and anxiety towards mathematics at the secondary level in Nagarjun Municipality in Kathmandu District. Although mathematics is compulsory at the secondary level, comparatively limited empirical research has examined students' perceptions, mathematics anxiety and mathematics learning together, particularly at the municipal level. Most studies tend to focus on achievement, teaching methods or mathematics anxiety separately. Therefore, there is a need for empirical evidence from specific Nepalese school contexts to understand how students' perceptions and anxiety are associated with their mathematics learning. This study attempts to address this gap by examining these variables among secondary-level students in Nagarjun Municipality, Kathmandu. The study was conducted with 200 secondary-level students. Students' perception and mathematics anxiety were measured through a structured Likert-scale questionnaire covering relevant dimensions of the respective constructs. Mathematics learning was measured through students' performance on a mathematics learning/ achievement measure based on the relevant secondary-level mathematics curriculum. The collected data were analyzed using descriptive statistics and inferential statistical techniques, including correlation and regression analysis, to determine the relationships among perception, anxiety, and mathematics learning. The study aimed to assess the level of students' perception, mathematics anxiety, and mathematics learning among secondary-level students and also to examine the relationship between students' perception, mathematics anxiety and mathematics learning. This study addressed research questions such as: What are the levels of students' perception, mathematics anxiety and mathematics learning among secondary-level students in Nagarjun Municipality? What relationship exists among students' perception, mathematics anxiety and mathematics learning? To what extent do students' perception and mathematics anxiety predict mathematics learning? Therefore, the findings may contribute to mathematics education research in Nepal and provide useful implications for teachers, schools, curriculum developers and

educational policymakers for creating supportive learning environments and improving students' mathematics learning.

Literature Review

Mathematics is an essential discipline or important component of school education because it contributes to logical reasoning, problem solving, decision making and the development of skills required for further education and everyday life. However, students' experiences in Mathematics are influenced not only by cognitive factors but also by affective factors such as perception, attitude, confidence, motivation and anxiety. Students who perceive mathematics as difficult, abstract or threatening may develop negative feelings towards the subject, which can influence their participation, persistence and learning outcomes. Therefore, understanding students' perception and anxiety is important for improving mathematics learning, particularly at the secondary level. The literature review based on this topic can be summarized as below:

Theoretical Literature

1) Students' perception towards Mathematics

Students' perception of Mathematics refers to their beliefs, feelings, attitudes, expectations, and views about mathematics as a subject and about their own ability to learn it. Positive perceptions may encourage students to participate actively, make sustained efforts and approach mathematical problems with confidence, whereas negative perceptions may lead to avoidance and reduced engagement. A systematic review of 95 studies on secondary students' attitudes toward mathematics reported that students commonly decline during secondary education and emphasized the importance of understanding how mathematics attitudes are conceptualized and measured. The review also examined the relationship between mathematics attitudes and mathematics achievement, indicating that the affective dimensions of mathematics learning serve considerable research attention. Students' perceptions are shaped by several factors, including previous learning experiences, classroom environment, teacher behaviour, teaching methods, peer influence, parental expectations, and perceived difficulty of mathematical ability. A supportive classroom environment can encourage students to express ideas, ask questions, make mistakes and engage in problem-solving without fear. In contrast, excessive emphasis on examination performance, negative feedback, and experiences of repeated failure may contribute to negative perceptions of mathematics.

2) Mathematics Anxiety

Mathematics anxiety refers to the feelings of fear, tension, worry or nervousness that occur when students are required to learn or perform mathematical tasks. It may occur during mathematics classes, examinations, problem-solving activities or when students are asked to answer mathematical questions in front of others. A high level of mathematics anxiety can negatively influence concentration, working memory, confidence and academic performance. Anxious students may avoid mathematics activities, hesitate to participate in class and experience difficulties in solving even simple problems. This can create a negative cycle in which poor performance increases anxiety, and increased anxiety further reduces performance.

