CHAPTER III
RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the methods, tools, and steps we used to gather, analyse, and validate the data to answer the questions in this study. Methodology in research refers to the organized way of solving a research problem by collecting data through different methods, analysing the collected data, and making conclusions based on that data. A research methodology is like a plan or blueprint for a research project or study (Murthy & Bhojanna 2009). Therefore, the methodology part of a research proposal is very important. Methodology refers to the foundational ideas and analysis that guide how research is conducted or should be conducted, as stated by Kirsch and Sullivan (1992). Similarly, Mills & Birks (2011) describe methodology as a collection of principles and concepts that shape the design of a research project. In this study, the research methodology chapter addresses the overall research design and sampling strategy. It elaborates on appropriate tools prepared for data collection, data collection methods, and data analysis techniques used. Ethical implications and limitations are addressed therefore creating sufficient information for others to evaluate or even replicate the study without difficulties.

3.2 Locale of the study

Bodoland Territorial Region(BTR) is an autonomous council in Assam, India. It comprises five districts situated on the northern banks of the Brahmaputra River. At the base of the mountains of Bhutan and Arunachal Pradesh lie Bodo majority districts BTR is governed by a democratically elected body called Bodoland Territorial Council which has been constituted in lieu of a peace accord signed in February of 2003 and its autonomy was even more enhanced by an accord signed in January of 2020. The Bodos are mainly found in the five districts that make up the Bodoland Territorial Region (BTR). Among the 5 districts, only 3 districts ,namely Kokrajhar, Baksa and Udalguri will be considered for the study. The districts have been selected based on the highest population.

3.3 Research Design

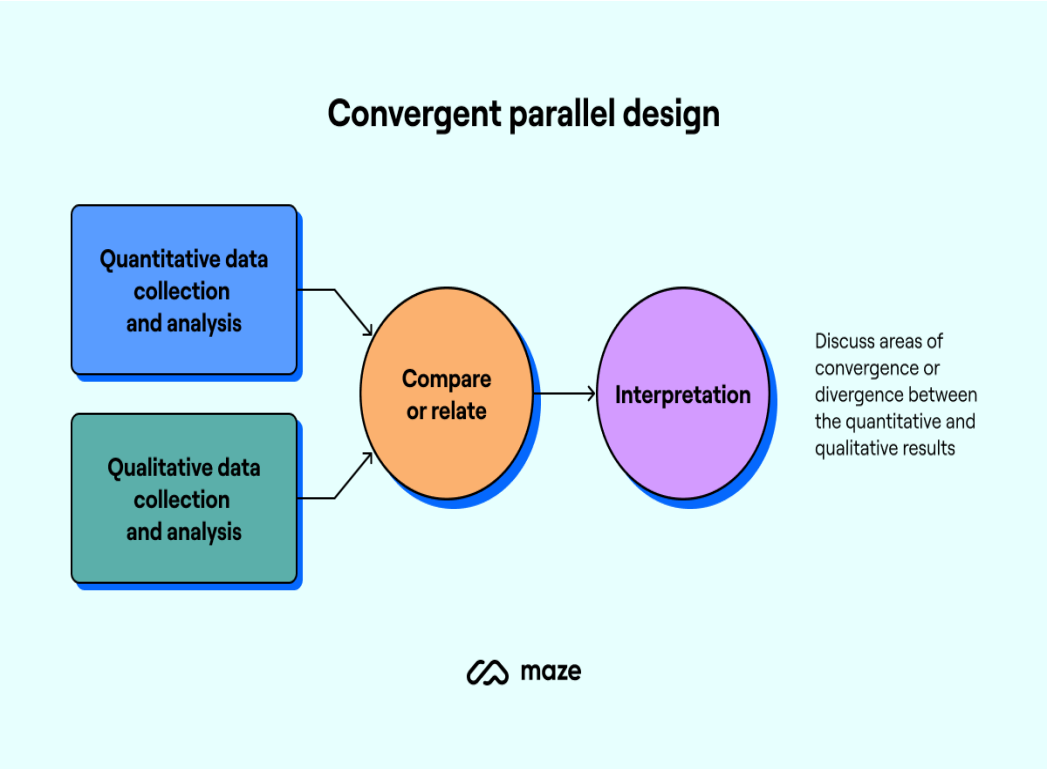
Research design can be described as a structure of method and techniques which a researcher selects in order to arrange the different elements of the research into a coherent whole that will address the research problem. Thyer (1993) states that " A traditional research design is a blueprint or detailed plan of how a research study is to be completed; operating variables for measurement, selecting a sample, collecting data and analysing the results of interest to the study, and testing the hypotheses." Bryman & Bell (2007) emphasized that a research design should outline the overall plan and direction of a study, as well as serve as a guide for collecting and analysing data. This study is focused on studying the status of education of Bodo women of BTR, the constraints they have faced and their perception towards education of Bodo women. Furthermore ,it will provide recommendations with respect to education of Bodo women of BTR.

