CHAPTER-5

Role of Music in determining Diners' Experience

This chapter presents the outcomes and findings of the study's primary goal, which was to determine how music at a restaurant affects patrons' overall dining experiences.

The previous chapters dealt with the need and significance of the study, reviewed an extensive literature related to the topic and highlighted on the approach to answer the research questions formulated for the study and the methods of attaining the objectives of the study. This chapter mainly focuses on the first objective of our research study, i.e. *to determine the role of music in diner experience.* It also contains the diners' perception of the sound sources. In addition to that, attempts have also been made to identify factors to determine the role of music played in the restaurant in overall diners' experience. While discussing role of music, the role of pre-recorded/ background music and live music in creating customer experience has been explored. This chapter is carefully divided into the following sections:

Section 5.1. discusses the descriptive statistics showcasing the demographic profile of the respondents obtained from Survey.
Section 5.2. consists of Analysis of Preferences & Perception of Diners
Section 5.3. comprises musicscape in restaurant
Section 5.4. presents the analyses on perception of sonic quality
Section 5.5. highlights the identification of composite factors
Section 5.6. presents the experience on level of volume
Section 5.7. consists of convivial restaurant ambience, attention towards music
Section 5.8. comprises of discussion on Live music

A survey was carried out and a valid 824 responses from diners of restaurants situated in Guwahati, Jorhat, Tezpur, Tinsukia, Dibrugarh, Nagaon and Silchar of the state of Assam have been collected. The survey has been carried out for achieving the following research objectives, which are to determine how the music in the restaurant affects the overall experience of the guests; to examine the role that live music plays 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 and also to determine whether music can help people avoid noise. However, this chapter only presents the role of music in diners' experience, live music, and the comparison of live music and pre-recorded music. The next chapter holds the effect of noise and role of music as noise avoider.

5.1A. Normality Test

The first step in conducting any statistical analysis is to ensure that the data is appropriate. The assumption of normality is checked on the data obtained from the survey using the questionnaire approach. The data is verified to check the normality assumption by the following analysis in SPSS. Normality means that the data is drawn from a normally distributed population. Researchers can estimate normality using skewness and kurtosis measurements for samples more than 300 (Kim, 2013). Kurtosis quantifies the 'peakedness of the distribution tail', while skewness quantifies the 'lack of symmetry' in the data distribution. According to Hair et al. (2010), both of these measurements must fall within the range between -3 and +3.

5.1. Profile of Respondents

At the outset, the demographic profile of the sample from the survey has been discussed. This will give an overview of the nature of respondents. Based on criteria like age, gender, education, occupation, income, family size, religion, race, and among others, demographic parameters divide the market into customer categories. Due to their straightforward categorical characters, these variables are relatively simpler to measure than others. It has been demonstrated that some factors, like education, gender, and income, change the relationships between consumer behaviour and satisfaction. (Cooil et al., 2007). Demographic variables also add to the data's importance. First, a demographic profile of the sample is made as part of the study.

5.1.1. Age

Figure 5.1.1 depicts the age wise distribution of the respondents. A large number of the respondents participated in the study are young at age, majority being from the age group of 26 to 35 years representing 58.3% of the respondents. This is followed by the age group of 18 to 25 years which shows 20.6% of the respondents. 12.1% of the respondents are in between the age group of 36 to 45

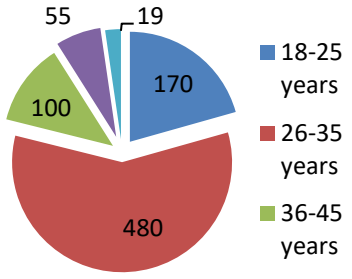

Figure 5.1: Age of the Respondents

years. A few respondents (6.7%) fall under the age group of 46 to 55 years. Only 2.3% belongs to the age group of 56 years and above. The trend shows maximum respondents are mostly young adults visiting restaurants.

5.1.2. Gender

The gender distribution of the 824 respondents in the sample is about 53 percent male, 46 percent female, and 1 percent transgender. The ratio of male to female study participants is 53:46, making gender an approximate representative distribution in the research. The percentage share of urban women population of Assam is 48.61% (Census, 2011).

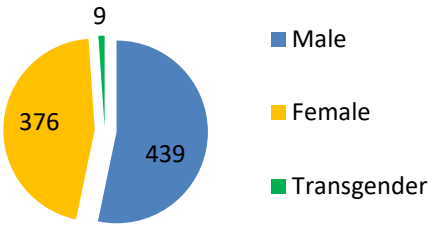

Figure 5.2: Gender of the Respondents

5.1.3. Marital Status

In terms of marital status in Figure No. 5.3 majority of the respondents are currently single representing 64.3 % and married represents 35.7%. The reason why currently single shows higher percentage is because the participants are mostly young in age and thus unmarried

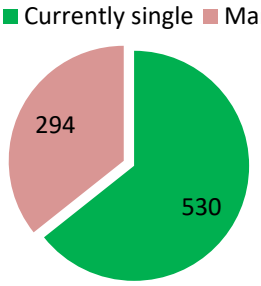

Figure 5.3: Marital Status of Respondents

5.1.4. Occupation

The vast majority of the respondents (88.3%) are employed and earning money, according to a thorough examination of the occupation groups. Figure 5.4 represents only 96 (11.7%) of the 824 respondents, the absolute minimum, are not earning, including housewives and students who rely on their spouses or parents for payment.

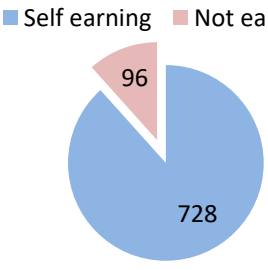

Figure 5.4.: Occupation of the Respondents

5.1.5. Monthly Income

From the table depicting monthly income of the respondents the majority of the respondents fall into the monthly personal income between Rs. 35,000/- and Rs. 65,000/- (34%). Subsequently, 31.8% of the participants earn up to Rs. 35,000/- each month. A total of 24 percent of those surveyed are earning between Rs. 65,000/- and Rs. 1,000,000/- per month. The highest monthly income is reported to be earned by 10% of the respondents, which is more than Rs. 1,00,000/-.

Table 5.1.: Monthly Income of Respondents

Monthly Income	Count	Percentage
Upto Rs.35000	*262*	*31.8*
Rs.35000-Rs.65000	*280*	*34.0*
Rs.65000-Rs.100000	*198*	*24.0*
Above Rs.100000	*84*	*10.2*
Total	*824*	*100*

5.1.6. Average Spending while Dining-out per Occasion

Table 5.2 reveals that while dining out more than half of the respondents spends on an average upto Rs.2500/-. This is followed by one fourth of the respondents, who spends in between Rs.2501/- -Rs. 5000/-. 12.5% spends within the range of Rs.5001/- -Rs.10000/- and only 6.9% diners on an average spend more than Rs.10000. It is seen that the percentage is decreasing when the average spending value is increasing and vice –verse. This may be due to the fact that although the survey was done in six urban centres but the number of most luxurious and premium class restaurants is more in Guwahati as compared to other places in Assam.

