CHAPTER-4

Research Methodology

This chapter provides a thorough explanation of the research design adopted for the study as well as research instruments utilized. A brief explanation of the sampling strategy used and the variables that have to be measured in order to meet the research objectives, along with the necessary explanations and justifications are included.

"The scientific basis of knowledge does not necessarily lie in the research method; rather, it lies in how we design the research and implement it." E. F. Fern (2001)

4.1. Introduction

This chapter is divided into five sections discussing the methodology for collecting, processing, and analyzing the data used in this study. The basic research design is explained in Section 4.2, along with the rationale for the approaches adopted. Section 4.3 presents the detailed discussion on Qualitative Approach with respect to Focus Group Discussion that has been used for exploratory investigation. A phase wise explanation of the data collection procedures including the variables and instruments of measurement and data analysis techniques employed in the Survey and Experiment are discussed in Section 4.4. Section 4.5 respectively with the minute details.

4.2. Research Design

The pivotal stage in the entire process of research is determining the research design. A research design is an outline of all the different phases and details that are crucial to the research effort. It also entails establishing the prerequisites for data collection and analysis in a way that aims to strike a balance between procedural efficiency and the importance of the research objectives. Establishing the research design provide with a thorough strategy that may be utilized to direct and concentrate the investigation (Collis & Hussey, 2003). The planning comprises the overall plan and program of the research. It serves as a guide for achieving goals and providing answers to the research problem. As stated by Kotler et al. (2009), research design offers a framework or structure for addressing the goals and purposes of a study that are predicated on the research topic.

That's why choosing a design might be challenging due to the abundance of different approaches, strategies, processes, guidelines, and sample schemes (Bryman & Bell, 2011). According to Blumberg et al. (2008), researchers can gain more insight into their designs by utilizing a variety of approaches rather than just the most common approach found in the literature or recommended by a certain discipline.

In order to understand a research problem, researchers may use a mixed-methods research design, which involves gathering, analyzing, and combining quantitative and qualitative methodologies in one study or a series of studies (Creswell & Clark, 2011). In

this study also we have adopted a mixed-methods approach. The work is conducted in three phases by adopting exploratory, descriptive and experimental research designs. Triangulation has also been attempted to bring together some findings of the different approaches for more conclusive results. The study tries to explore and better understand the established concepts, relationships, and elements connected to soundscape in restaurants with focus group discussion. The concepts, linkages, implementation, and gaps regarding the aural stimuli or marketing cues taken into consideration in the study have all been identified and understood with the use of exploratory research.

According to Yin (2009), descriptive research design seeks to provide answers to the questions of who, what, when, where, and how. According to Kotler et al. (2009), the main goals of descriptive studies are to describe something and develop patterns expressed in hypotheses. The qualitative descriptive approach is appropriate for this particular study since it provides a thorough analysis of the characteristics and behaviours of diners, resulting in an improvement in the researcher's comprehension of the aspects being studied. As stated by Siedlecki the descriptive approach was appropriate in situations where the researcher has access to the participants and could obtain optimal information on their perspectives, ideas, and experiences regarding the topic and subject matter (Siedlecki, 2020). Thus, it can be stated that when the study problem is well-defined and the researcher is knowledgeable in the field, this type of method works well.

For achieving the sub-objective of the first objective i.e.; to assess the role of ethnic music in diners' experience, an experiment was conducted. The experimental design tried to bring out the role and relation of ethnic music in ethnic restaurants in creating the diners' experience. In experimental research, a scientific method is utilized to examine the impact of manipulating one or more independent factors on one or more dependent variables. The effect of the independent variables on the dependent variables is frequently observed and recorded over some time, to enable researchers in forming a reasonable conclusion regarding the link between these two variable types. Many fields, including psychology, education, and the social and physical sciences, use the experimental research approach (Lalchuangkima, 2022). The comparison of two or more groups is the foundation of this simple yet potentially challenging to implement method. Experimental research designs, which are primarily associated with laboratory test procedures, or may be real setting entail gathering quantitative data and analyzing it

statistically while doing research. Finally, triangulation of some of the findings of all the three approaches has been done. Denzin (1988) defined triangulation broadly as "the combination of methodologies in the study of the same phenomenon." Triangulation has been used in the social sciences since Campbell and Fiske (1959), created the concept of "multi-method operationalism." In order to make sure that the variance represented the characteristic and not the method, they contended that the validation process should employ many approaches. Our conviction that the results are legitimate and not the product of methodological artefacts is strengthened by the concordance between the approaches (Bouchard, 1976). By combining the various advantages of the three approaches, this design aims to gather complementing quantitative and qualitative data on the subject (Choi et al., 2019).

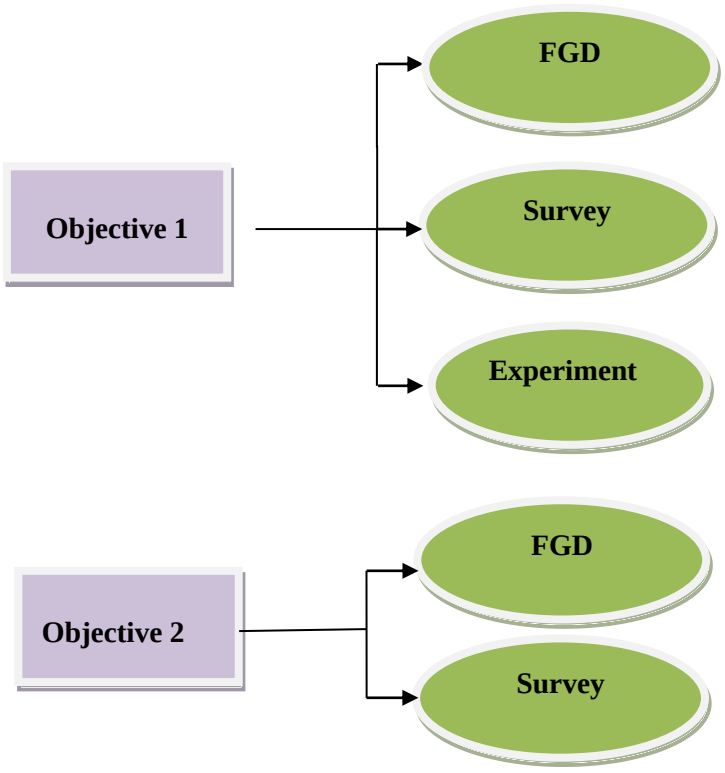

Figure 4.1: Figure showing Objective-wise Research tools used

4.3. PHASE I: FOCUS GROUP DISCUSSION (QUALITATIVE APPROACH)

Qualitative research has become more significant in the field of consumer behaviour since it offers manifold benefits. It examines how things happen in each activity and ensures that study conclusions are accurate and consistent with reality. Qualitative

research is used to uncover patterns in thoughts and attitudes, as well as to dive further into a topic (Patton, 2002). As a part of this, Focus Group Discussions were conducted to have a better understanding of the aspects related to a sound environment in a restaurant from persons who are related to restaurants. The participants' shared experiences serve as the study's major source of data in case of qualitative research (Bryman, 2016). Given that soundscape, being one of the components available among other components (visual, tactile, gustatory, and olfactory) in determining diners' experiences, is an emerging research area with limited theoretical understanding (Refer to Section 2.7, Chapter 2). Therefore, a qualitative inductive research design approach is being deemed necessary to gain an initial and exploratory insight and to generate theory (Soetan et al., 2021; Lenzi & Lindborg, 2021).