This study used a mixed-method approach as its research methodology. This strategy incorporates both quantitative and qualitative aspects in a unified way. Mixed method research began in the late 1980s (Creswell, 2013). This approach combines both quantitative and qualitative data in one study (Classen et al., 2007). It aims to gather, analyse, and integrate these two types of data to gain a deeper understanding of research issues than either method could provide on its own (Hui Bian,n.d). This is because relying on just one type of data might not be sufficient, so a second method is used to complement the first and to further clarify the initial findings.

Convergent Parallel Design was employed in this study to gather various yet complementary information about the education of Bodo women in BTR. This approach directly compared or corroborated quantitative results with qualitative findings to ensure their consistency and reliability. The goal of convergent parallel design mixed methods is to thoroughly analyse the research problem by combining quantitative and qualitative data. In this approach, researchers usually gather both types of data simultaneously, give equal importance to each method, analyse the data separately, and then integrate the results during the final interpretation. They aim to identify similarities,

differences, contradictions, or connections between the two sets of data(Hui Bian, n.d).

Figure 3.1 Diagram of convergent parallel mixed methods



Source: https://maze.co/blog/mixed-methods-research/

3.4. Research Method

The research used a descriptive survey method to gather information from Bodo women living in the Bodoland Territorial Region.

Fraenkel, Wallen, and Hyun (2015) explain that descriptive surveys aim to collect data to describe current situations, usually with an emphasis on " identifying relationships" and gaining insight into “attitudes, opinions, behaviours, or characteristics" of a particular group. They believe that survey research is useful for drawing conclusions from a smaller group to a larger population. Kothari (2004) explains that the descriptive survey method is research that focuses on describing the features or roles of a particular group by collecting measurable data, usually through questionnaires or interviews. Kothari highlights that this method is useful for gaining thorough insights into patterns and trends.

3.5. Population of the study

In research methodology, the "population of the study" refers to the entire group of people, things, or subjects that have specific traits and are important to the researcher. This group includes everyone or everything that the researcher might look at when doing a study. It represents all the possible subjects that are related to the research question. A thoroughly delineated population makes it possible for the results to be applicable to the wider group. As Babbie (2010) puts it, the population is the aggregation of the study elements that the researchers are theoretically concerned with. Thus, research's population must be clearly stated as it affects sampling techniques, data gathering processes and the accuracy of the research

Table 3.1 :Total Bodo population in three district of Bodoland territorial Region (BTR)

	KOKRAJHAR		BAKSHA		UDALGURI	
Rural	Male	Female	Male	Female	Male	Female
	656896	652654	143553	143755	107688	107539
Urban	26035	26150	533	556	1640	1714
Total	225041		288397		218581	

Source: Directorate of economics and statistics, Assam

outcomes. In this study, Population will comprise all the Bodo women from 3 districts of Bodoland Territorial Region of Assam, namely Kokrajhar, Baksa and Udalguri.In addition, the study will only involve women who reside in remote villages and who have achieved at least primary to a certain level of education in their lifetime.

3.6. Sample and Sampling Technique

In this study , the rural Bodo women population of the three districts of BTR is 903948 which is the total population in this study.

Table3.2: Showing sampling distribution

Sampling Distribution				
	BAKSA	KOKRAJHAR	UDALGURI	Total
	200	200	200	600

In this study,3 districts of BTR, namely, Kokrajhar, Baksa and Udalguri has been purposively selected on the basis of highest number of populations. However, the actual number of Bodo women who had gone to school or even attended basic education is not available. Hence, the researcher had decided to arrive at a sample size of 600. When making decisions about sample size, it is often necessary to take into account practical factors such as time constraints, costs and resource availability. A sample size of 600 provides an adequate representation across a wide range of characteristics especially in population groups with greater diversity such as tribal communities.