Table 5.2.: Average Spending while Dining-out

Average Spending while Dining-out	Count	Frequency
Upto Rs.2500	*454*	*55.1*
Rs.2501-Rs.5000	*210*	*25.5*
Rs.5001-Rs.10000	*103*	*12.5*
Above Rs.10000	*57*	*6.9*
Total	*824*	*100*

5.1.7. Treat Type

Table 5.3.: Type of Treat

Treat Type	Count	Frequency
Sponsored	*90*	*10.9*
Self Paid	*734*	*89.1*
Total	*824*	*100*

The above table shows that only 10.9% rounded off to 11% dine-in in the restaurant as sponsored treat where the bill payment was done by someone else on special occasions like birthday, anniversary, or for some other kind of celebration. The bill amount was self-paid by 89 % diners.

5.1.8. Visit Type

The majority of the respondents (85%) instantly visited the restaurant without making prior booking whereas only 15% made a booking for the dine-in as shown in the table.

Table 5.4.: Type of Visit to Restaurant

Treat Type	Count	Frequency
Pre-Booked	*123*	*14.9*
Instant Visit	*701*	*85.1*
Total	*824*	*100*

It can be inferred from the demographic analysis that majority of the respondents participated in the study are young from the age group of 26 to 35 years representing 58.3% of the respondents. The gender representation of 53:46 is also similar to that of population representation. Majority of the respondents are currently single representing 64.3 % and married represents 35.7%, a vast majority of 88.3% respondents are employed and earning money. The income class which has monthly personal income between Rs. 35,000/- and Rs. 65,000/- (34%). Subsequently, 31.8% of the participants earn up to Rs. 35,000/- each month. Expenditure patterns reveal that over half of the respondents spend up to Rs. 2,500/- on average. Hence, it can be said that the population is basically young and economically active.

5.2. Analysis of the Preferences and Perception of Diners

At the beginning of analysing the descriptive statistics and applying statistical tests to the variables, how frequently the diners dine outside in a month was determined. The

descriptive statistics show that on an average people dine outside for 6.5 times in a month where minimum count is one and maximum frequency is 30 times. This finding is similar to the report of 2019 survey by the National Restaurant Association of India (NRAI).

Table 5.5.: Descriptive Statistics of Average Number of Times Eating Outside

Minimum	Maximum	Mean	Std. Deviation
1	*30*	*6.53*	*4.577*
N= 824			

Next, responses to each item under purpose and reasons for choosing a restaurant are recorded, and the frequency and average score range of each variable are computed based on the responses and the nature of the variable.

5.2.1. Purpose and Reasons of Visiting Restaurant

Diners may visit restaurants for different purposes and reasons. Purpose helps to determine whether the diners have come for just a meal or some other purposes. Reasons of visiting a particular restaurant may be due to various factors. Under this variable the reason for choosing the restaurant has been determined. Here, with the help of percentage the purpose of visiting a restaurant has been measured.

Table 5.6.: Purpose of Visiting the Restaurant

Purpose of Visit	Frequency	Percentage
Outing with family or friends	*474*	*57.5*
Business purpose	*138*	*16.7*
Casual lunch/dinner	*142*	*17.2*
Occasion	*70*	*8.5*
Total	*824*	*100*

It is reflected in the table that more than fifty percent of the respondents visit restaurants as a way of outing with family or friend. This probably means that they want to spend quality time with their loved one. Only 17.2% diners visit restaurant for casual lunch or dinner which to have their afternoon or evening meal followed by 16.7% who have visited the restaurant for some business purpose, limited number of respondents (8.5%) came to attend some kind of occasion.

Further, it was also tried to examine the reasons for choosing the particular restaurant. All the respondents were asked close ended questions. This is presented in the Table 5.7.

Table 5.7.: Reasons for Choosing the Particular Restaurant

Reasons for choosing the particular restaurant	Percentage of Positive Response
Location	*13.6*
Past Experience	*13.5*
Reputation	*7.0*
Advertisement	*11.8*
Taste of Food	*27.3*
Pleasant Ambience	*14.9*
Recommended by Family/ Friends	*10.5*
No other alternative	*1.4*

N=824, Total Responses=1971 (Dichotomy group tabulated at value 1)

The most favourable influence is the taste of food (27.3%), which is followed by pleasant ambience (14.9%) and a good location and past experience; reputation and recommendation appear to have gradually less effect from 1971 responses.

It is evident from the responses that food quality solely is not the deciding factor for choosing a restaurant. Research also indicates that consumer perceptions of a particular space are influenced by the physical environment through their senses (Sliburytė & Le Ny, 2017). Even though the food served in the restaurant is the primary component, the environment in which the food is consumed also affects the diner's overall experience (Farias, 2014; Krishna, 2012).

Auditory cues can change the customer perception. Sound is considered to be a fundamental component of any space, and a perceived sonic environment affects users' overall experience (Aburawis et al., 2018; Rohrmann, 2012). To measure the overall sonic quality as perceived by the diners in the restaurant different variables are assessed here.

5.2.2. Prominent Sounds Heard in the Restaurant other than Music

Context determines how one interprets the quality of a soundscape. All of our senses are stimulated in the diverse settings of restaurants. In connection to the overall perception of the soundscape, more or less designable sound sources are seen to be vital, including music played in the restaurants; traffic sound; natural sound such as water fountain, artificial created natural sounds; human voices and kitchen noises (sound from kitchenware, cutlery, food preparation, etc.). With the increasing research on music played in a restaurant (Mathiesen et al., 2020; Shashikala & Suresh, 2013; Han et al., 2009; Brattico & Jacobsen, 2009), it is believed to be essential to first of all determine

the other sound excluding music. Therefore, the following analysis will first of all determines the sound sources other than music in a restaurant. In the subsequent sections the role of music shall be discussed in a more detailed way.

Here is the tabular presentation of close ended question on different sound present and prominently heard by the diners in a restaurant. Out of the 1638 total responses of 824 respondents, the respondents most prominently hear the sound from kitchen accounted for 30% including cutlery, utensils, food preparation etc. Followed by 22.3% sound heard from the co-diners, 14.5% sound coming from fan/ electronic gadgets; 14.3% from natural sound and 12.8% are traffic sound. Only 6.2% sound arising from employees.