3) Relationship between perception and anxiety

Students' perception and Mathematics anxiety are closely related; students who perceive mathematics as difficult or believe that they are not capable of learning it may experience a higher level of anxiety. Conversely, students with positive perceptions,

confidence and interest in mathematics are generally less likely to experience severe mathematics anxiety. Teachers, parents, classroom environments, teaching methods and previous experiences in mathematics can influence both perception and anxiety. Supportive teaching, encouraging feedback, practical activities and opportunities for successful learning experiences can help students develop positive perceptions and reduce anxiety.

Empirical literature

Ma and Xu (2004) conducted an empirical study on the relationship between mathematics anxiety and mathematics achievement. Their findings indicated a negative relationship between mathematics anxiety and students' performance. The students with higher levels of anxiety generally demonstrated lower achievement in mathematics. The study also suggested that negative experiences in mathematics may contribute to the development of anxiety.

Zakaria, Chin and Daud (2010) examined students' attitudes towards mathematics and their achievement, and reported that students with positive attitudes and perceptions towards mathematics generally showed that better academic performance factors such as confidence, interest, motivation and perceived usefulness of mathematics were important in developing positive attitude.

Ascraft and Kirk (2001) investigated the effects of mathematics anxiety on cognitive performance; the study found that mathematics anxiety can reduce working memory capacity, making it more difficult for students to solve mathematical problems effectively. Highly anxious students often experience worry and distraction during mathematical tasks, which negatively affects their performance.

Singh, Granville and Dika (2002) found that students' attitudes and perceptions towards mathematics were associated with academic achievement. Students who had positive beliefs about their mathematical abilities and valued mathematics were likely to perform successfully.

Hambree (1990), through a meta- analysis of studies related to mathematics anxiety, found that it was negatively associated with mathematics achievement and positive attitudes towards mathematics. The findings showed that students with high mathematics anxiety were more likely to avoid mathematics- related activities and courses.

Zhou et al. (2026) conducted a scoping review of 132 empirical K- 12 studies published in 2019- 2025. They found that mathematics anxiety is influenced by individual and environmental factors, while mathematics performance remains the major outcome examined. Importantly for this study, they identified high-school students and cross-sectional research as underdeveloped areas and noted that research relies heavily on cross- sectional designs.

A 2024 Swiss study examined secondary students' emotions, perceptions of instructional quality and mathematics achievement. It found significant associations between perceived instructional quality, students' mathematics emotions and achievement. This supports examining students' perceptions and emotional responses together rather than treating achievement as an isolated outcome.

Bhatta (2016) conducted a qualitative case study on mathematics anxiety: causes and ways of minimisation among Basic level students in Kritipur, Kathmandu. Classroom observation, semi-structured interviews and focus group discussions were used to collect data. The study explored the reasons for mathematics anxiety among

Basic level students and suggested that understanding students' classroom experiences is important for minimizing their anxiety.

Shrestha (2017) conducted an interpretive inquiry into the problems faced by students in learning mathematics in a school in Kathmandu. The findings identified mathematics anxiety, weak teacher-student interaction, teacher discrimination, low socioeconomic condition, lack of motivation and inadequate attention to student diversity as major problems. The study recommended a child-friendly classroom environment, motivational support, parental involvement, group discussion and teaching mathematics in relation to students' daily lives.

Poudel (2019) examined mathematics anxiety among secondary-level students in Nepal, focusing on the relationship between classroom environment and mathematics learning and test anxiety. The findings suggested that students' lack of interest in mathematics, weak participation in classroom activities, inadequate functional knowledge, complex mathematical content and insufficient preparation for tests contributed to mathematics anxiety. The study further emphasized the importance of a positive and supportive classroom environment.

Pandit (2021) studied students' attitudes towards mathematics among Grade XI students in Saptari District; the study found that most students had a generally positive attitude towards mathematics. It also shows that lack of self-confidence, mathematics anxiety, family educational background, home environment and sociocultural factors were identified as important challenging factors towards mathematics. The above reviewed literature demonstrates that mathematics anxiety is significantly associated with mathematics performance and that students' attitudes or perceptions toward mathematics are important dimensions of mathematics learning. International research has provided substantial evidence through correlational, longitudinal and meta-analytic studies. However, the literature also shows considerable variation according to educational level, cultural context, measurement instruments, mathematical tasks and learning environments.