From the 3 districts, and 200 rural Bodo women having education or have at least attended basic schooling, have been selected for quantitative analysis from each district. And 30 women from among the 600 women has been selected for qualitative study. This is done, keeping in mind the objective of the study, where data will be collected from those women who might have faced some constraint in attaining that education and also the perception they have developed about it. Qualitative data collection in this research also required purposive sampling which involved a selection of 10 Bodo women from every district, making 30 women in total, based on their ability to provide detailed information. This sample of 30 women are selected

among the 600 total women. This technique of sampling is used in research to increase the depth and the richness of qualitative data particularly where the subjects have specific unique characteristics.

In conclusion, this method can be characterized as purposive sampling technique. Purposive sampling elevates the depth and richness of the data by selecting participants based on their unique knowledge or experiences. Its special significance lies in mixed method research, primarily because it tends to focus on the phenomenological aspect of understanding specific phenomena in detail. Simultaneously, it saves time and cost by bringing participants under the study inclusion criteria without having to sample a large irrelevant population (Palinkas et al., 2012).

3.7 Tools used for data collection

The current research is described as descriptive survey research as the researcher tries to study the education of Bodo women in BTR of Assam . Once the required sample size was established, the researcher looked for suitable strategies for data collection from the chosen samples. In this regard, the researcher conducted an extensive survey to explore the tools which can be employed in this study. Since the researcher couldn't find the right tools for the study, hence, all the tools were prepared and standardized by the researcher. The tools used for this study are :-

3.7.1 Scale on Constraints to education of women

Concept of Constraints

Jackson (1991) explains that constraints are factors that can restrict involvement and enjoyment in various activities. Eliyahu M. Goldratt (1947-2011), the creator of the Theory of Constraints, said, “Every improvement is a change, but not every change is an improvement.” The Theory of Constraints is a collection of logical processes and practical methods used to identify and overcome major obstacles that prevent individuals, groups, or organizations from reaching their goals. Many educators aim to prepare students of all ages to be responsible and productive both now and in the future. However, despite their best efforts, dedication, and current practices, several barriers still hinder the progress needed to achieve this goal.

Not many scales have been developed to study the factors that act as constraints in education of women. Therefore, the researcher could not get significant number of references. Only one standardized scale has been found related to it.

Basantia has developed a *Basantia Psycho-social constraints Inventory (BPSCI)* to measure the Psychological and Social constraints that tribal people face in every sphere of life. There are 51 items in the and the magnitude of each statement is divided into three parts, i.e., Always, Sometimes and Never. All the items are in negative statements.

Description of the tool

The researcher has identified ***5 parameters*** to study the constraints in education of women. They are Family constraints, Socio-cultural constraints, financial constraints, School-based constraints, psychological constraints. There are **32 statements** in the final scales. All the items are **negative** as it intends to study the contains on women education. The magnitude of each response is divided into 3 parts, that is Always, Sometimes and Never. Their score for: **Always=1, Sometimes=2 and Never =3.**

Development of "Scale on constraints to education of women"

Step 1 :Initial draft of the scale

The researcher reviewed a vast number literature to develop this tool. The researcher initially identified 5 dimensions with 51 statements in the scales.

The dimensions were, Family constraints (11 statements),Socio-Cultural constraints (10 statements), Financial constraints (9 statements),School related constraints (13 statements), Psychological constraints (8 statements)All the items are negative as it intends to study the constraints to education of women. The magnitude of each response is divided into 3 parts, that is Always, Sometimes and Never. Their score for: Always=1, Sometimes=2 and Never =3.The 3-point Likert Scale intends to measure the constraint to education of Bodo women.

Step 2: Content validation

The content validity of the tool was established. To ascertain this, the researcher gave copies of questionnaire, the purpose of the study and research questions to experts

from both national and international. The scale is reviewed by a group of 4 professors who specialize in the subject. This group includes 1 international expert and 3 national experts, who each give their own opinions. The statements in the scale are carefully checked to ensure they accurately measure what they are supposed to and cover different parts of that topic. The experts examined the items in terms of content coverage, appropriateness of language used in developing the items and relatedness to research questions. Their comments and suggestions were used in the modification of the items and hence, the second draft of the scale with 35 statements was developed.

STEP 3: Pilot testing

The researcher conducted the pilot study in Goroimari village of Sonitpur District, Assam .The total number of samples taken for pilot study was 100 rural Bodo women.