FGDs or focus group discussions are a type of qualitative research methodology. Using pre-planned questions, the principal investigator moderates and assists in facilitating a discussion with a small group of participants during an FGD. The FGD uses an ontological framework and a constructive, interpretivist epistemology (Kaur et al., 2023). The two main components of focus group discussions, according to Vaughn and colleagues (1996), are a skilled moderator who establishes the tone with prepared questions or an interview guide and the skill of extracting participants' feelings, attitudes, and perceptions about a chosen topic. According to previous studies (Farinloye et al., 2019; Mogaji et al., 2021; Wolny & Charoensuksai, 2014), in-depth interviews are a crucial qualitative research tool for many studies on consumer behaviour and management. Hence, this data collection technique is consistent with those findings. Information collected from focus group interviews has been utilized to design surveys, or used as pilot interviews for a bigger study with one-on-one interviews (Barnett, 2002). Introducing the ground realities is the major aim of this type of discussion. The researcher facilitates open communication and equal participation from all participants throughout the discussion phase (Neville, 2007). Six to twelve people who share similar interests and are homogeneous in their group makes up the focus group discussion. Compared to one-on-one interviews or surveys, it reveals the true emotions and problems and yields more insightful responses due to the group dynamics. Likewise, it offers nonverbal cues like eagerness, uncertainty, and worry that surveys are unable to capture. Additionally, focus groups aid in our comprehension of causation—the reasons behind

human behaviour. “Knowing why helps us see how,”- how to develop, re-design, refine our products (UWSBR, 2007)

4.3.1. Participants of FGDs

The study includes two Focus Group Discussions and participants have been chosen based on the inclusion criteria. Stewart and Shamdasani (2014) argue that rather than under-recruiting and running the risk of having to cancel the session or having an unsatisfying conversation, it is preferable to slightly over-recruit for a focus group and maybe manage a slightly larger group. They predict that there will likely be two non-attendees in each group. Focus groups can function well with as few as three people or as many as eight, while the ideal number is six to eight (not including researchers). While large groups can be disruptive, difficult for the moderator to control, and unpleasant for members who feel they don't have enough opportunity to speak, small groups run the risk of having little conversation (Mishra, 2016). The small samples used in qualitative research are rarely able to attain meaningful representativeness, but it is equally important to ensure that the sample appropriately satisfies the purposive requirements (Morgan, 2008). Therefore, the participants in the FGD include those persons who have at least for once visited a restaurant. For the discussion, food bloggers, restaurant customers better called as diners, restaurant owners, renowned chef of the study area (Assam) formed the group. The homogeneity of the group was based on some kind of relation with restaurants. This was done so to gain insights into their knowledge, preferences, expectations, and behaviors, which are crucial for understanding the experiences with the sound environment. The researchers surfed the internet and basically social networking platforms to find out the correct match for creating the group. Despite being conducted virtually, only participants belonging to Assam were allowed to participate in the discussion. A total of 34 people got shortlisted based on the filter criterion (having a link with restaurants). Further, we gathered interview data from 21 participants who took part in the research interview, based on their responses to our filter questions (which included recent restaurant visit and leisure time utility etc.) and their availability at that time. The demographic information of the participants of FGDs are discussed in Table 7.1 (Chapter 7).

4.3.2. Conducting the FGDs

The FGDs were intended to be done prior to the data collection through questionnaires and experiment because gaining insights from the experts in the field helps in building a base for the study. A thorough discussion ensures that no crucial information is overlooked for further research. The FGDs have been conducted online via Google Meet on 24th November, 2020, Tuesday at 7 p.m. and 10th December, 2020, Thursday at 6 p.m. In order to ensure social distancing and mitigate the risk of having to cancel the focus groups due to evolving COVID-19 measures, we decided to conduct the focus groups online, reflecting the uncertainties surrounding the COVID-19 pandemic, which was still going on during the data collection period between November and December 2020. Additionally, online focus groups tend to decrease participants' propensity to assume dominant roles (Barbour, 2007), are less intimidating than face-to-face discussions (Krueger & Casey, 2014), can be held in settings where participants feel at ease (Hennink, 2014; Stewart & Shamdasani, 2017), reduce concerns about appearance (Morgan & Lobe, 2011), and remove barriers to participation related to transportation time or cost, making it easier for busy participants to participate (Hennink, 2014).

4.3.3. Purpose and Procedure of FGDs

The purpose of the study is to determine how music affects dining experience; the effects of recorded music and live performances on patron satisfaction. In addition, to determine whether ethnic cuisine and music have any bearing on one another. This study also makes an effort to understand how diners' experiences are impacted by noise levels in the restaurant. Keeping the purpose of the discussion in mind, semi-structured interviews were used as the technique of data collection, giving participants the opportunity to provide comments and descriptive details regarding the soundscape (Saunders et al., 2019). Prior to the start of the focus group discussion, the co-facilitators (Researcher being the moderator and the Research Supervisor was the Observer) agreed that it was crucial to emphasize to participants that the goal of this research is not to elicit individual opinions but rather to encourage a collaborative discussion about the problems and potential aspects of "Soundscape in diners' experience" (van Eeuwijk & Angehrn, 2017; Morgan & Lobe, 2011). Due to the interdependence of focus group participants, the information gathered from one person cannot be isolated from the social setting in which it was gathered. Focus groups are especially useful because they let researchers evaluate

how people construct, express, defend, and (sometimes) change their opinions in the course of debating and discussing them with others. Following the introduction, the moderator gave both groups a thorough explanation of the focus group's goal. They were asked to introduce themselves in order to create rapport. The moderator steered the general direction of the conversation by probing participants' answers to the interview questions. Open-ended questions were asked at the beginning of the FGD. The entire discussions were videotaped and lasted about ninety minutes for each group. It was made sure that everyone had an opportunity to speak because occasionally someone would try to control the conversation. Participants were specially requested to keep the video feed on at all time. It was watched for visual indications from people raising their hands, showing frustration with a domineering speaker, and attempted to get participants' attention by having them switch on the camera throughout and giving them an opportunity to speak as soon as they did so using the emoticon. The moderator made an effort to delve deeper into each participant's response. We covered a variety of probing techniques, starting with the most basic kind, known as "free probes" as these helps to learn more about a wide range of comments, such as "*Can you give me an example of that*?" "*Please explain what do you mean by...*" "*Explain that in more detail*" and so forth. The moderator uses these kinds of probes not only to get more information about a particular comment but also to let everyone know what kind of content are particularly relevant to the conversation and the discussion stays on track.

The moderator clarified that pseudonyms would be used in place of real names and that the notes and audio-visual recordings will be kept totally private as suggested by Patton (2002). It was emphasized that no further personally identifiable information would be utilized. Thus, the participants received assurances regarding their confidentiality, and all other ethical measures were taken to provide them with further comfort.

4.3.4. Interview Guidelines and Protocol

I) Protocol for Interviews: a recorded and transcribed semi-structured interview.

Express gratitude to the person who took part in the interview. Remind them that a video recording of the interview will be made. Assurance of response confidentiality and possible follow-up interviews.

II) Variables: The variables that are used in the FGDs are- restaurant experience, music, pre-recorded music, live music, genre of music, ethnic music, noise, music as noise, and employee performance

III) Questions:

a) Background and Filter Questions

i) Give us a brief introduction of yourselves.

ii) What do you do when you have free time?

iii) Could you elaborate on your experience of restaurant visit?

iv) How about your recent dining experience?

b) Contextual Questions

i) Have you ever observed the auditory environment in the restaurant? (*Probe on what, which, familiarity of the term 'Soundscape'*)

ii) What is the role of music in diner experience? (*Probe on pre-recorded music and live music*)

iii) Basically, which type/ genres of music liked by the customers of Assam? (*Probe into more details about different genre*)

iv) Can you describe how live music affects customer satisfaction?

v) Tell us something on the differences between live and pre-recorded music in restaurant.

vi) Can you throw some light on the relationship of ethnic music to ethnic cuisine?

vii) Have you ever come across noise in restaurant? (*Probe into details like sources, measures to be taken*)

viii) Tell us if music acts as a noise avoider and how?

ix) Can playing music transform a bad experience of food to a positive one? (*Probe into How*)

x) What is your say on how playing music in the restaurant affect the employees' performance?

In accordance with the literature review, an interview guide was prepared and adhered to while conducting FGD (Murukutla &Puri, 2020; Schulze et al., 2022). The interview guide allowed the moderator to ask open-ended questions and initiate a discussion about

the participant's actions, behaviour, and attitudes and experiences towards soundscape (Morgan & Lobe, 2011). Keeping the questions in that pattern allows participants to give additional views on auditory environment and their experiences. Opening questions were useful to overcome the bias, shower expression of interest in the discussion.

4.3.5. Audio Transcription

The moderator meticulously transcribed the recorded audio into word form, translating from Assamese into English when needed to ensure correctness and uniformity. Transcribing recorded utterances to create a comprehensive textual record that explains who said what in response to a certain question (Morgan & Lobe, 2011). The transcription results in numerous pages of text and takes several hours to do so. After that, "thematic analysis" was applied to the content.

4.3.6. Data Analysis

The researcher transcribed the audio-visual portion of each interview, stored it as a PDF file, and exported it into the qualitative data analysis programme NViVo. Due of its iterative structure and ability to reveal implicit meanings in participant activities and responses to the restaurant's auditory environment, qualitative data analysis was selected (Braun & Clarke, 2006). The study involved close engagement with people's stories regarding the effect of soundscapes at restaurants, particularly with reference to Assam. It involved meticulous data preparation, coding, categorization, and theme analysis. The results clearly show that this method of conceptualizing the phenomenon abstracted themes without reducing the voices of the participants. The data analysis procedure for this study adhered to Braun and Clarke's (2006) six steps of thematic data analysis. Reading interview transcripts allowed one to become acquainted with and become immersed in the data during this procedure. The creation of themes (child nodes) highlighting the difficulties and possibilities that surfaced from the transcripts of the participants and from firsthand observations came after this phase. After that, these child nodes were assessed and combined to create parent nodes. For the parent nodes, a deductive theme analysis approach was used.