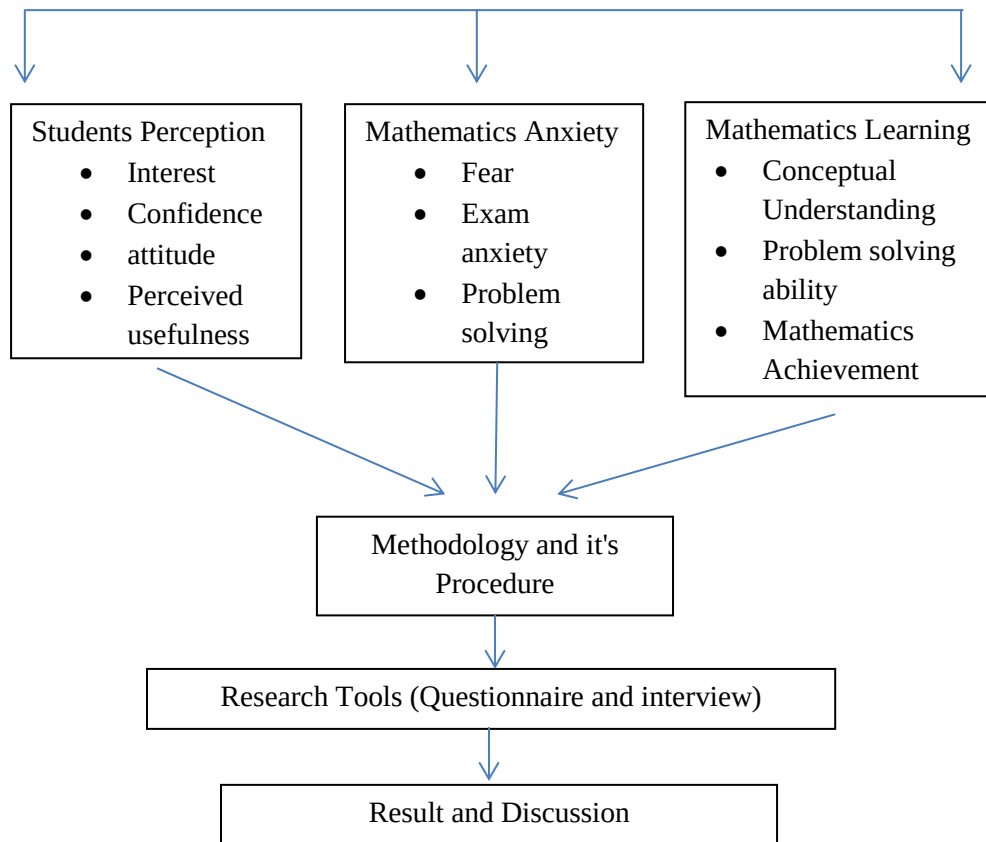
In Nepal, existing research has examined mathematics anxiety and classroom-related factors, but comparatively limited attention has been given to the combined investigation of students' perception toward mathematics and mathematics anxiety among secondary-level students in Nagarjun Municipality, Kathmandu. Furthermore, there is a need for context-specific evidence regarding the level of students' perception, level of anxiety and the relationship between these variables. Therefore, the present study seeks to address this gap by examining students' perceptions and anxiety toward mathematics learning among secondary-level students in Nagarjun Municipality, Kathmandu, Nepal. This study is expected to provide empirical evidence that can assist mathematics teachers, schools, parents, and educational policymakers in developing supportive learning environments, promoting positive perceptions, reducing anxiety and improving mathematics learning.

Conceptual framework

The conceptual framework provides the road map to the research study, so the overall framework of this study is given below:

students perception and anxiety towards mathematics





Objectives

The main objectives of this study are to examine students' perception and anxiety towards Mathematics learning and their relationship with Mathematics achievement among secondary level students in Nagarjun Municipality, Kathmandu. However, the specific objectives of this study are as follows:

- To assess the level of students' perception towards Mathematics learning among secondary level students.
- To determine the level of mathematics anxiety among secondary level students.
- To examine the relationship between students' perception, mathematics anxiety and mathematics achievement.