Step 4: Item Analysis and selection of items

Item analysis is a key part of creating a standard questionnaire. The scores from the pilot test were sorted from highest to lowest. Two groups were formed: one with high scores and one with low scores. To analyse each question, 27% of the people with the highest scores and 27% of those with the lowest scores were selected. To select the items, t-values are calculated using the procedure explained by Allen L. Edwards (1957).

In table 3.2 it can be seen that the T-value of item no 24,25 and 28 are less than 1.75 and therefore those items are discriminated. Based on the calculated t- value, the items which are having value above 1.75 have been selected and this formed the final items for the study.

Table 3.3 Items analysis and Selection of the Item: Scale on Constraint to the education of women

Item no	T- value	Remarks
1.	13.353	Accepted
2.	12.609	Accepted
3.	14.639	Accepted
4	14.340	Accepted
5	3.735	Accepted
6	9.578	Accepted
7	19.051	Accepted
8	10.156	Accepted
9.	4.753	Accepted
10.	6.522	Accepted
11	4.949	Accepted
12.	4.149	Accepted
13	10.018	Accepted
14	4.232	Accepted
15	2.161	Accepted
16	16.922	Accepted
17	11.193	Accepted
18	9.446	Accepted
19	6.717	Accepted
20	9.773	Accepted
21	8.873	Accepted
22	12.609	Accepted
23	2.884	Accepted
24	**-0.557**	**Rejected**
25	**-0.570**	**Rejected**
26	7.504	Accepted
27	3.369	Accepted
28	**-0.310**	**Rejected**
29	4.741	Accepted
30	9.985	Accepted
31	10.844	Accepted
32.	11.824	Accepted
33	12.619	Accepted

34	14.862	Accepted
35	10.452	Accepted

Step 5: Scoring procedure

Total 32 statements in the scales were included in the study. This tool will be used for the data collection of the study. As this is a constraint scale, the scoring procedure for this scale is, Never=3,Sometimes=2, Always=1. The minimum and maximum score for this scale is 32 and 96. Higher Score indicates High level of constraint faced in attaining education and the lower score indicates Low level of constraint faced in attaining education.

Step 6:Reliability of the scale

The reliability of a scale means how consistent, stable, and dependable the tool is in giving similar results when the conditions are the same. "Reliability means how well a test or tool can give the same results each time, without being influenced by chance mistakes. Higher reliability shows that a way of measuring something is accurate and consistent." (DeVellis, 2016). The completed draft of the scale is tested and standardized on 100 rural Bodo women of Sonitpur district. The researcher employed both Cronbach's alpha and the split-half method for assessing internal consistency or determining the reliability coefficient of the scale. Cronbach's Alpha is a way to measure how well the questions in a test or survey are related to each other, giving us a number that shows how reliable the test is. This number can be anywhere from 0 to 1, and the higher the number, the more consistent the test is. The Cronbach’s alpha for the scale is .947, which means that the scale is highly consistent and reliable . The Cronbach alpha coefficient for each item in the scale is shown in Table 3.4. This, this means that the items in the scale were very closely related to each other, establishing that they all measured the same construct of constraints on the education of Bodo women.

Also, the scale on constraint to education of Bodo women showed a split-half correlation coefficient of .867,indicating a high degree of reliability. The Guttman Split-Half Coefficient is used to measure the internal consistency of a scale by correlating two halves of the test and adjusting for the reduction in length, providing a reliability estimate based on split-half methodology” (Cohen, Swerdlik & Sturman, 2013).

Hence, scale on constraint to education of women is a reliable tool as it indicated a high score on Cronbach's and split-half reliability (shown in Table 3.3)