Table 5.8.: Sound Sources other than Music

Sound prominently heard by Diner	Percentage
Kitchen sound (sound from kitchenware, cutlery, food preparation, etc.	*30.0*
Sound from co-diners	*22.3*
Fan/Electronic Gadget sound	*14.5*
Natural sound (bird, water fountain, etc.)	*14.3*
Traffic sound	*12.8*
Sound from employees	*6.2*

N=824, Total Responses=1638 (Dichotomy group tabulated at value 1)

5.2.3. Categories of Sound in Restaurants

In this part it is examined whether and where the diners place these sounds. The obtained annotations on the sounds as heard by the diners in the restaurants are analyzed by using frequency analysis and presented in the form of word cloud for all the three categories namely pleasant, neutral and unpleasant sounds.

Pleasant Sounds:

Table 5.9.: Word Frequency for Pleasant Sound

Word for pleasant sound in the restaurant	Frequency
Background music	*124*
Music	*428*
Soft music	*125*
Live Music	*145*
Ambient music	*20*
Classical music	*89*
Contemporary music	*46*
Sizzler sound	*18*
Frying sound	*27*
food cooking &preparation	*232*
Fountain Sound	*18*

Figure 5.5: Pleasant Sound

The diners overwhelmingly associated “music” (428 mentions) with pleasantness in restaurants, followed by specific types of music like soft music (125), live music (145), and classical music (89) However, ambient music (20) and contemporary music (46) are less commonly cited for pleasant sounds. Beyond music, the sound of food cooking and preparation (232 mentions) rated second highest, specific cooking sounds like sizzler sound (18) and frying sound (27) also has notable mentions by the diners as associated with pleasant sound. Natural inspired sound also adds to a serene and calming auditory environment and thus fountain sound (18) is also considered as pleasant sound by the diners.

Unpleasant Sounds:

Next, for unpleasant sound, the word frequency shows the following trend. Chair dragging (326 mentions) is identified as the most unpleasant sound, followed by loud mixer grinder sounds (234) and loud mobile ringtones (232) as significant sources of irritation. Social noises such as co-diner laughing (184), co-diner talking (124), and children running (125) are frequently cited as unpleasant by the diners. Noises such as construction/drill (80) and aircraft/traffic noise (28) are cited, although depending on the location, these might be harder to suppress. Background operational sounds like kitchen bell signals (30) and staff/waiter talking (145); wrappers clinking (25) and walking/heels sounds (56) added to unpleasant sound sources. Moreover, loud music (134) was reported as unpleasant, emphasizing the need for careful volume control in restaurants.

Table 5.10.: Word Frequency for Unpleasant Sound

Word for unpleasant sound in the restaurant	Frequency
Co- diner Talking	*124*
Co-Diner Laughing	*184*
Children running	*125*
Staff/Waiter Talking	*145*
kitchen bell Signal	*30*
Construction/drill sound	*80*
Walking/Heels sound	*56*
Baby Crying	*218*
Loud Music	*134*
Chair Dragging	*326*
Loud Ringtone	*232*
Traffic/ Aircraft sound	*28*
Wrappers clinking	*25*
Mixer Grinder	*234*

Figure 5.6: Unpleasant Sound

Neutral Sounds:

Further, the sounds which are considered to be neutral are as follows- co-diners ordering (342) was the most frequently mentioned neutral sound, indicating that this routine activity does not significantly impact diners' experience positively or negatively. This is followed by music (247), waitress greeting (246), fountain/aquarium sounds (148), air conditioner or fan (102) and cutlery/utensils (70), sound from the kitchen (56), sizzler (43), frying sounds (28) and food cooking (12) respectively.

Table 5.11.: Word Frequency for Neutral Sound

Word for neutral sound in the restaurant	Frequency
Co-diners Ordering	*342*
Music	*247*
Cutlery/utensils	*70*
Sound from kitchen	*56*
Air conditioner/Fan	*102*
Co-diner Talking	*189*
Waitress Greeting	*246*
Sizzler sound	*43*
Frying sound	*28*
food cooking	*12*
Fountain /Aquarium Sound	*148*

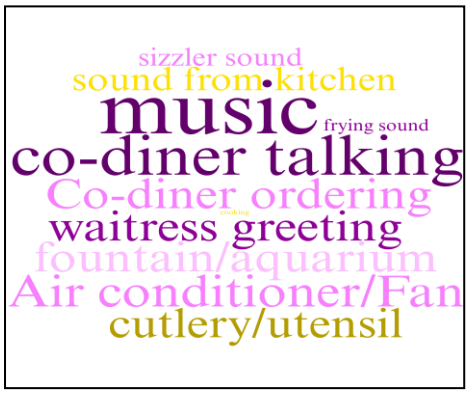

Figure 5.7: Neutral Sound

Summary of section 5.2.3:

A total of 1272 pleasant, 1941 unpleasant, 1483 neutral words correspond with the characteristic sound of the restaurants. Simple description with one or two words that suggested either a physical source (such as "utensils," "chairs," or "music"), a sound in and of itself (such as "talking," "crying," or "music"), or both (such as "soft music," "people talking," or "plate clattering") are considered. Nonetheless, similar closest matches are grouped under a single category for the purpose of recording the frequencies. In case of *Pleasant* sound overall music records the highest. While sound from food ordered by others like sizzlers and artificial water fountains records the least as pleasant sound. In case of unpleasant sound in restaurants dragging and pulling of chair has the highest frequencies followed by operation of mixer grinder, loud ringtone of co-diners and crying of baby among others. Among the neutral sounds, orders placed by the diners record the highest. Diners hear what the next table orders but they did not recognize that to be pleasant or unpleasant rather categorized as neutral sound. However, music is again considered as neutral sound for at least 247 respondents.

This is clear from the above analysis that the diners are exposed to different kinds of sound in the restaurant and we can broadly classify these sounds as music (pleasant), noise (unpleasant) and minor sound (neutral). Music has individually and exceptionally taken a place in the sonic environment. This is evident from the word frequency that diners consider different types and aspects of music as pleasant and a very few other words describing pleasant sonic environment are there such as sound of cooking and preparing food, sizzlers. If we consider the unpleasant sound as noises and rest of the other sounds which have not shown a major effect we may treat them as minor sources. These minor sources are also important as we can see that if they are not handled properly they may be turned into noise (unpleasant sound).