Research Questions

The study addressed the following research questions:

- What are the levels of students' perception, mathematics anxiety and mathematical achievement among secondary-level students in Nagarjun Municipality?
- What relationship exists among students' perception, mathematics anxiety, and mathematical learning?
- To what extent do students' perception and mathematics anxiety predict mathematics learning?

Methodology

The study entitled "Students' Perception and Anxiety towards Mathematics Learning among secondary level students in Nagarjun Municipality, Kathmandu" was conducted using a quantitative descriptive survey research design. The design is appropriate because the study aims to examine students' perceptions, levels of Mathematics anxiety and their relationship with Mathematics learning. It was conducted among secondary level students (Grade 9 and 10) of schools in Nagarjun Municipality, Kathmandu, Nepal. The population included students enrolled in both community and institutional schools within Nagarjun Municipality. The researcher selected 200 students from 5 secondary Government schools, maintaining reasonable representation of grades 9 and 10 and both genders. The data were collected by using a structured questionnaire and interview tools. A structured Likert-scale questionnaire was developed to measure the students' perception of Mathematics learning. The Likert scale was used as: 1= strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree. Similarly, a Mathematics anxiety questionnaire was used, including fear of Mathematics, anxiety of examination, problem solving, fear of making mistakes, answering questions in the classroom and physical/ emotional relations during Mathematics learning, etc.

Table-1

Sample size (N)= 200 (Secondary level students)

Category	Group	Ferquency	Percentage
Gender	Male	98	49.0%
	Female	102	51.0%
Grade	9	104	52.0%
	10	96	48.0%
Total		200	100%

Data Analysis and Interpretation

After obtaining permission from the concerned authorities and schools, the researcher visited the selected schools. The purpose of the study was explained to participants. A questionnaire was distributed to the selected students and collected after completion. Students were informed that their responses were only for research purposes and that their identities would remain confidential. The collected data were coded and analyzed by SPSS, including statistical techniques like frequency, mean, percentage, SD and Pearson correlation(r).

Table-2

The overall descriptive statistics

Scores for perception and mathematics anxiety are based on a 5-point Likert scale, whereas the mathematics achievement score is based on a maximum of 30 marks.. The study used a 50-item instrument comprising 20 items measuring students' perception, 15 items measuring mathematics anxiety, and 15 objective questions measuring mathematics achievement. Each achievement item carried 2 marks, giving a maximum possible achievement score of 30.

Variables	N	Mean	SD
Perception towards Mathematics	200	3.54	0.62
Mathematics anxiety	200	2.91	0.71
Mathematics achievement (Out of 30)	200	17.36	4.21

Table-3
Students' Perception Level

Perception Level	Frequency	Percentage
Low	28	14.0%
Moderate	103	51.5%
High	69	34.5%
Total	200	100%

More than half of the students (51,5%) demonstrated a moderate perception of Mathematics, while 34.5% showed a high perception. Only 14.0% had a low perception level. The graphical representation of students' perception level (Pie Chart) is:

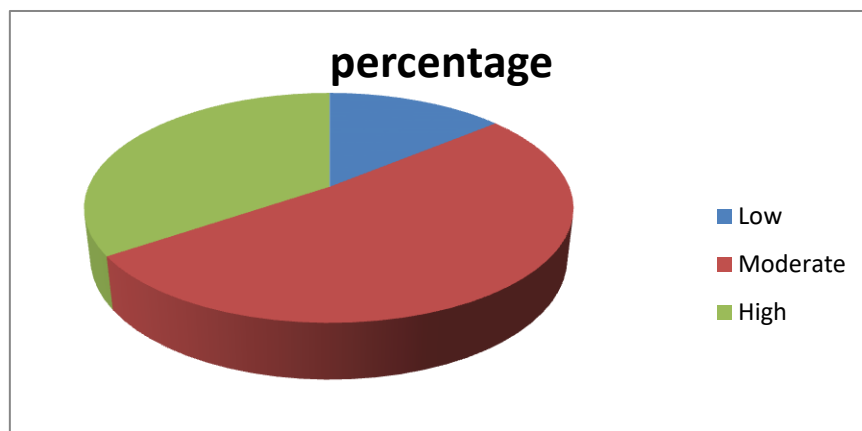


Table-4
Mathematics Anxiety level:

Anxiety Level	Frequency	Percentage
Low	48	24.0%
Moderate	109	54.5%
High	43	21.5%
Total	200	100%

The majority of students (54.5%) experienced moderate mathematics anxiety. About one-fifth (21.5%) experienced high anxiety. The mathematics anxiety level of students can be illustrated as below.

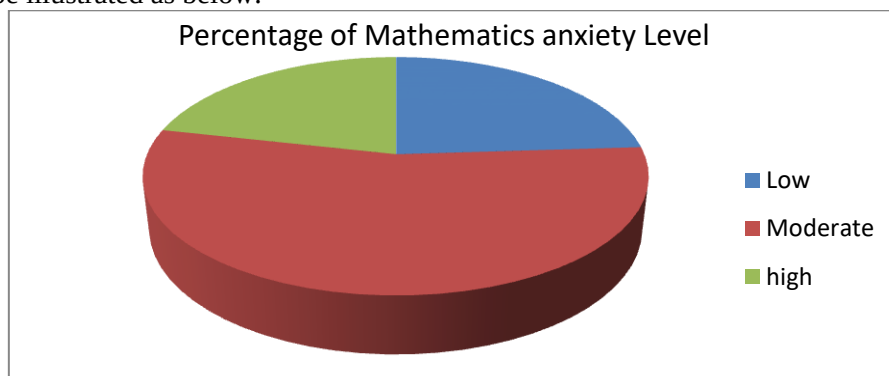


Table-5**Gender - wise Result:**

Variable	Male(n= 98) Mean	Female(n= 102) Mean	Overall Mean(N= 200)
Perception	3.59	3.49	3.54
Anxiety	2.78	3.04	2.91
Achievement	17.82	16.92	17.60

This table suggests that female students have slightly higher Mathematics anxiety than male students and slightly lower achievement than male students.

Table-6**Relationship among major variables:**

Variables	Pearson's r	t- value	df	P- value (2-tailed)	Interpretation
Perception ↔ Anxiety	-0.48	-7.699	198	< .001	Moderate(-ve) relationship
Perception ↔ Achievement	+0.56	+ 9.511	198	< .001	Moderate (+ve) relationship
Anxiety ↔ Achievement	-0.51	- 8.343	198	< .001	Moderate(-ve) relationship

Table 6 illustrates that Students with more positive perceptions of Mathematics tend to report lower anxiety. A positive perception is also associated with higher mathematics achievement, whereas high anxiety is associated with lower achievement.

Discussion

The findings of the study indicate that students' perception towards mathematics is closely related to their level of mathematics anxiety. Students who expressed positive perceptions towards mathematics tended to report lower levels of anxiety, while students with negative perceptions were more likely to experience higher anxiety. This suggests that students' beliefs about their mathematical ability, interest in mathematics, confidence and perceived usefulness of mathematics may influence their emotional responses during mathematics learning. The negative relationship between perception and anxiety can be explained by students' confidence and learning experiences. Students who believe that mathematics can be learned through regular practice are more likely to participate actively, attempt mathematical problems and persist when they face difficulties. Such experiences may reduce fear and nervousness. In contrast, students who consider mathematics difficult or believe that they are weak in mathematics may avoid participation and experience worry during mathematics class, tests and problem-solving activities. The findings also suggest that mathematics teachers have an important role in developing students' perceptions and reducing anxiety. Supportive teacher behaviour, student-centred teaching methods, opportunities for practice, constructive feedback and a non- threatening classroom environment can help students develop confidence in mathematics. Excessive pressure, fear of mistakes and negative comments may contribute to mathematics anxiety. Overall, the study suggests that students' perceptions and mathematics anxiety are important factors in mathematics learning. Improving students' perception alone may not completely eliminate anxiety, but developing positive attitudes, confidence, interest and

motivation can contribute to reducing anxiety and improving engagement and achievement in mathematics. Therefore, Mathematics teaching at the secondary level should address both students' cognitive learning needs and emotional experiences.