Table 3.4:Reliability statistics

Cronbach's Alpha value	.947
Guttman Split-Half Coefficient	.867

Table 3.5:Cronbach alpha value of each item of the scale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	61.07	264.248	.752	.944
Item 2	60.83	266.486	.693	.945
Item 3	60.79	266.794	.729	.944
Item 4	61.08	265.246	.761	.944
Item 5	60.99	278.576	.316	.948
Item 6	61.37	270.134	.699	.945
Item 7	61.02	264.606	.763	.944
Item 8	60.52	271.303	.543	.946
Item 9	60.92	275.387	.410	.947
Item 10	61.43	273.541	,624	.946
Item 11	60.69	277.570	.392	.947
Item 12	61.12	278.046	.439	.947
Item 13	60.98	269.939	.665	.945
Item 14	61.08	279.266	.364	.948
Item 15	61.56	285.865	.154	.949
Item 16	61.30	265.424	.788	.944
Item 17	61.10	268.495	.743	.944
Item 18	61.29	268.289	.686	.945
Item 19	60.93	273.702	.526	.946
Item 20	60.89	267.978	.695	.945
Item 21	60.94	269.754	.648	.945
Item 22	60.93	266.652	.666	.945
Item 23	60.01	284.555	.254	.948
Item 24	60.75	273.361	.454	.947
Item 25	60.40	279.697	.297	.948
Item 26	60.21	278.572	.419	.947
Item 27	60.84	269.954	.621	.945
Item 28	60.89	268.543	.641	.945
Item 29	60.83	268.688	.732	.945
Item 30	60.65	269.442	.663	.945
Item 31	60.63	267.427	.711	,945
Item 32	60.62	268.965	.654	.945

Norms: The norm is usually defined as an accepted standard of development or achievement and is commonly determined from the average, or the median, achievement of a large group. Norms has been developed for the data interpretation. The collected raw scores were arranged in a tabular column in the increasing order. Table 3.5 contains the norms outlined in the form of Z-scores.

Table 3.6:Norms for interpretation of level of constraints to the education of women

Sl.no	Z score Range	Levels	Raw score Range
1	+1.26 and above	Very High	85 and above
2	+0.51 to -1.25	High	72 to 84
3	-0.50 to +0.50	Moderate	55 to 71
4	-0.51 to -1.25	Low	42 to 54
5	-1.26 and below	Very Low	41 and below

- ***Unstructured interview schedule on constraint towards education of Bodo women***

  An unstructured interview schedule encompasses a qualitative methodology that starts with one broad and open-ended question. Thus, the conversation can take its course without any restrictions allowing the participant to express their views, experiences, and perspectives freely in details as the conversation flows organically without forcing a particular structure.

  Initially the researcher prepared a draft of the interview schedule consisting of 8 questions and it was sent for expert review for ensuring that the schedule is well-designed, clear, and capable of capturing the necessary data to meet the research objectives. Following the feedback from the experts, only one open-ended question remained for the interview.

3.7.2 : Scale on perception of women towards education

According to R.E. Silverman, “Perception is an individual’s awareness aspect of behaviour, for it is the way each person processes the raw data he or she receives from the environment, into meaningful patterns.” It is vital to first understand the general barriers to women's education in order to properly understand the educational status of tribal women and offer suggestions for change. Furthermore, it is acknowledged

that women have the primary responsibility for driving women's motivation and aspirations to pursue education and achieve self-sufficiency. As such, women's views on education are crucial. This perception is critical, and policymakers should take it into account. The knowledge that education is important indicates that women are willing to pursue higher education if given the opportunity (Mansur et al., 2009).

Description of the tool

In this study the researcher tries to see the perception of Bodo women toward education in terms of their *Feelings, Family Beliefs, Socio-Cultural Beliefs, School Environment*. The magnitude of each response is divided into 3 parts, that is Always, Sometimes and Never. Their score for: Positive item is Always=3, Sometimes=2 and Never =1. Their score for negative item is Always=1.Sometimes =2,Never =3.

Feeling: Feeling, in psychology is the perception of events within the body, closely related to emotion. An intuitive sense about something can also be called a *feeling***.** In this study, Feelings means personal beliefs, attitudes, or idea that developed as a result of experiences, that developed in relation to education within the Bodo women. The way Bodo women feel about education involves how they see and emotionally react to their learning experiences and difficulties. This includes their feelings of motivation, empowerment, frustration, or obstacles in pursuing education.

*Family Beliefs***:** Perceptions of women towards family beliefs regarding education are the ways women interpret and are influenced by the traditional family values, cultural norms, and expectations regarding education. This view influences their goals for education and the role their families have in either helping or preventing them from getting an education. It shows how these women navigate with, and sometimes challenge or accept, the educational opportunities or restrictions set by their families and culture.

Socio-Cultural Beliefs: Sociocultural is a term related to social and cultural factors, which means common traditions, habits, patterns, and beliefs present in a population group. Sociocultural factors influence people's feelings, values, beliefs, behaviours, attitudes, and interactions. In this study, the perception of Bodo women towards socio-cultural beliefs in education refers to traditional cultural parameters, gender roles, and community values that shape the attitudes and experiences of the Bodo women regarding education. It accounts for how the Bodo women view educational

opportunities, whether they are willing to pursue education, and the society expectations that either supports or hinder their participation and success in education.