Table 5.12.: Preference of Music with Meal and Gender Cross tabulation

Preference of music with meal		Gender		Total
		Male	Female	
Prefer music during breakfast	Count	41	21	62
	Row%	66.10%	33.90%	
	Column%	**5.90%**	**3.40%**	
	% of Total	*3.10%*	*1.60%*	4.70%
Prefer music during lunch	Count	106	137	243
	Row%	43.60%	**56.40%**	
	Column%	15.30%	22.30%	
	% of Total	*8.10%*	*10.50%*	18.60%
Prefer music during high tea	Count	110	89	199
	Row%	55.30%	44.70%	
	Column%	15.90%	14.50%	
	% of Total	8.40%	6.80%	15.20%
Prefer music during dinner	Count	193	168	361
	Row%	53.50%	46.50%	
	Column%	27.80%	27.40%	
	% of Total	*14.80%*	*12.80%*	27.60%
Prefer music during Special occasion	Count	244	199	443
	Row%	55.10%	44.90%	
	Column%	35.20%	32.40%	
	% of Total	*18.70%*	*15.20%*	**33.90%**
Total	Count	694	614	1308
	% of Total	53.10%	46.90%	100.00%

Percentages and totals are based on responses.

a. Dichotomy group tabulated at value 1.

5.3. Musicscape in Restaurant

According to Oakes (2000), musicscape is a visual framework that emphasizes music as one of the ambient factors affecting consumer behavior. Here in this, preference of music and genre with the meal in restaurants are measured.

5.3.1. Preference of Music with Meal

Music is one of the elements of atmospheric tools that are used by the marketers. It is indeed important to find out whether diners prefer music while dining. Here, a cross tabulation of multiple responses has been used to examine the preference of music with respective meal such as breakfast, lunch, high tea, dinner, special occasion on the basis of gender. The percentages and frequencies in the table are on the basis of responses and not the sample size as the records for all the categories are sought for and are important for analysis. It can be seen in the Table 5.12 that both male and female diners score

highest for music during special occasion (33.9%) and least preference for music during breakfast (4.7%). However, a significant difference can be seen in terms of female percentage (56.4%) during lunch whereas only 43.6% male diners likes music during lunch It can be said that the trend indicates incorporating music during lunch time and special occasions like birthday, anniversary party, new year party etc., and dinner could be particularly appealing to a broad audience.

Table 5.13.: Cross tabulation -Genre and Gender

Genre		Gender		Total
		Male	Female	
Prefer ethnic/traditional music	Count	82	90	172
	Row%	47.70%	52.30%	
	Column%	10.20%	11.20%	
	% of Total	5.10%	5.60%	10.70 %
Prefer Indian music	Count	190	186	376
	Row%	50.50%	49.50%	
	Column%	**23.60%**	23.20%	
	% of Total	11.80%	11.60%	**23.40 %**
Prefer Western music	Count	162	140	302
	Row%	53.60%	46.40%	
	% within Gender	20.10%	17.50%	
	% of Total	10.10%	8.70%	18.80 %
Prefer Classical/Gazal	Count	64	50	114
	Row%	56.10%	43.90%	
	Column%	8.00%	**6.20%**	
	% of Total	4.00%	3.10%	7.10%
Prefer Instrumental music	Count	128	124	252
	Row%	50.80%	49.20%	
	Column%	15.90%	15.50%	
	% of Total	8.00%	7.70%	15.70 %
Prefer popular movie songs	Count	106	131	237
	Row%	44.70%	55.30%	
	Column%	13.20%	16.30%	
	% of Total	6.60%	8.20%	14.70 %
Prefer Contemporary/ Pop music	Count	73	81	154
	Row%	47.40%	52.60%	
	Column%	9.10%	10.10%	
	% of Total	4.50%	5.00%	**9.60%**
Total	Count	805	802	1607
	% of Total	50.10%	49.90%	100.00 %

Percentages and totals are based on responses.

a. Dichotomy group tabulated at value 1.

5.3.2. Preference of Music Genre

Music can be classified based on the genre. All the diners may not like all the genre or particular genre may not be liked specially in case of restaurants. It has been tried to find out the genre preference based on gender and age in restaurants. The Table 5.13 depicts Indian music as the most preferred genre, with 50.5% of males and 49.5% of females, making up 23.4% of the total responses**.**

This shows an equal preference for Indian music across genders. However, females have a slightly higher preference for popular movie songs (55.3%) compared to males

(44.7%), accounting for 14.7% of total responses. This is the genre with the largest gender discrepancy. Males slightly favor classical/ghazal music (56.1%) compared to 43.9% of females, although this genre makes up only 7.1% of the total responses.

Table 5.14 Cross tabulation -Genre and Age

Genre		Age Bracket					Total
		18-25 years	26-35 years	36-45 years	46-55 years	56 years and above	
Prefer ethnic/traditional music	Count	35	93	28	15	6	177
	Row %	19.8%	52.5%	15.8%	8.5%	3.4%	
	Column%	11.2%	9.9%	12.6%	13.3%	18.2%	
	% of Total	2.2%	5.7%	1.7%	.9%	.4%	10.9%
Prefer Indian music	Count	65	241	40	22	8	376
	Row %	17.3%	64.1%	10.6%	5.9%	2.1%	
	Column %	20.8%	25.6%	17.9%	19.5%	24.2%	
	% of Total	4.0%	14.9%	2.5%	1.4%	.5%	23.2%
Prefer Western music	Count	60	170	42	25	5	302
	Row %	19.9%	56.3%	13.9%	8.3%	1.7%	
	Column %	19.2%	18.1%	18.8%	22.1%	15.2%	
	% of Total	3.7%	10.5%	2.6%	1.5%	.3%	18.6%
Prefer Classical/Ghazal	Count	20	59	24	10	2	115
	Row %	17.4%	51.3%	20.9%	8.7%	1.7%	
	Column %	6.4%	6.3%	10.8%	8.8%	6.1%	
	% of Total	1.2%	3.6%	1.5%	.6%	.1%	7.1%
Prefer Instrumental music	Count	49	149	33	18	5	254
	Row %	19.3%	58.7%	13.0%	7.1%	2.0%	
	Column %	15.7%	15.8%	14.8%	15.9%	15.2%	
	% of Total	3.0%	9.2%	2.0%	1.1%	.3%	15.7%
Prefer popular movie songs	Count	50	141	33	13	3	240
	Row %	20.8%	58.8%	13.8%	5.4%	1.3%	
	Column %	16.0%	15.0%	14.8%	11.5%	9.1%	
	% of Total	3.1%	8.7%	2.0%	.8%	.2%	14.8%
Prefer Contemporary/Pop music	Count	33	88	23	10	4	158
	Row %	20.9%	55.7%	14.6%	6.3%	2.5%	
	Column %	10.6%	9.4%	10.3%	8.8%	12.1%	
	% of Total	2.0%	5.4%	1.4%	.6%	.2%	9.7%
Total	Count	312	941	223	113	33	1622
	% of Total	19.2%	58.0%	13.7%	7.0%	2.0%	100.0%

Similarly, genre preference has been checked for age wise distribution presented in Table 5.14. Of all age groups, Indian music is the most popular, especially among the age group 26 to 35, who account for 64.1% of all Indian music listeners. 14.9% of the responses to the survey about Indian music come from this age range. The 26–35 age group (56.3%) and the 18–25 age group (19.9%) both choose Western music. The age

group of 26 to 35 years old like ethnic/traditional music the most (52.5%), followed by younger listeners (18 to 25 years old) (19.8%). The genre that older listeners love the most is classical/ghazal, which is most popular among those aged 26–35 (51.3%) and 36–45 (20.9%). Instrumental music is popular with people of all ages, but it is particularly popular with those aged 18 to 25 (19.3%) and 26 to 35 (58.7%).