4.3.7. Validity and Reliability

The study maintained a consistent level of trustworthiness, covering the fundamental ideas of validity and reliability in qualitative research (Sattarapu et al., 2023). Despite the

absence of standardized tools to evaluate validity and reliability, qualitative researchers take great care to ensure the validity and reliability of their findings. Credibility, transferability, dependability, and confirmability are all covered by this guarantee. According to Lim (2019), confirmability is the degree of objectivity that permeates the findings of a research study, guaranteeing that participant replies are free from the prejudices or personal preferences of the researchers who conducted the study. The present study endeavour adhered strictly to the confirmability concept (Abdulquadri et al., 2021; Lim, 2019). In order to ensure the validity of the study, the researchers acquired ethical permission and adhered to all relevant ethical protocols, which included obtaining the participants' informed consent. The participants were made aware that the interviews would be videotaped, that the information gathered would only be utilized for scholarly research, and that their personal information would not be disclosed. The members of the study team met for debriefings to confirm and talk about the topics. Furthermore, the study's traceability and credibility were enhanced by the utilization of the clustered themes, which are displayed in Table 2 and demonstrate the various phases of data analysis (Mogaji & Nguyen, 2021).

4.3.8. Location of the Study

Although the FGDs were conducted online but the geographical location of the participants was neither combined nor compromised. Two FGDs were conducted. First FGD was conducted for the participants of Guwahati with 12 participants. Second FGD was conducted in Tezpur with 9 participants to validate the first FGD.

4.4. PHASE II: THE SURVEY

The survey has been carried out for achieving the following research objectives. Firstly, to determine how music in the restaurant affects the overall experience of the guests. Next, to examine the role of live music in fostering a satisfying consumer experience. After that, a comparison to be done on the effects of live and recorded music on restaurant patrons' experiences. Then, to ascertain the effect of noise on guests' overall experience. Lastly, to determine whether music can help people avoid noise.

4.4.1. Variables for the Survey

As mentioned earlier, the study focuses on examining the impact of soundscape in diners' experience. For this, an extensive study of the existing literature has been done. Variables that are appropriate for the study's context have been extracted from other studies along similar lines. The main goal of this is to guarantee consistency and make it easier to measure the elements of soundscape and their impact on diners' experience, and to compare the findings with those of past similar studies. Following variables are measured with the help of the questionnaire. The measurements are done using scales appropriate for each variable. The questionnaire has been included as Annexure A2 at the end of the thesis.

The basic dimensions used to measure diners' perception of soundscape for the study are described below.

(i) **Sonic Impression** is the overall sonic/ sound quality as perceived by a person in a particular space. In our case we wish to determine the sonic impression of diners in a restaurant. The scale is established as follows: 1 corresponds to 'very good', 2 for 'good', 3 meant 'neutral', 4 for 'bad', and 5 meant 'very bad' (Axelsson et al., 2010; Frid, 2013). A categorical variable to know the *prominent sound heard in the restaurant* with different options was included and also assessed whether the sonic impression is pleasant, neutral or unpleasant. Next, to measure the ordinal variable on *Background sound level in the restaurant*, the respondents are asked to react to the scale established as 1 for 'very high', 2 for 'high', 3 for 'appropriate', 4 for 'low' and 5 for 'very low'. Again, to measure the sound experience in the restaurant, statements such as '*Sound of cooking affects my mood positively*'; '*Sound of food ordered by the co-diners enhances my appetite and temptation to order the same*'; '*I paid attention to the music during the meal*'; '*Overall, I am satisfied with my restaurant experience*'; and '*I find the restaurant ambience welcoming*' are on 5 point scale ranging from 1-5 where 1 indicates least agreement to the statement and 5 indicate highly agreeing with the statement. Finally, 7 items construct on sound experience and emotions (pleasant, chaotic, calm, eventful, exciting, annoying and monotonous) is measured using 7-point scale ranging from 1-7 where 1 indicates least agreement to the statement

and 7 indicate highly agreeing with the statement (*Ryu & Jang, 2007; Lindborg,2016; Frid, 2013;* Aletta et al., 2016*).*

(ii) **Music** is one of the potent atmospheric sensory components. Restaurants methodically apply music in restaurants (Shaed et al., 2015; Bruner, 1990; Morrison & Beverland, 2003; Faat et al., 2019). In order to assess the first objective on role of music different variables related to music are included in the questionnaire. A 17-item construct on music as experienced by the diners in the restaurant was measured using 7-point scale ranging from 1-7 where 1 indicates least agreement to the statement and 7 indicate highly agreeing with the statement (Burghelea et al., 2015; Novak et al., 2010; Kellaris & Kent, 1994; Ryu & Jang, 2007; Shaed et al.,2015). Next, a 3 level (*personal level of listening music, preferred music level in a restaurant and music level experienced in the restaurant)* was measured using 7-point scale ranging from 1-7 where 1 indicates *just audible* to the statement and 7 indicate much *louder* to the statement (Rohrmann, 2012). Another variable used to measure preference of music (*no music, pre-recorded music and live music*) while dining was in a unipolar 6-point numeric scale (0-5) where 0 indicates no preference and 5 indicates highest preference for the statement (Yang, 2019; ISO, 2003). Few categorical variables such as *meal preference with music, music tempo preference, music genre preference, music volume preference, opinion of music volume* were measured. To measure the preference of live music, a filter dichotomous variable to know the preference of live question was included and also 5 items construct using 7-point scale ranging from 1-7 where 1 indicates least agreement to the statement and 7 indicate highly agreeing with the statement was used.

(iii) **Noise** is the annoyance or discomfort caused by sound in an environment (restaurant). In noise research, one of the most important individual differences variables is noise sensitivity, which is defined as an individual's aversion to a noisy environment. Higher noise discomfort was associated with higher noise sensitivity, and vice versa (Weinstein, 1978; Novak et al., 2010; Senese et al., 2011). For measuring noise sensitivity of the diners Weinstein Noise Sensitivity Scale (WNSS) has been resorted to with appropriate modification required for the purpose of the study. The original WNSS has 21 items expressing attitudes and affective responses to several common environmental sounds as well as noise in general. To fit the restaurant dining atmosphere, 20 items are somewhat altered

and out of 20 items, in the modified version, seven are formulated in the reverse direction to prevent the response effect. Participants are asked to rate their agreement with each statement from strongly disagree to strongly agree. The respondent's increased sensitivity to noise is shown by agreement with the item.

(iv) To capture the demographic characteristics of the respondents' and their other characteristics the following variables are also measured.

a) **Frequency of eating outside in a month:** This variable denotes the number of eating out in a restaurant by the respondents.

b) **Purpose of visit:** This variable specifies the objective or intention of eating in a restaurant. This has the following options such as outing with family or friends, business purpose, casual lunch/dinner, special occasion (Birthday, Anniversary etc.) or any other specific reason for visiting the restaurant.

c) **Companion:** This variable seeks to look into the companion of the respondent to the restaurant or simply, with whom the respondent has come to the restaurant.

d) **Conversation Intention:** The variable denotes if the diner has come to the restaurant to converse with the companion or not, or to resolve a problem, or any other underlying specific conversation intention.

e) **Reasons for visiting the Restaurant:** This variable throw light on why a respondent has chosen the particular restaurant. Is it because of the location or past experience or reputation or advertisement or taste of food or pleasant ambience or recommended by friends/family or no other alternative or for any specific reason. For this variable the respondents were free to choose one or more than one option as there may be number of reasons for choosing a particular reason.

f) **Age**: This variable indicates the respondent's current age.

g) **Gender**: This variable indicates the respondent's gender.

h) **Marital Status:** This variable tells us whether the respondent is currently single or married.

i) **Occupation:** This variable specifies the respective occupation possessed by the respondent.

j) **Monthly income:** The variable tries to classify respondents into different income brackets such as Upto Rs. 35000, Rs. 35000- Rs. 65000, Rs. 65000- Rs.100000, or Above Rs. 100000

k) **Average spending while Dining out:** This variable classifies respondents into different brackets for their average spending in a restaurant ranging from below Rs. 2500, Rs. 2501- Rs. 5000, Rs. 5001-Rs. 10000, or Above Rs. 10001.

l) **Treat Type:** This variable shows whether the treat is a self paid or a sponsored one.

m) **Visit Type:** This variable shows whether the visit to the restaurant is a pre-booked or instant visit.