School Environment: In this study, Bodo women's perception regarding the school environment means their understanding in viewing and interpreting the school environment in terms of their physical, social, and cultural attributes. It includes perceptions they have of the school's infrastructure, teachers' and peers' behaviour and attitudes, as well as the support or barriers experienced by students in the school system. Their perception can be shaped by factors such as the schools' accessibility, safety, inclusivity, and whether the environment is welcoming and conducive to learning for women.

*Development of "*Scale on Perception of women towards education*"*

Step 1 :Initial draft of the scale

The researcher reviewed a vast number literature to develop this tool. The researcher initially identified 4 dimensions with 47 statements in the scales.

The dimensions were, Feelings (16 statements),Family beliefs (11 statements),Socio-Cultural beliefs (13 statements),School environment (7 statements). The magnitude of each response is divided into 3 parts, that is Always, Sometimes and Never. Their score for positive item is Always=3, Sometimes=2 and Never =1.Their score for negative item is: Always=1, Sometimes=2 and Never =3.The 3-point Likert Scale intends to measure the perception of Bodo women towards education.

Step 2: Content validation

The content validity of the tool was established. To ascertain this, the researcher gave copies of questionnaire, the purpose of the study and research questions to experts from both national and international. The scale is reviewed by a group of 4 professors who specialize in the subject. This group includes 1 international expert and 3 national experts, who each give their own opinions. The statements in the scale are carefully checked to ensure they accurately measure what they are supposed to and cover different parts of that topic. The experts examined the items in terms of content coverage, appropriateness of language used in developing the items and relatedness to research questions. Their comments and suggestions were used in the modification of the items and hence, the second draft of the scale with 35 statements was developed.

Step 3: Pilot-testing

The researcher conducted the pilot study in Goroimari village of Sonitpur District, Assam .The total number of samples taken for pilot study was 100 rural Bodo women.

Step 4: Item Analysis and selection of items

Item analysis is a key part of creating a standard questionnaire. The scores from the pilot test were sorted from highest to lowest. Two groups were formed: one with high scores and one with low scores. To analyse each question, 27% of the people with the highest scores and 27% of those with the lowest scores were selected. To select the items, t-values are calculated using the procedure explained by Allen L. Edwards (1957).

In table 3.6 it can be seen that the T-value of item no 4,5,8,13 and 25 are less than 1.75 and therefore those items are discriminated. Based on the calculated t- value, the items which are having value above 1.75 have been selected and this formed the final items for the study.

Step 5: Scoring procedure

Total 30 statements in the scales were included in the study. This tool will be used for the data collection of the study. Their score for positive item is Always=3, Sometimes=2 and Never =1.Their score for negative item is: Always=1, Sometimes=2 and Never =3. The minimum and maximum score for this scale is 30 and 90. Higher Score indicates High level favourable perception towards education and the lower score indicates Low level of perception towards education of Bodo women.

Table 3.7 Items analysis and Selection of the Item: Scale on Perception of women towards education

Item no	T- value	Remarks
1.	3.416	Accepted
2.	6.027	Accepted
3.	2.998	Accepted
4	**1.257**	**Rejected**
5	**1.363**	**Rejected**
6	3.354	Accepted
7	2.085	Accepted
8	**1.690**	**Rejected**
9.	3.592	Accepted
10.	8.305	Accepted
11	1.929	Accepted
12.	5.918	Accepted
13	**1.379**	**Rejected**
14	2.783	Accepted
15	2.025	Accepted
16	5.247	Accepted
17	6.827	Accepted
18	7.386	Accepted
19	2.596	Accepted
20	2.542	Accepted
21	2.220	Accepted
22	3.339	Accepted
23	2.498	Accepted
24	1.834	Accepted
25	**1.258**	**Rejected**
26	2.929	Accepted
27	3.538	Accepted
28	6.027	Accepted
29	3.354	Accepted
30	2.783	Accepted
31	5.918	Accepted
32.	6.827	Accepted
33	2.220	Accepted
34	5.247	Accepted
35	5.918	Accepted