5.4. Perception on Sonic Quality of Restaurant

The perception of the sonic quality in the restaurant has been measured on the agreement to the adjective based statements. The perception of the sonic environment is pleasant, chaotic, exciting, uneventful, calm, annoying and monotonous with respect to the conviviality of the restaurant ambience and attentive to music during meal is explored with the help of two way ANOVA and the variables were separately assessed as well as interaction effect was also sought for.

5.4.1. Interaction Effect of Pleasantness across Conviviality and Attention to Music

To test the null hypotheses and investigate variations in diners' perceptions of pleasantness and conviviality, a two-way ANOVA was performed. A two-way ANOVA is suitable to test three variables at a time to check the interaction of the two categorical variables on the dependent variable which is a scale variable. This test performs better than ANOVA and produces the interaction effect also with two main effects alongside as ANOVA. Here three hypotheses are tested, first is for interaction effect and second two for main effect also called as no interaction effect (Kim, 2014). In a two-way ANOVA, the interaction term tells whether the effect of one independent variable on the dependent variable remains the same across all values of the other independent variable, and vice versa. If the interaction is statistically significant, it means that the effect of one factor changes depending on the level of the other. In this case, the main effects alone are not only looked at. Rather, the simple main effects are also examined; the effect of one factor at each specific level of the other factor. This procedure makes it easier to pinpoint the precise locations of the variances. It's not just about the factors working alone; it's also about how they function together (Laerd Statistics, 2018). Further, the effect size in two way ANOVA measures the strength of the relationship between independent variables (factors) and the dependent variable, as well as the interaction between the factors.

In particular, it evaluates the variations between diners who indicate that their levels of conviviality indicating "welcoming", "neutral" or "not welcoming" as well as their different levels of attention (paid attention, neutral or not paid attention) towards music listening during the meal. The interaction effect of levels of conviviality, and levels of attention to music on the perception of pleasantness in the sonic environment has been assessed.

A two-way ANOVA is conducted to compare the diners' perceptions of the sonic environment being pleasant with respect to the conviviality of the restaurant ambience and level of attention to music during meal. This tries to find out the interaction effect of the variables. The first null hypothesis states that there is no interaction of conviviality and attention levels of music during meal on pleasant sonic environment.

Table 5. 15.: Tests of Between-Subjects Effects (Section 5.4.1)

Dependent Variable: How pleasant the sound environment is?

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	*639.251[a]*	*8*	*79.906*	*33.449*	*.000*	*.247*
Intercept	*8630.697*	*1*	*8630.697*	*3612.780*	*.000*	*.816*
conviviality	*241.195*	*2*	*120.597*	*50.482*	*.000*	*.110*
Attentive	*37.198*	*2*	*18.599*	*7.785*	*.000*	*.019*
*conviviality * attentive*	*46.639*	*4*	*11.660*	*4.881*	*.001*	*.023*
Error	*1946.982*	*815*	*2.389*			
Total	*18560.000*	*824*				
Corrected Total	*2586.233*	*823*				

a. R Squared = .247 (Adjusted R Squared = .240)

The results of a two-way ANOVA states that $p < .05$, the null hypothesis is rejected examining the effects of conviviality (how welcoming the restaurant ambience is), attention to music, and their interaction on the perceived pleasantness of the sound environment. The interaction effect between conviviality and attention to music is statistically significant with F (4,815) =4.881; p=0.001 and with a Partial Eta Squared value of 0.023. The interaction effect indicates that about 24.7% of the variance in pleasantness is explained by the interaction between conviviality and attention. A significant interaction means that the effect of conviviality depends on diners' attention levels to music, or vice versa. This suggests that the effect of conviviality on the pleasantness of the sound environment depends on the level of attention participants paid to the music. Thus, it can be said that the significant interaction implies that participants'

perception of the sound environment is influenced not only by the conviviality of the ambience or attention to music alone but by the combined effect of both.

After finding the interaction effect the other two categorical variables are tested separately. The second null hypothesis states that there would be no significant difference among the diners' perceptions towards pleasantness in the sonic environment and varying levels of conviviality indicating "welcoming", "neutral" or "not welcoming". The results show that $p < .05$, and hence the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 50.482$, $p = .00$, partial $\eta^2 = .247$ indicating that about 24.7% of the variance in pleasantness is explained by conviviality levels. The eta partial squared produced a moderate effect size (Warner (2013).

The post hoc results show that there is difference among diners' perception about pleasantness in the welcoming ambience and not welcoming ambience (p=.000); welcoming and neutral conviviality (p=.000) and not welcoming and neutral conviviality (p=.000). It can be interpreted as the most pleasant assessments of the sound environment were linked to the welcoming ambience, which greatly outperformed the neutral and unwelcoming settings. This emphasizes the need of establishing a welcoming and upbeat environment since it enhances the overall sensory perception of the restaurant.

Table 5.16.: Descriptive Statistics (Section 5.4.1)

Level of attention to music during meal	Conviviality	Mean	Std. Deviation	N
Not paid attention	*not welcoming*	*3.22*	*1.372*	*117*
	neutral	*3.56*	*1.202*	*103*
	welcoming	*4.51*	*1.877*	*116*
	Total	*3.77*	*1.615*	*336*
Neutral	*not welcoming*	*3.6*	*1.557*	*35*
	neutral	*4.16*	*1.614*	*69*
	welcoming	*4.51*	*1.92*	*93*
	Total	*4.22*	*1.779*	*197*
Paid attention	*not welcoming*	*2.89*	*0.9*	*18*
	neutral	*4.61*	*1.487*	*66*
	welcoming	*5.67*	*1.428*	*207*
	Total	*5.25*	*1.599*	*291*
Total	*not welcoming*	*3.26*	*1.378*	*170*
	neutral	*4.03*	*1.472*	*238*
	welcoming	*5.08*	*1.773*	*416*
	Total	*4.4*	*1.773*	*824*
Dependent Variable: Pleasant sound environment				

The next null hypothesis states that there would be no significant difference among the diners' perceptions towards pleasantness and different levels of attentive, inattentive, or neutral music listening during the meal. The analysis found significant difference, F (2, 815) = 7.785, p = .000, partial η^2 = .019. The eta partial squared produced a small effect size. The results of the two-way ANOVA show that $p < .05$ and hence the null hypothesis is rejected.