Table 4.1.: List of Variables for Survey

Variables	Source
Soundscape – Sonic Impression, sound environment (experience in the present surrounding sound environment)	*Lindborg,2016; Frid, 2013; Aletta et al.,2016; Axelsson et al., 2010*
Appealing Sound	*Muniz, 2013*
Customer Companion	*Rohrmann,2012*
Conversation Intention	*Rohrmann,2012*
Perceived Music Level	*Rohrmann,2012*
Perceived Background Sound level	*Rohrmann,2012*
Annoyed by Music Level	*Rohrmann,2012*
Emotion/Mood- Pleasure and Arousal	*Ryu & Jang, 2007; Zeithaml, Berry, & Parasuraman, 1996*
Behavioural Intention- Revisit and Recommend	*Novak et al., 2010; Kellaris & Kent, 1994; Ryu & Jang, 2007;Shaed et al.,2015*
Music Listening Preference (Genre) and Context	*Novak et al., 2010; Kellaris & Kent, 1994; Ryu & Jang, 2007; Upadhyay,2017*
Diner Satisfaction	*Matilla and Wirtz, 2001; Rohrmann,2012*
Willingness to Pay	*Muniz, 2013*
Frequency of dining out	*Muniz, 2013; Shaed, 2015*
Time Perception- Time Spent, Waiting Time, Unplanned Time Spent and Stay Longer	*North and Hargreaves,1997; Shaed et al.,2015*
Mood Influencer	*Shaed et al.,2015*
Influence Positive Behaviour during Restaurant visit	*Shaed et al.,2015*
Create Unforgettable Experience	*Shaed et al.,2015*
Service evaluation with pleasant Music	*Shaed et al.,2015*
Enjoy Dining with Music	*Shaed et al.,2015*
Contact with Staff Positive	*Gustafsson,2015*
Purpose of Visitation	*Mandila et al..2012; Chua et al.,2020*
Live Music	*Minor & Hausman, 2004*
Preference for time of Live Music	*Rohrmann,2012*
Prefer Live Music in Special Occasion	*Rohrmann,2012*

Prefer Ethnic Music with Ethnic Food	*Muniz,2013*
Noise Sensitivity	*Novak et al.,2010; Senese et al. ,2011*
Reason for visit	*Khan & Aditi, 2020*
Reason for visiting the restaurant	*Chua et al., (2020).*
Background music	*Faat et al., 2019*

Source: Compiled by the researcher

4.4.1.1. Scales of Measurement

The questionnaire contains 30 questions with sub questions which are in both nominal, ordinal, interval and ratio scale depending upon the purpose of the information to be collected. It is presented in the form of a pie chart.

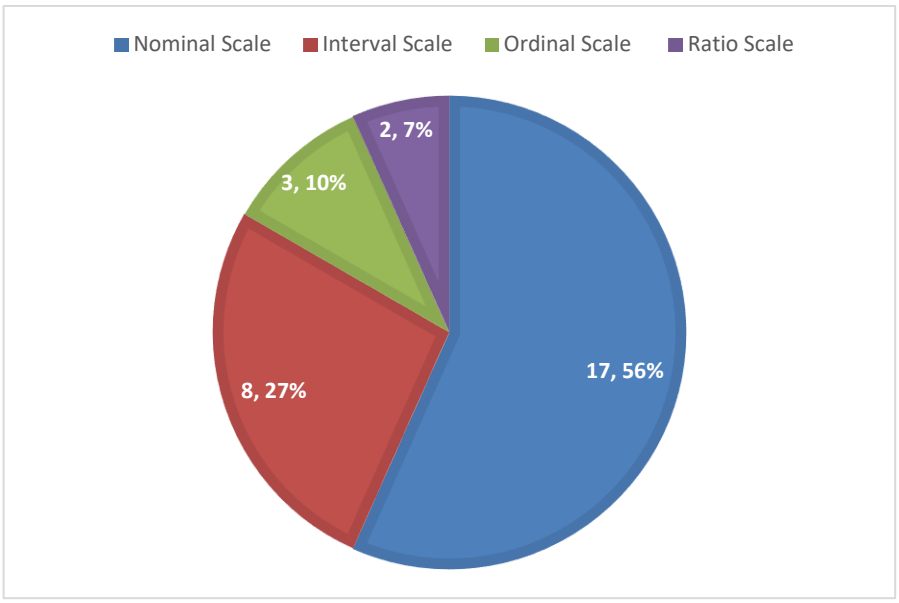

Figure 4.2: Scales of Measurement (Survey)

4.4.2. Sampling Design

A specific strategy for selecting a sample from a population is known as a sampling design. It describes the method or process the researcher would use to choose the sample's contents. The sample size, or the number of objects to be included in the sample, may also be specified by the sample design. Prior to the collection of data, the sample design is decided. A researcher can select from a variety of sample designs. Certain designs are easier to implement and comparatively more accurate than others.

4.4.2.1. Population

The number of people that eat outside every day in each restaurant in each location is unknown. Therefore, the population for the study becomes too large in numbers to define. For the study, all the diners in Assam who are above the age of 18 years together served as the element and the sampling unit.

(a) Element

The element is the basic component of the population from which the data is derived. The general adult population over the age of 18 who lives in select urban centres of Assam makes up an element of the study. Major commercial activity occurs there, and there is a higher rate of migration from surrounding areas in search of work opportunities (Desai, Mahadeviya, and Mishra, 2014). These metropolitan areas were chosen because previous research of the same kind indicates that eating out is more common among urban residents, where affordability and disposable income are relatively high (Bren d'Amour et al., 2020; Kalita & Sarma, 2017; Patgiri, 2022). Therefore, urban population has been considered because the diners who are required for the study presumed to have higher level of income, more exposure to different eateries and willingness to pay for leisure activities than their rural counterparts. This makes it easier to guarantee that the sample we choose is representative and includes individuals from a range of backgrounds. Also, as stated by Shri Amitabh Kant, CEO of NITI Aayog, GOI, the food service business is growing at a quick pace because India is the youngest nation with a tech-savvy and internet-savvy consumer base. This group has a lot of money to spend and little time cooking indoors. This is demonstrated by the fact that customers nationwide eat out an average of 6.6 times each month (NRAI, 2019).

(b) Sampling Unit

The sampling unit and sampling element for the study is the same. Any individual is a diner and above 18 years of age forms the sampling unit which has been discussed in the previous sub section.

(c) Sample Location

The study's geographic scope encompasses seven important urban centres of Assam- Guwahati, Dibrugarh, Jorhat, Tezpur, Tinsukia, Nagaon, and Silchar. The locations so

considered are comparatively urban locations having quite a good number of restaurants in order to achieve the aforementioned objectives. The main justification for their inclusion is that, in terms of both urban population and business activity, these urban centres are the largest in our state. Additionally, the populace of these places is generally cosmopolitan (Ramachandran et al., 2021; Thongkhanthang, 2015; Kashyap, 2022). Additionally, these cities guarantee representation of the Barak Valley division, North Assam, Upper Assam, and Lower Assam, the state's four major administrative divisions.

(d) Period of Study

The final field survey was carried out in seven urban centres starting from January 2022 and continued till June 2023.

4.4.3. Sample Size

The sample size for the survey has been determined on the basis of following criteria. Firstly, in accordance to the KMT (Krejice & Morgan, 1970) table a sample size of 784 should be used at a 95% confidence level and a 3.5% margin of error for a population size between of 2,500,000 to 10,000,000. A relatively larger sample size will be used for this study since primary data has been gathered from cities and towns, particularly urban (agglomeration) parts of the state.

Secondly, similar studies conducted by different researchers in the previous years have considered the following sample sizes. The study on consumers' ideal eating out experience in restaurant was 652 (Alonso & O'Neill, 2010). 600 samples were taken in a study conducted by Chen and Lin (2018). Upadhyay et al. (2009) considered 650 samples in a study done in India. 1001 samples were considered in the study done by Wickey (2013). 422 samples were considered in a study done in Fine Dining Restaurant in Bangalore by Shashikala & Suresh (2018). Ismail et al. (2022) took a sample of 482 to empirically find out the effect of dining experience on the brand personality and satisfaction at luxury hotel restaurants in Malaysia. 400 samples were taken by Maziri et al. (2021) to determine factors influencing food consumption satisfaction and purchase decisions of restaurant consumers. Nanda, S. (2019) in her doctoral thesis on '*The imperative of service quality dimensions on customer satisfaction: A comparative study of full-service restaurants and quick service restaurants*' finally used 570 sample data out of 700 predetermined samples. 960 samples were taken by Shah (2018) to study service quality and customer satisfaction of chain restaurants in selected cities of Gujarat.