Conclusion

Overall, the findings suggest that students' perceptions and Mathematics anxiety are closely related. Students who perceived mathematics as useful, understandable, interesting and manageable were likely to report lower levels of anxiety. Conversely, negative perceptions of mathematics were associated with greater anxiety and reduced confidence in mathematics learning. Therefore, the study emphasizes the need for student-centred, supportive, activity-based, and problem solving oriented mathematics teaching approaches to develop positive perceptions and reduce mathematics anxiety among secondary level students in Nagarjun Municipality, Kathmandu, Nepal.

References

- Ashcraft, M. H., & Kirk, E. P. (2001). The relationships among working memory, math anxiety, and performance. *Journal of Experimental Psychology: General*, 130(2), 224–237.
<https://doi.org/10.1037/0096-3445.130.2.224>
- Bhatta, H. R. (2016). *Mathematics anxiety: Causes and ways of minimization at basic level students*. Tribhuvan University.
- Fenne, e., & sherman, J. A. (1976). Fennema-Sherman mathematics attitudes scale. *Journal for research in mathematics education*, 7(5), 324– 326.
- Gnawali, Y. P. (2023). Math anxiety: classroom culture as a causing factor. *humanities and social sciences journal*, 15(1-2), 95- 113
- Joshi, M.r. (2017). *Students' attitude towards mathematics*. Tribhuvan University.
- Ma, X., & Xu, J. (2004). The causal ordering of mathematics anxiety and mathematics achievement: a longitudinal panel analysis. *Journal of Adolescence*, 27(2), 165–179.
<https://doi.org/10.1016/j.adolescence.2003.11.003>
- Neupane, S. (2015). *Causes of anxiety in mathematics learning*. Tribhuvan University.
- Pandit, S. K. (2021) . *Students' attitude towards mathematics at Grade XI*. tribhuwan University.
- Paudel, K. C. (2019). *Mathematical anxiety among secondary level students in Nepal*. The Eurasia proceedings of Educational and social sciences, 14, 34- 40.
- Poudel, K. C. (2023). *Impact of classroom environment of anxiety in mathematics learning*. Tribhuvan University.
- Regmi, N. (2016). *Mathematical anxiety among secondary level girls students*. Tribhuvan University.
- Shrestha, B. (2017). *Problems faced by students in learning mathematics: an interpretive inquiry*. Tribhuvan University
- Singh, K., Granville, M., & Dika, S. (2002). Mathematics and science achievement: Effects of motivation, interest, and academic engagement. *The Journal of Educational Research*, 95(6), 323–332.
<https://doi.org/10.1080/00220670209596607>
- Wen, R., & Dube, A. K. (2022). A systematic review of secondary students' attitudes towards mathematics and its relation with mathematics achievement. *Journal of numerical cognition*, 8(2), 295- 325
- yan, x. (2024). How does math anxiety affect students' academic achievement in Mathematics? *Journal of social systems and policy analysis*, 1(4), 131- 142
- Zhou, Y., Jing, b., Wang, Q., & zhang, J. (2026). *What shapes mathematics anxiety in K- 12 education? A scoping review of research from 2019 to 2025*. *Frontiers in Psychology*, 17, 1894090.

Questionnaires: 50-item instrument

Response scale for perception of Mathematics (using a Likert scale)

5= Strongly agree, 4= Agree, 3= Neutral , 2= disagree, 1= strongly disagree

A) Perception towards Mathematics Learning - 20 items

1. I enjoy learning Mathematics.
2. Mathematics is an important subject for my education.
3. Mathematics is useful in everyday life.
4. I am interested in learning new mathematical concepts.