This analysis shows participants' level of paying attention to music during a meal on their perception of pleasantness of the sound environment. The three conditions compared are: *"*Not paid attention", *"*Paid attention", *and "*Neutral" are assessed by post hoc test. There is statistically significant difference among all the categories with respect to pleasantness. Participants who do not pay attention to music rate the sound environment as significantly less pleasant compared to those who pay attention (p=.000). Those who did not pay attention also rated the sound environment less pleasant compared to participants with neutral attention (p=.027). However, there was no significant difference between those who paid attention to music and those with neutral attention (p=.107). It can be inferred from here that even mild or passive awareness of the music enhanced perceptions of the sound environment making the experience a pleasant one compared to complete disengagement.

In other words, the impact of a welcoming or neutral atmosphere on sound perception varies depending on whether participants pay attention, do not pay attention, or neutral attention to the music. This may be possible that in a welcoming ambience, paying attention to music may enhance the perceived pleasantness of the sound environment more than it would in a less welcoming setting. Conversely, in a less welcoming ambience, even attention to music might not be sufficient to improve the perception of the sound environment to the same degree.

5.4.2. Interaction Effect among Uneventfulness, Conviviality and Attention to Music

Uneventfulness is associated with something which is not happening and not in movement (Axelsson et al., 2010). It is believed that if a person perceives the restaurant sound environment to be uneventful then there is a chance that the ambiance may not be convivial and may not pay attention to music. In order to the test the two-way ANOVA for uneventfulness, conviviality and attentive to music during dining, the interaction effect among the three variables has been assessed.

The first null hypothesis states that there is no interaction of conviviality and attention levels of music during meal on uneventful sonic environment. The two-way ANOVA suggests that the effect of conviviality on the perception of the sound environment as uneventful do not significantly depend on the level of attention paid to the music (p=.406). The effect of whether the ambience is convivial on the perception of sound eventfulness is relatively independent of whether diners are paying attention to the music. But then, the main effect of convivial ambiance and attention to music on perception of sonic environment to be uneventful has been assessed separately.

Table 5.17.: Tests of Between-Subjects Effects

Dependent Variable: How uneventful sound environment is

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	*82.155[a]*	*8*	*10.269*	*4.890*	*.000*	*.046*
Intercept	*10196.612*	*1*	*10196.612*	*4855.597*	*0.000*	*.856*
conviviality	*42.836*	*2*	*21.418*	*10.199*	*.000*	*.024*
Attentive	*11.322*	*2*	*5.661*	*2.696*	*.068*	*.007*
conviviality Attentive*	*8.405*	*4*	*2.101*	*1.001*	*.406*	*.005*
Error	*1711.476*	*815*	*2.100*			
Total	*19024.000*	*824*				
Corrected Total	*1793.631*	*823*				

a. R Squared = .046 (Adjusted R Squared = .036)

Table 5.18.: Descriptive Statistics (Section 5.4.2)

Conviviality	Level of attention to music during meal	Mean	Std. Deviation	N
Not welcoming	*Not paid attention*	*4.2*	*1.301*	*117*
	Paid attention	*4.17*	*1.043*	*18*
	Neutral	*3.86*	*0.845*	*35*
	Total	*4.12*	*1.198*	*170*
Neutral	*Not paid attention*	*4.58*	*1.287*	*103*
	Paid attention	*4.29*	*1.624*	*66*
	Neutral	*4.49*	*1.302*	*69*
	Total	*4.47*	*1.392*	*238*
Welcoming	*Not paid attention*	*4.99*	*1.471*	*116*
	Paid attention	*4.86*	*1.511*	*207*
	Neutral	*4.47*	*1.797*	*93*
	Total	*4.81*	*1.576*	*416*
Total	*Not paid attention*	*4.59*	*1.394*	*336*
	Paid attention	*4.69*	*1.534*	*291*
	Neutral	*4.37*	*1.512*	*197*
	Total	*4.57*	*1.476*	*824*
Dependent Variable: Uneventful sound environment				

Second null hypothesis states that there is no significant difference among the diners' perceptions of uneventful the sonic environment and varying levels of conviviality indicating "welcoming", "neutral" or "not welcoming". The results of the two way ANOVA show that $p < .05$, the null hypothesis rejected. The analysis found significant difference, $F(2, 815) = 10.199$, $p = .000$.

no significant difference between not paying attention, and paying attention to music and

Further proceeding to post hoc test reveals the sound environment is perceived as significantly more uneventful in a "not welcoming" ambience compared to a "welcoming ambience" (p=.000). It can be inferred that creating a welcoming atmosphere can substantially reduce the perception of the sound environment as uneventful. The sound environment is perceived as significantly more uneventful in a not welcoming ambience compared to a neutral ambience. The sound environment is also perceived as more uneventful in a neutral ambience compared to a welcoming one (p=0.008). The findings, thus, demonstrate that enhancing the restaurant's ambiance from unwelcoming to neutral and from neutral to welcoming consistently reduces the impression that the sound environment is uneventful. This implies that patrons will find the auditory environment more engaging and eventful if the restaurant has a more welcoming atmosphere.

The third null hypothesis states that there is no significant difference among the diners' perceptions on uneventfulness and different levels of attentive, inattentive, or neutral music listening during the meal. The post hoc test shows a significant difference among the levels of attention, $F(2, 815) = 2.696$. The results indicate that we cannot reject (at 5% level of significance p=.065) but it is possible to reject at 1%. Participants who did not pay attention to music rated the sound environment as significantly more uneventful compared to those with a neutral level of attention (p=0.022). This suggests that even a partial attention to the music by the guests decreases the perception of the sound environment as uneventful compared to those completely ignoring it. Apparently, there is paying attention and having a neutral level of attention to music. The results demonstrate that, rather than avoiding the music altogether, being neutral to it i.e., not actively listening to it but also not ignoring it led to a less uneventful sense of the sound environment. Nonetheless, there is not a noticeable distinction between actively paying attention and neutral attention, suggesting that a moderate level of musical awareness is adequate to enhance perceptions of the eventfulness of the sound environment.