Third point regarding sample determination is that a study by Bujang, Ikhwan, Sa'at, and Sidik (2017) came up with the notion that when doing tests like Multiple Linear Regression, ANOVA, and ANCOVA, a sample size of 300 or more provides a close approximation of the target population. As a general rule, 10 participants per item are good, and 300 sample sizes have been deemed excellent for factor analyses by several authors. It was suggested by Gorsuch (1983) that N should be at least 100, and Kline (1979) agreed. Cattell (1978) asserted that the minimum desired N should be 250, while Guilford (1954) maintained that N should be at least 200. Comrey and Lee (1992) provided an approximate evaluation system for sufficient sample sizes in factor analysis: 100 is poor, 200 is Fair, 300 is Good, 500 is Very Good, 1,000 or more is better. They advised researchers, if feasible, use samples of 500 or more observations for factor analysis.

Keeping the above discussion in consideration along with the minimum sample size needed to perform analysis using different statistical approaches due care has been taken to choose the survey's sample size. It was decided to collect 1000 survey samples as the primary data for this survey from seven locations within urban agglomerates of Assam. In order to determine the appropriate sample size for each location based on the number of restaurants available, the total number of samples (1000) was divided by the total number of restaurants (169) (Refer to Table 4.3), yielding figure 5.9. Next, 5.9 was multiplied by the number of restaurants in each urban centre. The last column in Table 4.3, titled "Actual Sample Size Determined," displayed the findings from this computation. Originally, a sample size of 1000 was chosen for the study; however, 824 responses are taken into consideration for analysis after a number of entries were eliminated as a part of data cleaning due to incomplete questionnaires. The removed responses were not considered a major component by the researcher (Morton-Williams, 1993). With respondents' cooperation, data is gathered, and respondents' anonymity is protected.

4.4.3.1. Sampling Technique

The sampling technique adopted in the survey is a mixed sampling design. Initially, seven different sub-samples were selected using quota sampling with the urban center of each of these urban agglomerates serving as the sub-sample. The proportional number of restaurants in each center determined the size of each sub-sample. To make a

proportionate representation, the researcher judiciously taken resort to Tripadvisor website. This website happens to be a reliable source of searching information and reviews on hotels and restaurants. Many researchers have used in similar studies from different perspectives (Minkwitz, 2018; Miguéns & Costa, 2008; Sumarsono, 2019; Pezenka & Weismayer, 2020). The inclusion criteria for a restaurant to be selected is that either it has to be a fine dining or has to provide three course meals with a handsome ambience. Thus, those restaurants which are famous for or serve ethnic cuisine exclusively and also the 'dhabas' were excluded. While searching in the Tripadvisor website for the seven towns and cities say for instance, Guwahati, the search term '*Restaurant*' resulted to 885 restaurants. It was then filtered with '*establishment type*' to restaurant only out of different options like quick bite, desserts, coffee and tea etc. and '*price*' to mid-range and fine dining to get more accurate search result. The number of resultants came down to 148 which matched with the filter search. After that looking into the restaurants one by one the final list includes 93 restaurants (Refer Table 4.2.)

Table 4.2.: Selection of Restaurant based on Filter criteria

Location	Filter 1*	Filter 2**	Final Result
Dibrugarh	*62*	*34*	*12*
Guwahati	*885*	*148*	*93*
Jorhat	*85*	*28*	*20*
Nagaon	*36*	*18*	*08*
Silchar	*67*	*19*	*15*
Tezpur	*42*	*23*	*15*
Tinsukia	*36*	*14*	*06*
** filtered with 'establishment type' to restaurants only* ***filtered with* '*price*' to mid-range and fine dining			

Source: Tripadvisor and Personal Verification

This was done for all the rest of the six places. Dibrugarh includes 62 restaurants in the first phase which was filtered to 34 and finally 12 restaurants. Tezpur includes 42 restaurants in the first phase which was filtered to 23 and finally 15 restaurants. Jorhat includes 85 restaurants in the first phase which was filtered to 28 and finally 20 restaurants. Silchar includes 67 restaurants in the first phase which was filtered to 19 and finally 15 restaurants. Tinsukia includes 36 restaurants in the first phase which was filtered to 14 and finally 6 restaurants. Nagaon includes 36 restaurants in the first phase which was filtered to 18 and finally 8 restaurants as presented in Table 4.2. A total of 169 restaurants came up by following the above criterion and judgement of the researcher by the personal visit to each of the location.

Additionally, respondents were included in each sub-sample based on convenience to ensure sampling stability and control, and to simplify data collection. Due to this convenience sampling, only respondents who were willing to volunteer and participate in the survey were chosen from those who were approached. However, as this would probably result in data duplication, effort was taken to guarantee that no two members of the same family in the same table were included in the survey. Additionally, care was taken to guarantee that individuals from various demographics—including gender and age groups, were adequately represented.

The sample breakdown for each centre has been determined using the formula below:

Table 4.3.: Sample Size Calculation

Urban Agglomerates	Number of Restaurants as per filter criteria	Sample Size Calculation	Actual Sample Size Determined
Dibrugarh	*12*	*12×5.9*	***71***
Guwahati	*93*	*93×5.9*	***549***
Jorhat	*20*	*20×5.9*	***118***
Nagaon	*8*	*8×5.9*	***47***
Silchar	*15*	*15×5.9*	***90***
Tezpur	*15*	*15×5.9*	***90***
Tinsukia	*6*	*6×5.9*	***35***
Total	***169***	***1000÷169=5.9***	***1000***

4.4.4. Data Collection

The primary data has been collected from the diners of the restaurants of the select seven urban centres. The respondents' prior consent was obtained before data collection, and they were assured that the information would only be used for academic purposes. The respondents are given the structured questionnaire created specifically for the study in order to collect data. The researcher asked respondents to complete the surveys while visiting restaurants in each of these seven urban centres. The questionnaire includes rating-based questions with a 5 and 7-point Likert scale, as well as dichotomous and multiple-choice questions. The researcher also modified the Weinstein's Noise Sensitivity Scale and used it in the questionnaire to collect data regarding noise sensitivity (Senese et al., 2011). For collecting the data of 1000 samples, the researcher first selected the Urban Agglomerates in Assam and out of which seven urban agglomerates were chosen, viz: Guwahati, Dibrugarh, Tezpur, Jorhat, Tinsukia, Nagaon and Sichar as mentioned in the Table 4.3. The researcher then recorded the responses

that were received. A total of 1000 consumer survey questionnaires are collected, and 824 of those are selected for additional analysis, yielding an 82.4 percent response rate.

4.4.5. Pilot Survey

The purpose of the pilot study is to determine the viability, validity, and reliability of the research instrument. Hair et al. (2007) define a pilot study as an experiment carried out prior to the distribution of the actual questionnaire that aids in determining the issues with the questionnaires, such as whether the respondents comprehend the questions and whether the study is feasible in the particular setting. From there, the researcher can refine and modify the questionnaire until it is finished and sent to the intended respondents. In our case, we have had done pilot survey in Guwahati, Tezpur and Jorhat with 50 samples. It was conducted in three of the seven sample urban agglomerates to determine the study's feasibility. The three locations have been taken for the following reasons. Firstly, Guwahati has the highest number of restaurants and the final data collection from the proportionate sample was also more as compared to other urban centres. Secondly, Jorhat has the second largest determined sample size. Aditionally, Tezpur was selected for pilot survey out of the convenience of the researcher. The result of the reliability test of data collected from Pilot survey has been presented below:

Table 4.4: Result of Reliability Test

Items	Rating Scale	Cronbach's Alpha	No. of Items
Experience related to Music	*1-7*	*.797*	*17*
Live Music	*1-7*	*.836*	*5*
Sound experience in restaurant	*1-5*	*.777*	*5*
Experience and statement of Emotion	*1-7*	*.677*	*7*

Cronbach's Alpha is a measure of a scale's internal consistency, and Tavakol & Dennick (2011) state that a numerical value between .70 and .95 indicates that the data collection process can be proceeded. While no major difficulties and issues were faced with the questionnaire, a change in one question (Question No.6) has been made by reversing the scale point for a clearer understanding. Earlier the rating was from 0-5 and modified to 5-0 especially for Q6. (i) '*No music at all'*

Q6. Your expectation/preference while taking food in a restaurant:

Please tick your preference ,0 for No preference to 5 for Highest preference	*5*	*4*	*3*	*2*	*1*	*0*
(i)No music at all						
(ii)Pre-recorded music						
(iii)Live music						

Finally, the survey tool for the study has been finalized with appropriate modifications.

4.4.6 Data Analysis

Data analysis is done using SPSS (Statistical Package for Social Sciences). The gathered information is coded and processed in accordance with the software's compatibility. For data analysis, both descriptive and inferential statistics are employed. Analysis of frequency, percentage, average, and factor has been done. Results and outcome of different variables have been produced using inferential statistics (t-test, one-way ANOVA, two-way ANOVA, chi-square, etc.). A word cloud has been created for the survey's qualitative questions.