Step 6:Reliability of the scale

The reliability of a scale means how consistent, stable, and dependable the tool is in giving similar results when the conditions are the same. "Reliability means how well a test or tool can give the same results each time, without being influenced by chance mistakes. Higher reliability shows that a way of measuring something is accurate and consistent." (DeVellis, 2016). The completed draft of the scale is tested and standardized on 100 rural Bodo women of Sonitpur district. The researcher employed both Cronbach's alpha and the split-half method for assessing internal consistency or determining the reliability coefficient of the scale. Cronbach's Alpha is a way to measure how well the questions in a test or survey are related to each other, giving us a number that shows how reliable the test is. This number can be anywhere from 0 to 1, and the higher the number, the more consistent the test is. The Cronbach's alpha for the scale is .785,which means that the scale is highly consistent and reliable . The Cronbach alpha coefficient for each item in the scale is shown in Table 3.7. This, this means that the items in the scale were very closely related to each other, establishing that they all measured the same construct of constraints on the education of Bodo women.

Also, the scale on perception of women towards education of Bodo women showed a split-half correlation coefficient of .807,indicating a high degree of reliability. The Guttman Split-Half Coefficient is used to measure the internal consistency of a scale by correlating two halves of the test and adjusting for the reduction in length, providing a reliability estimate based on split-half methodology" (Cohen, Swerdlik & Sturman, 2013).

Hence, scale on perception of women towards is a reliable tool as it indicated an acceptable score on Cronbach's and split-half reliability (shown in Table 3.7)

Table 3.8:Reliability statistics

Cronbach's Alpha value	.785
Guttman Split-Half Coefficient	.807

Table 3.9 :Cronbach alpha value of each item of the scale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Item 1	65.04	71.352	.261	.780
Item 2	65.20	68.364	.448	.772
Item 3	65.02	71.373	.238	.781
Item 4	64.92	71.024	.332	.778
Item 5	65.49	72.757	.149	.785
Item 6	65.13	70.235	.287	.779
Item 7	65.14	67.233	.545	.767
Item 8	65.32	73.412	.047	.792
Item 9	65.29	69.077	.451	.772
Item 10	65.06	71.390	.259	.781
Item 11	65.48	73.646	.039	.791
Item 12	64.88	70.672	.381	.776
Item 13	65.16	67.651	.478	.770
Item 14	65.31	68.539	.405	.773
Item 15	64.41	70.325	.258	.781
Item 16	65.15	71.058	.268	.780
Item 17	65.52	70.919	.208	.784
Item 18	65.77	70.341	.282	.780
Item 19	65.08	73.266	.076	.789
Item 20	65.20	73.616	.036	.792
Item 21	64.98	71.919	.199	.783
Item 22	65.47	69.423	.310	.778
Item 23	65.20	68.364	.448	.772
Item 24	64.92	71.024	.332	.778
Item 25	65.06	71.390	.259	.781
Item 26	65.29	69.077	.451	.772
Item 27	65.16	67.651	.478	.770
Item 28	65.52	70.919	.208	.784
Item 29	64.88	70.672	.381	.776
Item 30	65.29	69.077	.451	.772

Norms: The norm is usually defined as an accepted standard of development or achievement and is commonly determined from the average, or the median, achievement of a large group. Norms has been developed for the data interpretation. The collected raw scores were arranged in a tabular column in the increasing order. Table 3.9 contains the norms outlined in the form of Z-scores.

Table 3.10:Norms for interpretation of level of perception towards education of women

Sl.no	Z score Range	Levels	Raw score Range
1	+1.26 and above	Very High	79 and above
2	+0.51 to -1.25	High	72 to 78
3	-0.50 to +0.50	Moderate	71 to 64
4	-0.51 to -1.25	Low	63 to 57
5	-1.26 and below	Very Low	56 and below

- ***Unstructured interview schedule on perception of women towards education***

An unstructured interview involves a qualitative approach that begins with a broad, open-ended question. This allows the conversation to unfold naturally, without any constraints, enabling the participant to freely share their thoughts, experiences, and perspectives in detail as the discussion progresses organically, without being forced into a specific structure.

At first, the researcher created a draft of the interview questions, which included 8 questions. This draft was then sent to experts to make sure the questions were well-designed, easy to understand, and could gather the necessary information to achieve the research goals. After receiving feedback from the experts and making the necessary changes, only one open-ended question was finalised for the interview.