5. I feel confident while learning Mathematics.
6. I enjoy solving mathematical problems.
7. Mathematics develops my logical thinking.
8. I like participating in mathematics classroom activities.
9. I try to understand mathematical concepts instead of memorizing them.
10. I believe mathematics will be useful for my future career.
11. I am motivated to improve my mathematics performance.
12. I spend extra time practicing mathematics.
13. I ask questions when I do not understand mathematics.
14. I believe regular practice improves my mathematics ability.
15. I enjoy working with classmates to solve mathematics problems.
16. I can apply mathematical knowledge to real- life situations.
17. I feel satisfied when I solve difficult mathematics problems.
18. I believe every student can learn mathematics.
19. I actively participate in mathematics lessons.
20. I have a positive attitude toward learning mathematics.

B) Anxiety towards Mathematics Learning – 15 items.

1. I feel nervous when solving mathematics problems.
2. I feel worried before a mathematics examination.
3. I become anxious when my mathematics teacher asks me a question.
4. I feel tense when solving mathematics problems in front of others.
5. I worry about making mistakes in mathematics.
6. I feel uncomfortable when learning difficult mathematical concepts.
7. I become confused when I see a difficult mathematical problem.
8. I am afraid of getting low marks in mathematics.
9. I feel stressed during mathematics tests.
10. I feel anxious when I have limited time to solve a mathematical problem.
11. I find it difficult to concentrate when I am anxious about mathematics.
12. I feel nervous when explaining my mathematical solution.
13. I feel helpless when I can not solve a mathematics problem.
14. I avoid participating in mathematics activities because of anxiety.
15. My anxiety prevents me from showing what I know in mathematics.

C) Mathematics Achievement- 15 items (Objective questions)

For achievement, use actual mathematics questions rather than asking students whether they are good at mathematics.

1. If $3x + 5 = 20$, what is the value of x ?
 A. 3
 B. 5
 C. 7
 D. 8
2. What is the value of $2^3 \times 2^2$?
 A. 16
 B. 32
 C. 64
 D. 128
3. Which one is the square root of 25?
 A. 3
 B. 5
 C. 7
 D. 10
4. Solve: $2p - 6 = 10$
 A. 4
 B. 6
 C. 8
 D. 10
5. IF the sides of a rectangle are 8 cm and 5 cm, what is its area?

- A. 13 cm^2
 - B. 26 cm^2
 - C. 40 cm^2
 - D. 80 cm^2
6. What is the mean of 5, 10, 15, 20 and 25?
- A. 10
 - B. 12
 - C. 15
 - D. 20
7. A triangle has angles 50° and 60° , what is the third angle?
- A. 60°
 - B. 70°
 - C. 80°
 - D. 90°
8. What is the HCF of 18 and 24?
- A. 3
 - B. 6
 - C. 9
 - D. 12
9. If $y = 2x + 3$, what is y when $x = 4$?
- A. 7
 - B. 9
 - C. 11
 - D. 12
10. A student obtains 40 marks out of 50. What percentage is obtained?
- A. 60%
 - B. 70%
 - C. 80%
 - D. 90%
11. If the ratio of boys to girls is 2:3 and there are 20 boys, how many girls are there?
- A. 25
 - B. 30
 - C. 35
 - D. 40
12. What is the probability of getting a head when a fair coin is tossed once?
- A. 0
 - B. $\frac{1}{4}$
 - C. $\frac{1}{2}$
 - D. 1
13. Simplify: $3(2x + 4)$
- A. $6x + 4$
 - B. $6x + 12$
 - C. $5x + 12$
 - D. $6x + 8$
14. A shopkeeper buys an article for Rs. 500 and sells it for Rs. 600. What is the profit?
- A. Rs. 50
 - B. Rs. 75
 - C. Rs. 100
 - D. Rs. 150
15. If 5 pens cost Rs. 100, what is the cost of 8 pens?
- A. Rs. 120
 - B. Rs. 140
 - C. Rs. 160
 - D. Rs. 180