4.5. PHASE III: THE EXPERIMENT

Our study also employs an interesting experimental design for close observation of the diners in ethnic restaurants to find out the impact of ethnic music in their overall dining experience. Experimental design is a research methodology in which the researchers alter the independent variables to investigate its impact on the dependent variables while controlling the effects of extraneous variables (Kent, 2007; McDaniel & Gates, 2007; Cohen et al., 2017; Mattila et al., 2021). Analysis of experiments refer to the planning of an experiment to gather relevant data and the derivation of conclusions from the data regarding any problem being studied. This could include anything from clearly stating the experiment's goals to the crucial findings of the investigation being included in the final report draft. Intermediary details include how the dependent and independent variables are structured, how their levels are chosen in the experiment, what kind of experimental material will be used, how the variables are manipulated on the experimental material, how data is recorded and tabulated, how the material is analyzed, how to draw sound and valid inference, etc.(Jayaraman, 1999).It enables scientists to test

theories, forecast results, and advance our knowledge of how variables interact to affect behaviour, results, or phenomena (Leppink, 2019). Hence, a study is considered effective if the researcher can verify that a change in the dependent variable is solely the result of manipulating the independent variable. An experimental study must be able to identify the cause and effect of an event, which implies it must be explicit that the effects of the experiment are caused by the cause. When conducting a controlled experiment, researchers compare a control group and an experimental or intervention group that are similar except for one thing that is experimental manipulation. Participants who do not receive any experimental intervention make up the control group. The control group is used as a point of comparison. The researcher tries to match as closely as possible the age, gender, socioeconomic status, ethnicity, and other characteristics of the control group to the intervention group.

The way food is perceived and assessed is a complex process. According to Li (2017), subconscious behaviour is defined as an action or response in a subconscious state or "*working or existing outside of consciousness*". Individual and cultural differences, as well as external environmental factors like background music, odour, and visual impression, can significantly influence a variety of subconscious consumer behaviours (Biswas et al., 2019; Huang and Labroo, 2020; Jeong and Lee, 2021; Pantoja and Borges, 2021; Peng-Li et al., 2022; Szakal ´ et al., 2023). Despite the fact that several researchers have looked at how ambient music affects food choices the impact of ethnic music on meal choice, however, has not yet been written about or investigated in relation to its impacts on dining experience (Refer to Section 2.7, Research Gap). Retail establishments and restaurants can profit from background music as a powerful marketing tool. Thus, the current study intends to investigate if the ethnic music of various communities of Assam can affect the choice of food that patrons choose to eat at the corresponding ethnic community restaurant. Our experimental study attempts to shed more light on the relationship between and significance of ethnic music in improving the dining experience when consuming ethnic food in a restaurant. Dining experiences, which frequently features both local and global cuisine, can be distinctive and different from regular meals. Guests seek out local, authentic, and unique culinary experiences, making the concept of "authenticity" highly prized in the travel industry (Carroll 2015; Hall, 2009).

For the experiment, the ethnic restaurants serving ethnic food are taken into consideration. Traditional cuisines that are connected to a particular country, area, or

community and represent their history, customs, and preferences are referred to as ethnic food. In order to preserve culinary practices and cultural history, these recipes frequently make use of locally produced ingredients and distinctive cooking methods (Pearce & Lee, 2005). By sustaining local food systems, preserving cultural heritage, and boosting biodiversity, eating ethnic food not merely enables people to experience a variety of flavours and culinary customs but also advances food sovereignty. As a vehicle for cultural research and identity construction, food has a profound impact on societies, civilizations, and identities. Bonds are strengthened and tradition and history are preserved when meals are shared among family, close companions and members of the community. Therefore, ethnic restaurants typically reflect a unique culture, giving patrons the chance to try something novel and exotic (Ebster & Guist, 2005).

The processes of ethnic identity creation in Assam and Northeast India in general have been influenced by many historical and sociopolitical causes. In Assam, ethnic identity assertion was characterized by simultaneous processes of exclusion and accommodation. The varied nature of ethnicity in Assam makes studying these dynamics challenging (Gohain, 1997; 2008; Borah & Deka, 2019). People from many races, religions, castes, tribes, and languages make up the state's population. Since the time immemorial, a sizable number of immigration groups have added to the splendour of the larger Assamese ethnicity, in addition to the state's indigenous tribes and clans. Assamese, Bengali, and Bodo are the most commonly spoken languages in the state; Hindi is also widely used for business purposes. The Bodo tribe or Boro or Boddo, is one of the largest modern-day ethno linguistic group in the state of Assam. Assam has been a cradle and witnessed assimilation of people from different regions like West Bengal, tea garden workers, and herders from Nepal, Jharkhand, Bihar, Rajasthan etc. (Bharadwaj, 2016; Sinha, 2022, Ghosh, 2023; Acharya, 2020). A group of tribes living in Nagaland, Northern Manipur, and the adjacent regions of Assam and Arunachal Pradesh are collectively referred to as the Naga (Dutta & Dutta, 2015). Although Nagaland was curved out of Assam for ethnic identity, the presence of Naga tribe can be seen in most of the places of Assam such as Sibsagar, Dima Hasao etc. (Rai, 2018). Since the Nagas have migrated and lived in Assam's plains for many generations, their interactions and associations with non-Naga people have a significant impact on every aspect of their lives (Boruah & Ovung, 2017). By keeping in mind, the socio-cultural background of different communities of Assam and the criteria laid down by the researcher, the

restaurants serving Assamese cuisine, Bodo cuisine, Naga cuisine and Bengali cuisine have been considered. Ethnic restaurants for the study are as follows:

Table 4.5: List of Ethnic Restaurants for the Experiment

Urban Agglomerates (Places)	Name of the Restaurants	Ethnic Community Cuisine
Guwahati	*Paradise*	*Non- Tribal Assamese (Main stream Axamiya)*
	Naga Kitchen	*Naga*
	Zarwa	*Bodo*
	O maago	*Bengali*
Jorhat	*Paradise*	*Non- Tribal Assamese (Main stream Axamiya)*
	Naga Kitchen	*Naga*
	Abhiruchi	*Bengali*
Tezpur	*Khorika*	*Non- Tribal Assamese (Main stream Axamiya)*
	Naga Kitchen	*Naga*
	Thajim	*Bodo*

The criteria for inclusion in the list of restaurants were:

(a) The restaurant has to serve ethnic cuisine.
(b) It has to offer 3-course meal including starter, main course, and dessert.
(c) The restaurant offering the same cuisine type should also be available in more than one place within the select urban agglomerates to maintain homogeneity.
(d) If a chain restaurant is not found, then a popular restaurant offering the same cuisine may be included in cases where criteria (a), (b) are met.

While coming to ethnic music, the concept of ethnomusicology has come up. It is the study of music of different cultures. The root of Assamese music is deep and widespread. Folk, classical, and modern are the three categories into which Assamese songs fall (Gogoi, 2015). Gramophone records marked the beginning of the contemporary era of Assamese music. The creators of contemporary Assamese songs are Prafulla Baruah, Umesh Choudhary, Anandiram Das, Kirti Nath Sarma Bordoloi, Ambikagiri Rai Choudhary, Purushutam Das, Joytiprasad Agarwala, Bishnu Prasad Rabha, Dr. Bhupen Hazarika, Jayanta Hazarika. Songs like Biya Naam, Borgeet, Gualporia Lokgeet, Kamrupi Lokgeet, and others were initially written by contemporary lyricists based on folklore (Hazarika, 2024). Because they may be obtained in both printed and recorded form on Gramophone, these are regarded as modern. Here, the songs are identified by the writer's name, and we have clear lyricists and which are not tuned to a particular *raag or*

taal as classical. Unlike folk songs, which are not found in printed form yet represent the rich cultural heritage (Borthakur, 2019; Bordoloi, 2024). Again, many lyricists purposefully concentrated on songwriting in the early 20th century in an effort to eliminate the Bengali influence from Assamese songs (Dutta, 2022). A detailed discussion on the evolution of Assamese music has been presented by scholars like Goswami and Dutta (1974), Hazarika (2024), Therefore, after judiciously considering the matter and going through the literature available (Boruah, 2019), the music of Dr. Bhupen Hazarika has been chosen to represent Assamese music.

With regard to Bodo music, *Bagurumba* has been a cultural and political pride of Bodos, has been considered. It has emerged as an identity tool for the Bodo tribe (Ramchiary, 2018). Despite the fact that Boro music isn't as complex as music from other schools and genres, the Bagurumba dance ensemble uses the *khams*, a long cylindrical drum, for beats and rhythm, and the flute and *serja* for melody (Phukan, 2019).