5.4.3. Interaction Effect of perception on Chaotic environment across Conviviality and Attention to Music

A place, unpleasant yet happening can be termed as chaotic environment (Axelsson et al., 2010). The perception of the diners on chaotic sonic environment has been examined to conviviality and level of attention towards music during meal. First the interaction effect of conviviality and attention levels of music during meal on the perception of chaotic sonic environment has been investigated. The two way ANOVA returns a value of $p < .05$, led to rejection of the null hypothesis. The analysis found significant difference, $F(2, 815) = 10.362$, $p = .00$. There is a significant interaction between conviviality and attentive to music meaning that the effect of conviviality on the chaotic perception of the sound environment changes depending on the level of attentiveness even though paying attention to music may not influence individually. A welcoming ambience with music may change the sonic environment. After this, the main effects are assessed separately.

The null hypothesis states that there is no significant difference among the diners' perceptions on chaotic sonic environment and varying levels of conviviality indicating "welcoming", "neutral" or "not welcoming" The results of the two way ANOVA states that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 10.362$, $p = .00$, in perception of chaotic environment across the conviviality levels.

Table 5.19.: Descriptive Statistics (Section 5.4.3)

Conviviality	Level of attention to music during meal	Mean	Std. Deviation	N
Not welcoming	Not paid attention	3.54	1.055	117
	Paid attention	3.61	1.037	18
	Neutral	3.77	1.374	35
	Total	3.59	1.123	170
Neutral	Not paid attention	4	1.237	103
	Paid attention	4.05	1.352	66
	Neutral	3.64	1.424	69
	Total	3.91	1.331	238
Welcoming	Not paid attention	3.47	1.417	116
	Paid attention	2.98	1.859	207
	Neutral	3.52	1.742	93
	Total	3.24	1.735	416
Total	Not paid attention	3.66	1.262	336
	Paid attention	3.26	1.77	291
	Neutral	3.6	1.57	197
	Total	3.5	1.54	824
Dependent Variable: Chaotic sound environment				

The post hoc results show that there is difference among diners' perception about chaotic environment in the "welcoming" ambience and "not welcoming" ambience (p=.065); "welcoming" and "neutral" conviviality (p=.000) and no difference is present in not welcoming and neutral conviviality (p=.164). It can be interpreted as the perception of how chaotic the sound environment is, differs significantly between a neutral and a welcoming ambience, with the welcoming environment being perceived as less chaotic.

The next null hypothesis states that there is no significant difference among the diners' perceptions towards environment being chaotic and different levels of attentive, inattentive, or neutral music listening during the meal. The results of the two way ANOVA produces $p > .05$, the null hypothesis cannot be rejected. The analysis found no significant difference, $F(2, 815) = .304$, $p = .738$. It can be said that paying attention to music or not or being neutral do not influence the perception of chaotic sonic environment.

5.4.4. Interaction Effect of Excitement across Conviviality and Attention to Music

Exciting sonic environment is a combination of pleasantness and eventfulness (Axelsson et al., 2010). The perception of the diners on exciting sonic environment which is interval scale has been examined to conviviality and attention to music during meal which are in nominal scale. Similarly, the interaction effect among on the perception of the diners on exciting sonic environment has been examined to conviviality and attention to music during meal. The two way ANOVA shows the interaction effect as significant, $F(4, 815) = 4.283$; p=.002 with a small effect size **(**Partial Eta Squared = .021**).** This indicates that the combined influence of conviviality and attentiveness to music significantly affects perceptions of the sound environment's excitement. The interaction suggests that the relationship between attentiveness and excitement depends on the level of conviviality. It can be said that being attentive to music may enhance excitement only in environments perceived as more convivial.

For examining individual main effects, first null hypothesis states that there is be no significant difference among the diners' perceptions on exciting sonic environment and varying levels of conviviality indicating "welcoming", "neutral" or "not welcoming" The results of the two way ANOVA shows that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 3.974$, $p = .019$.

Table 5.20.: Descriptive Statistics (Section 5.4.4)

Conviviality	Level of attention to music during meal	Mean	Std. Deviation	N
Not welcoming	*Not paid attention*	*3.39*	*1.238*	*117*
	Paid attention	*4.06*	*1.056*	*18*
	Neutral	*3.86*	*0.974*	*35*
	Total	*3.56*	*1.191*	*170*
Neutral	*Not paid attention*	*3.87*	*1.266*	*103*
	Paid attention	*4.36*	*1.26*	*66*
	Neutral	*4.36*	*1.084*	*69*
	Total	*4.15*	*1.233*	*238*
Welcoming	*Not paid attention*	*4.37*	*1.361*	*116*
	Paid attention	*4.17*	*1.484*	*207*
	Neutral	*3.94*	*1.466*	*93*
	Total	*4.18*	*1.451*	*416*
Total	*Not paid attention*	*3.88*	*1.349*	*336*
	Paid attention	*4.21*	*1.412*	*291*
	Neutral	*4.07*	*1.276*	*197*
	Total	*4.04*	*1.361*	*824*
Dependent Variable: Exciting sound environment				

The post hoc results show that there is significant difference among diners' perception on exciting environment in the welcoming ambience and not welcoming ambience (p=.010); and not welcoming and neutral conviviality (p=.008) but no difference between welcoming and neutral conviviality (p=.721). This shows that participants who find the ambience welcoming rate the excitement of the sound environment as high compared to those who find it not welcoming. And also suggests that participants who find the restaurant ambience not welcoming rate the excitement of the sound environment as lower compared to those who find it neutral.

The second main effect null hypothesis states that there is no significant difference among the diners' perceptions towards environment being chaotic and different levels of attentive, inattentive, or neutral music listening during the meal. The results return a value of $p > .05$, and hence the null hypothesis cannot be rejected. The analysis found no significant difference, $F(2, 815) = 2.795$, $p = .062$, partial $\eta^2 = .007$ at 5% level of confidence. This indicates that being attentive toward the music do not strongly influence perceptions of excitement in the sound environment.

5.4.5. Interaction Effect of Calmness across Conviviality and Attention to Music

The next test of sonic perception is for calmness in the environment. The interaction between conviviality and attention on the perception of calmness in the sonic environment is not statistically significant at the conventional threshold F (4, 815) = 2.215, *p*=.066 and has a small effect size (Partial Eta Squared = .011). Therefore, we fail to reject the null hypothesis at 5% level of confidence. This suggests that the influence of attention on calmness is relatively consistent across different levels of conviviality, and vice versa. The model explains a meaningful proportion of variance (20.8%), underscoring the importance of both conviviality and attention in shaping perceptions of the sound environment. Additionally, their combined effect does not appear to add much beyond their individual contributions.