3.8 Procedure of data collection

At first the researcher visited Kokrajhar district and secondly Baksa district and thirdly Udalguri district and completed the data collection in all the 3(three) districts. The data has been collected from the month of September 2023 to February 2024. Due permission has been granted from the Head of the Department as well as from the supervisor before the field study. For the

quantitative phase, the researcher gave the detailed instructions on how to fill the questionnaire. The participants were given enough time to make a well-informed choice, and some of them didn't want to complete the questionnaire on their own. So, the researcher filled it out based on their responses. The data collection in the qualitative phase consisted of conducting interviews with rural Bodo women of BTR who agreed to be interviewed. Each interview session lasts approximatively 10 to 15 minutes. After all the tools have been implemented, the quantitative data is exported into the statistics application SPSS and Excel for analysis purposes. The recorded interviews were manually transcribed with great accuracy and detail.

3.9 Procedure of data analysis:

3.9.1 Quantitative data analysis:

The researcher used these methods to analyse the data for this study:

- *Percentage*: Percentages convert raw numbers into easily interpretable values. When analysing data from surveys with Likert scales, percentages help quantify the distribution of responses.
- *Mean*: The mean is the "average" value in a set of data, giving us a central point to refer to.
- *Standard deviation***:** The Standard Deviation (SD) denotes the extent of deviation of the individual scores from their average value.
- *Bar Chart:* Bar charts are helpful for showing how frequently different responses occur. It is use to display and compare the mean and SD of all the dimensions.
- *Pie Chart:* Pie charts are used to display the percentage or proportion of different categories in a set of data. Here, it is used to present the data of constraint and perception of Bodo women in visual impression.

3.9.2 Qualitative data analysis:

Thematic analysis has been used for analysing the qualitative data. The researcher did the qualitative analysis manually without the use of any software. It is a widely used method by researchers who study things that can't be measured with numbers, like people's thoughts and feelings. This method helps them look at detailed descriptions to find important patterns and themes (Naeem et al., 2023). Creswell (2013) outlines six stages involved in the analysis of qualitative data and this has been used by the researcher in qualitative data analysis. The steps included collecting and organizing

data, reviewing the data as a whole, examining it closely through coding, creating a description of the data, explaining the findings, and interpreting the data.

Firstly, the researcher systematically gathered and structured the information for analysis by means of transcription of the interviews, appropriate scans of the material, encoding relevant information correctly.

Secondly, this step involves the process of reading or scanning all the data. The main point of this stage is to comprehend the details with respect to the big picture and to allow oneself to think about their overall significance.

Thirdly, in this step, the researcher used short phrases or words, called codes, to label parts of the data that show its main idea, importance, or topic. This makes the data easier to understand by turning it into a simpler form and helps to find information related to the research questions. Keywords are very important in this process because they are the foundation of the analysis and help turn raw data into useful, organized pieces of information.

Fourthly, this phase includes the Theme development stage whereby codes are sorted into relevant sections in order to reveal patterns and relationships thereby enabling answering the research problem. This stage in research, the researcher engaged in detailed analysis of codes and categories, that is, in constructing sub-themes and later the main themes.

Fifthly, this phase which involves conceptualization, consists of comprehension and construction of concepts that are coming from the data. The researcher used tools such as diagrams or models in order to help explain the links that exist between these concepts.

Lastly, the final step is to interpret the findings or results. This involves reflecting on what was learned. The researcher reported the results of the theme analysis. They provided a clear and detailed summary of the themes and the evidence that supports them.

The process of thematic analysis involved a step-by-step method for interpreting research data. Each step was built upon the previous one, leading to a thorough understanding of the data. This organized approach improved the reliability and reproducibility of the results, making it easier to see how the data, interpretations, and final conclusions are connected. This systematic method ensures a comprehensive analysis and reduces the risk of bias.

3.10 Ethical Considerations.

This study kept ethical considerations in the forefront during the study process to ensure that the rights, dignity, and well-being of all parties were respected. Participants were fully informed about the purpose of the study, methods involved, and how their responses would be used prior to data collection. Their informed consent was taken before participation since all participation was voluntary and could be withdrawn at any stage without consequences. All confidentiality and anonymity guidelines were kept very strictly by ensuring that all records were stripped of all personal detail or identifiers that would make possible the identification of participants' privacy. To handle sensitive topics during interviews, extra care was given so that participants would feel comfortable and safe while sharing their perspectives. The research conducted was ethical to the guidelines and no harm, discrimination, or coercion would be seen throughout the project in terms of research processes.