Next comes the Bengali music. More than a thousand years old, Bengali music has a long history and a wide range of styles, beginning from religious to secular. These include Vaishnav poetries (Gitagovindam), Shayama Sangeet, Bishnupur Gharana classical music, Rabindra Sangeet, Nazrul Geeti, Dwijendrageeti, Atul Prasadi, folk versions like Baul, Bhatiali, Bhawaiya, and Dhamail, as well as contemporary versions enhanced by singers like Shyamal Mitra, Kanan Devi, Jaganmoy Mitra, Manna Dey, Geeta Dutta, Sachin Dev Burman, Hemanta Kumar Mukhopadhyay, Manabendra Mukhopadhyay, Sandhya Mukhopadhyay etc. (Sinha, 2022). But for the purpose of our study Rabindra Sangeet has been considered. Rabindra Sangeet is a prominent feature of Bengali culture. A sense of communal identity as inwardness is evoked by its different melodies and their individual accents.

Unlike music from other regions of the world, Naga traditional music did not employ many complex instruments, musical styles, or melodies. Traditional music included trumpets made of *Mitun Jemji's* horn, cymbals, gongs, and various bamboo flutes and mouth organs, as well as stringed instruments with *Mitun* horn, coconut shell, or bottle guard attached to a fretless wooden neck (known by different names in each tribe and village as *Tati, Nrah, Libuh, Mrabung, and Nrübu*) and animal-skin drums (*Nkhuangh*) and bamboo mouth organs (Imchen, 2018; Panmei, 2020; Nanjappa, 2020). For our experiment Naga folk fusion music is used.

Thoughts, ideas, civilizations, and histories are all expressed through music, which is a fundamental component of the construction of societal and personal identities (Sinha, 2022). According to Sheleman (2006), musical space serves as an exercise that unites group members through a sense of belongingness.

4. 5.1. Subjects or Participants

It is very crucial to determine the sample be it survey or experimental study. According to Gall et al. (1996), there should be a minimum of 15 participants in both the experimental and control groups for comparison, while Cohen et al. (2017) stated that the experimental procedures require a minimum of 15 individuals. Similar studies conducted by different researchers in the previous years have exhibited the following sample sizes. A study conducted by Caldwell & Hibbert (2002) took total 62 restaurant customers for their experiment on restaurant music of which 30 under slow music condition and 32 under fast music condition. The study conducted by Sahin (2023) took 30 samples to find out the effect of tempo in eating behaviour in restaurant. Experiment conducted to check the effect of ethnic music on selecting ethnic foods Szakálet al. (2023) employed 104 participants and divided into two groups of 52 each: the control group (those who did not listen to music during the experiment) and the music group (those who listened to music during the measurement. Delice (2010) suggested the minimum sample size in the experimental studies to be 50.

Based on these, a total of 100 participants took part in the experiment. There were two groups in the study: the intervention group, who were exposed to instrumental music excerpts representing "Assamese," "Bodo," "Naga," and "Bengali" music, are termed as the ‘Ethnomusicological Group’ (EG) and the other group, who were exposed to Bollywood instrumental music are termed as Control Group (CG). The control group (those who were exposed to Bollywood music) consisted of 50 participants and the intervention group (those who listened to relevant ethnic music) consisted of 50 participants. All of the selected participants were from the urban agglomerates of Assam. 5 subjects each from the respective ethnic restaurants considered for the study. Detailed demographic information of the participants is given in Table 4.6, describing demographic profile of the subjects. The experiment was carried out in the restaurants itself.

4.5.2. Materials and Instruments

4.5.2.1. Tool Used

The experiment used two identical questionnaires for the subjects in both intervention group and control group respectively. To avoid any possible confusion the questionnaire was printed in yellow and pink papers for intervention and control group respectively. The self-administered questionnaire consisted of 17 questions (enclosed in Annexure A3) related to liking towards music played, music fit, association, music tempo, music volume preference along with questions related to demographic profile of the subjects such as ethnic background, eating out average frequency, frequency of consuming ethnic food,, age, gender, marital status, occupation, monthly income, average spending, treat type, visit type, and order type. A sincere effort has been made to verify each statement separately. In addition to rating statements on a 7-point scale, where 1 indicates the least agreement and 7 indicates the highest agreement, the diners were asked to rate a few statements on a 6-point scale, with 0 representing not agreeing, 1 representing least agreement, and 5 representing highest agreement (Vagias, 2006). The participants rated questions like "*I can associate the music played in the restaurant with the food served in the restaurant*" (0 being **Not at all associated** and 5 being **Highly Associated**); "*The music fits with the food served*" (O being **Does Not Fit** and 5 being Strongly **Fit**); "*To what extent the music in the restaurant defines the authenticity of the experience in the restaurant?*" (where 1 indicates the least agreement and 7 indicates the highest agreement) etc. The questionnaire of 17 questions with sub-questions in nominal, interval, and ratio scales, depending on the information gathering goal. This information is displayed as a pie chart.

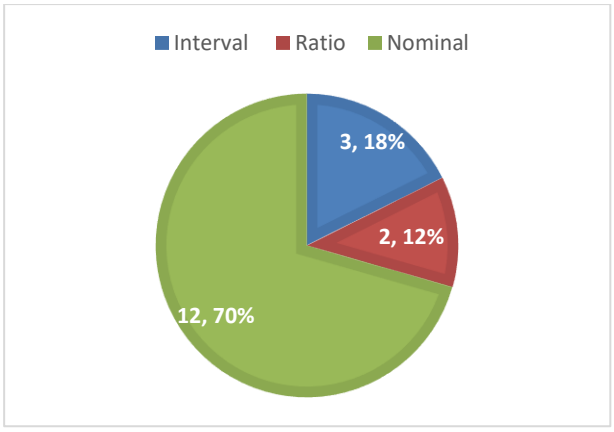

Figure 4.3: Scale of Measurement (Experiment)

4.5.2.2. Auditory Stimuli

Four instrumental music excerpts representing "Assamese," "Bodo," "Naga," and "Bengali" music, respectively, were employed in the study. The Assamese music extract was from Bharat Ratna Dr. Bhupen Hazarika's composition; the Bengali sample was from Nobel Laureate Kabiguru Rabindra Nath Tagore; the Bodo excerpt was a rendition of the traditional Bagurumba; and the Naga excerpt was by Abiogenesis-Nagaland, an international folk fusion band from Nagaland. Only instrumentals were included in all of the clips. The extracts' original speed was maintained as the samples were taken from the internet and were played at about 60 dB on a Philips bluetooth speaker to retain the same level sound quality in all the restaurants. We deliberately decided against using headsets since we did not want to distract participants from the dining task and it would unnecessarily bring attention to the study's acoustic component. The use of speakers in food and music trials has been supported by earlier research (Peng-Li et al., 2020a, b). Therefore, on both days at each restaurant, we made sure that the Bluetooth speaker was positioned in the same spot in the room to regulate the listening volume. An excerpt of the popular Bollywood music of that time (period when experiment was conducted) was used for the control group for each of the restaurant. The reason being as it was observed while carrying out the survey the restaurants used to play basically latest Bollywood music and it was also stated in the FGD that restaurants play Bollywood music. In both the days of conducting experiment for the control group and intervention group in each of the restaurants, the respective instrumental music was played. The reason behind to avoid the lyrics and the singer is to control the effects that may be produced by them. This has been also suggested by the music expert Late Nanda Banerjee, Famous Music composer of Assam in the personal interview that was carried out on 27th July, 2023 to get expert comments on ethnic music. Therefore, the instrumental musical stimulus was resorted to conduct the experiment (Zellner et al., 2017). Additionally, when selecting Bollywood music effort has been made to avoid using any music with ethnic resemblances, basically, any Indian ethnic music, such as Punjabi Bhangra, Garwa, etc. The Bollywood Music “Satranga” from the Hindi movie Animal, which was one of the popular and trending in those days in the chartbuster was considered for the purpose (https://youtu.be/zYUL5Iwc0dI? (si=3PmP4L_t9j4USwBX).

Other tracks can be listened from the following links:

Assamese Music https://youtu.be/WBqDkZ83YDg?si=b7Vbt1JIbfHF8r6n
Bodo Music https://youtu.be/7WlOL2hWc-Y?si=erktqMaXsSU9evIh
Naga Music https://youtu.be/0RDnfTSOXsA?si=aZaGmzr9tvyWbkI9
Bengali Music https://youtu.be/TK_llvyxpxY?si=Vrlijq0dem7SsXwf
Bollywood Music https://youtu.be/4e6AoE-b7s4?si=KFrWOxXUk_VPbQ1d

4.5.3. Procedure

The experiment is conducted in three Urban agglomerates i.e; Guwahati. Tezpur and Jorhat. Only these three places have been selected out of the 6 urban agglomertes because of the reason that the ethnic restaurants which have been chosen for the study are present in at least two destinations. Like for example, Paradise is present in Guwahati and Jorhat; Naga Kitchen is available in all the three locations viz; Guwahati, Tezpur and Jorhat. Since no chain Bengali cuisine restaurant was available so a popular Bengali cuisine restaurant as per the laid down criteria are chosen which are Abhiruchi in Jorhat, O Maago in Guwahati. It is left blank for Tezpur since there isn't a restaurant offering Bengali cuisine that meets the requirements laid down. Table 4.7 shows the ethnic restaurants chosen for the experiment in Guwahati, Tezpur and Jorhat. 50 participants made up the control group, and their answers were documented on a questionnaire they were requested to complete while exposed to a particular Bollywood music in the ethnic restaurants under study. We then conducted the measurement again with another 50 participants, but this time, they were paired with the ethnic music that corresponded to the ethnic restaurant they were in. The music was the only distinction between the measurement mechanisms of the two groups. The process begins with the

Table 4.7: Ethnic Restaurants for Experiment

Place (Urban Agglomeration)	***Ethnic Restaurants***			
	Assamese Restaurant	***Bodo Restaurant***	***Naga Restaurant***	***Bengali Restaurant***
Guwahati	√	√	√	
Tezpur	√	√	√	√
Jorhat	√		√	√

participants being allotted a number, of which they were not informed. The researcher wrote down 25 numbers ranging from 1 to 25 and picked up a number for five times through a lottery. The researcher drew the numbers for five times because from each restaurant 5 subjects were required for both the control and intervention group to make it 100. Whosoever diner is allotted with that number becomes the subject. Until five subjects were confirmed, this method was repeated. The next number is chosen if a diner who is eligible for the lottery refuses. In order to reach fifty participants for each of the intervention and control groups, this process was carried out for two days at each of the ten restaurants. After obtaining the necessary authorization from the restaurant management, the complete procedure was carried out, and the appropriate music was played over the Bluetooth speaker. The experiment was carried out in the months of January and February, 2024 around dinnertime, from 7 to 10 p.m. After the participants placed their order, they were approached for filling up the questionnaire. Along with answering the necessary questions to determine perception and association about the music, participants also completed the questionnaire on demographic information as part of the experiment.

4.5.4. Data Analysis

The entire experiment data have been organized in Microsoft Excel, and then analyses been performed in SPSS. Analysis of choice data was performed using Frequency tables, line graphs and Paired sample t tests to examine the relation between the music conditions and food choice of select culture for the control group and the intervention group.

4.5.5. Precautions while Conducting the Experiment

The following precautions have been undertaken while conducting the experiment:

a) To control extraneous variables and its effect, the experiment was not conducted during day (lunch time), during special occasions like festivals, birthday etc.
b) To reduce the placebo effect ‘no music’ was avoided and any popular trending song was played.
c) As the experiment was not conducted with the two groups with same participants care has been taken to choose the participants with similar demographic profile and exceptional cases have been avoided by the following the lottery parameters.

A schematic depiction has been made in order to more effectively represent the various research approaches used in the study in Figure 4.4.

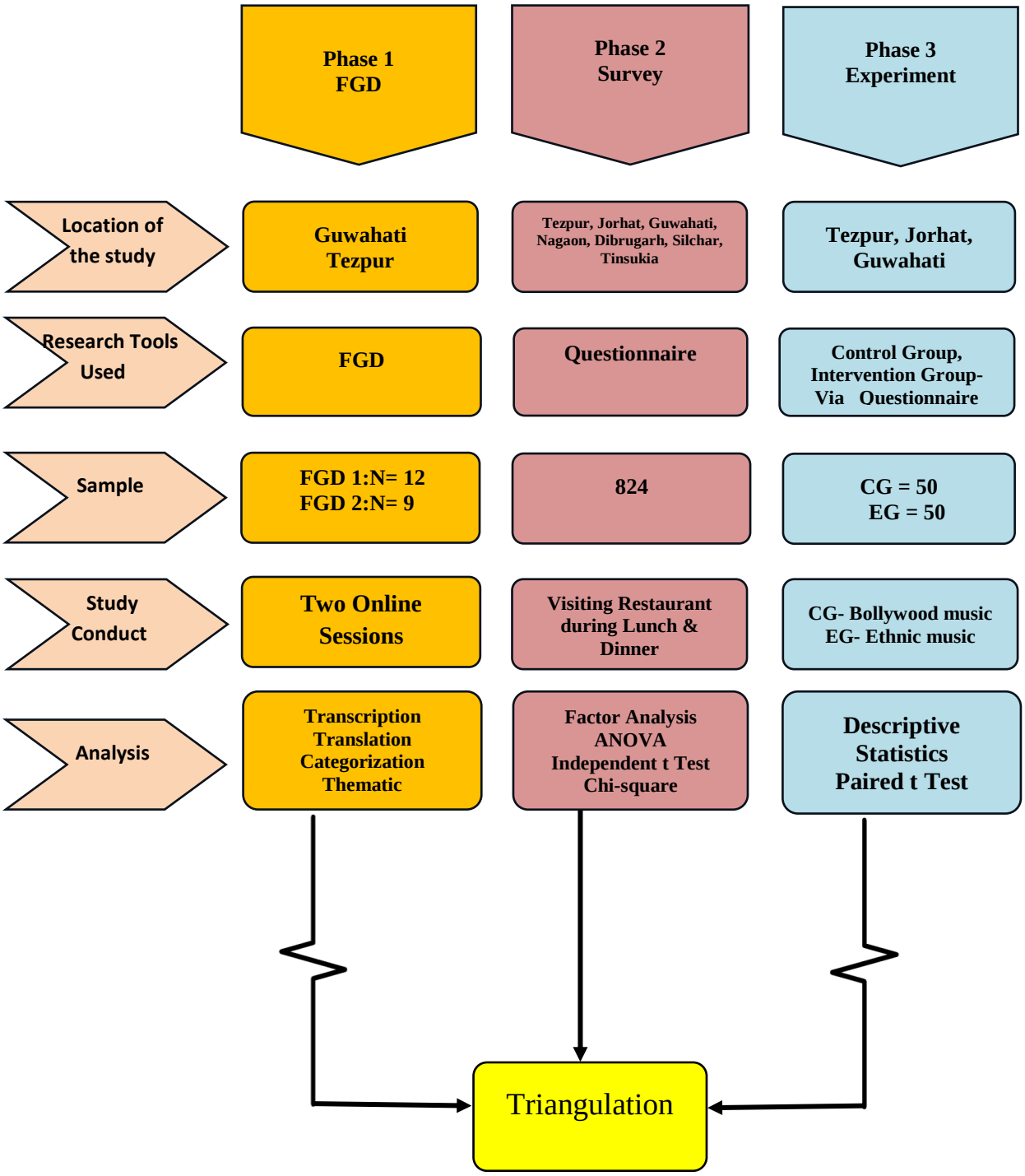

Figure 4.4: Schematic representation of the Mixed Research Design

4.6. Triangulation

The study further tries to triangulate the data generated from the three different approaches for robustness. The focus group is helpful in supplementing the quantitative data as well as the experiment results (Caillaud & Flick, 2017). A more thorough, comprehensive, and contextual representation of variables under consideration can also be obtained by triangulation. In other words, in addition to analysing overlapping variation, multiple measurements reveal some unique variance which single approaches could have missed. Here, qualitative approaches in particular are very useful since they can extract information and draw conclusions that other approaches might miss out. Contextual elements are discussed in details (Jick, 1979). The researcher wants to use triangulation to determine whether the results of focus group discussions (FGDs) differ from, converge with, or complement those of surveys and experiments (Morgan, 2019; Kern, 2018; Caillaud, et al., 2019; Braun et al., 2020; Flick, 2017). For this few of the variables of survey and experiment are triangulated with findings of the FGDs. The variables of FGD and survey are sound, choice and preference of diners, preference of music with eatery type, experience, presentation, music genre. The variables of FGD and experiment are ethnic food with music, preference for presentation, type and genre of music.

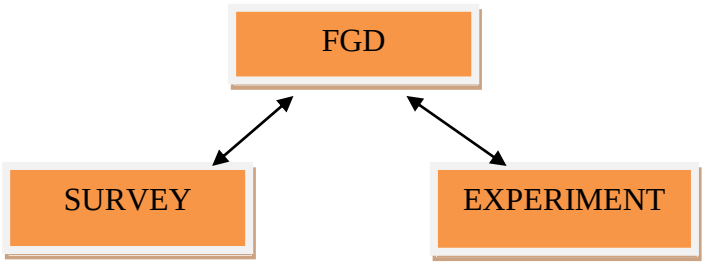

Figure 4.5: Pictorial representation of Triangulation Process

The chapter's primary goals were to outline the study's methodology and give a summary of the strategies and tactics employed during the data collection phase. The data analysis for each of the specified objectives will be presented in the upcoming chapters.