The first main effect null hypothesis states that there would be no significant difference among the diners' perception of calm sonic environment and varying levels of conviviality indicating "welcoming", "neutral" or "not welcoming". The results of the two way ANOVA states that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, F (2, 815) = 43.697, $p = .000$, partial $\eta^2 = .097$ indicating that about 9.7% of the variance in calmness is explained by conviviality levels. The eta partial squared produced a moderate effect size. The post hoc test shows significant difference among diners' perception on calm environment in the welcoming ambience and not welcoming ambience (*p*=.000); welcoming and neutral conviviality (*p*=.000) and not welcoming and neutral conviviality (*p*=.000). This indicates that diners who perceive the ambience as not welcoming rate the sound environment as significantly less calm compared to those who perceive it as neutral, who perceive the ambience as not welcoming rate the sound environment as much less calm compared to those who find the ambience welcoming. Those who perceive the ambience as not welcoming rate the sound environment as much less calm compared to those who find the ambience welcoming.

Table 5.21.: Descriptive Statistics (Section 5.4.5)

Conviviality	Level of attention to music during meal	Mean	Std. Deviation	N
Not welcoming	*Not paid attention*	*2.96*	*1.133*	*117*
	Paid attention	*3.06*	*1.349*	*18*
	Neutral	*3.4*	*1.479*	*35*
	Total	*3.06*	*1.239*	*170*
Neutral	*Not paid attention*	*3.67*	*1.431*	*103*
	Paid attention	*4.2*	*1.561*	*66*
	Neutral	*3.62*	*1.384*	*69*
	Total	*3.8*	*1.469*	*238*
Welcoming	*Not paid attention*	*4.15*	*1.534*	*116*
	Paid attention	*5.22*	*1.645*	*207*
	Neutral	*4.47*	*1.845*	*93*
	Total	*4.75*	*1.726*	*416*
Total	*Not paid attention*	*3.59*	*1.457*	*336*
	Paid attention	*4.86*	*1.724*	*291*
	Neutral	*3.98*	*1.692*	*197*
	Total	*4.13*	*1.705*	*824*
Dependent Variable: Calm sound environment				

The second main effect null hypothesis states that there is no significant difference among the diners' perceptions towards calmness in the sonic environment and different levels of attentive, inattentive, or neutral music listening during the meal. The results of the two way ANOVA states that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 6.305$, $p = .002$.

The post hoc test offers pair-wise comparisons for the dependent variable, perception on calmness of the sound environment, based on whether participants pay attention to music during the meal (Not Paid Attention, Paid Attention, Neutral). Diners who do not pay attention to the music rate the sound environment as significantly less calm compared to those who pay attention (p=.001). There is no significant difference between participants who are neutral and either those who pay attention(p=.075) and those have not pay attention (p=.095).

5.4.6. Interaction Effect of Annoyance across Conviviality and Attention to Music

Not liking and unpleasant may be said as annoying. The results of another two-way ANOVA testing the effects of conviviality of restaurant ambience and attention to music on the perception of diners on annoying sound environment are presented. The interaction between conviviality and attention to music on annoyance is significant F (4,

815) = 5.556; $p < .001$ with a small effect size (partial $\eta^2 = .027$). This indicates that the combined influence of conviviality and attention on the perception of annoyance is notable, meaning that the effect of attention on annoyance depends on the level of conviviality. It can be inferred as sometimes welcoming ambience might mitigate or enhance the annoyance level of diners by paying attention to music, depending on the context.

The first main effect null hypothesis states that there is no significant difference among the diners' perceptions of annoying sonic environment and varying levels of conviviality indicating "welcoming", "neutral" or "not welcoming" The results of the two way ANOVA states that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, F (2, 815) = 38.823, $p = .000$, partial $\eta^2 = .087$ indicating that about 8.7% of the variance in annoyance is explained by conviviality levels. The eta partial squared produced a moderate effect size.

Table 5.22.: Descriptive Statistics (Section 5.4.6)

Conviviality	Level of attention to music during meal	Mean	Std. Deviation	N
Not welcoming	*Not paid attention*	*3.68*	*1.128*	*117*
	Paid attention	*4.56*	*1.338*	*18*
	Neutral	*2.8*	*1.451*	*35*
	Total	*3.59*	*1.308*	*170*
Neutral	*Not paid attention*	*4.13*	*0.957*	*103*
	Paid attention	*4.02*	*1.283*	*66*
	Neutral	*4.17*	*1.26*	*69*
	Total	*4.11*	*1.142*	*238*
Welcoming	*Not paid attention*	*3.42*	*1.259*	*116*
	Paid attention	*2.89*	*1.811*	*207*
	Neutral	*2.88*	*1.58*	*93*
	Total	*3.04*	*1.636*	*416*
Total	*Not paid attention*	*3.73*	*1.16*	*336*
	Paid attention	*3.25*	*1.77*	*291*
	Neutral	*3.32*	*1.576*	*197*
	Total	*3.46*	*1.514*	*824*
Dependent Variable: Annoying sound environment				

The post hoc test shows significant difference among diners' perception on annoyance in the welcoming ambience and not welcoming ambience (p=.000); welcoming and neutral conviviality (p=.000) and not welcoming and neutral conviviality (p=.001). The result show diners who perceive the ambience as neutral rate the sound environment as significantly less annoying than those who find it not welcoming. Also the diners who

find the ambience welcoming rate the sound environment as significantly more annoying compared to those who perceive it as neutral. Diners who perceive the ambience as welcoming rate the sound environment as more annoying than those who perceive it as not welcoming. Surprisingly, "welcoming" ambience leads to the highest annoyance levels. This may suggest that a welcoming ambience could be associated with higher noise levels (e.g., liveliness or social buzz, sound from kitchen), which some participants may find annoying despite the positive atmosphere.

The next null hypothesis states that there is no significant difference among the diners' perceptions towards annoyance in the sonic environment and different levels of attentive, inattentive, or neutral music listening during the meal. The state that $p < .05$, and the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 7.029$, $p = .001$.

The post hoc test gave pair-wise comparisons for the dependent variable, perception on annoyance of the sound environment, based on whether participants pay attention to music during the meal (Not Paid Attention, Paid Attention, and Neutral). There is no significant difference in annoyance ratings between diners who pay attention and those who do not pay attention to music *(p*=.597). Diners who do not pay attention to music rate the sound environment as significantly more annoying than those who are neutral toward the music (*p*=.001). Again, diners who pay attention to music rate the sound environment as significantly more annoying than those who are neutral toward the music (*p*=.002). It can be inferred that actively paying attention to music during the meal increases annoyance compared to being neutral. This might reflect heightened sensitivity to sound details or disruptions when focusing on music. However, as there is no significant difference in annoyance ratings between participants who did not pay attention and those who paid attention, indicating that lack of engagement with music alone does not significantly reduce annoyance.

5.4.7. Interaction Effect of perception of Monotonous environment across Conviviality and Attention to Music

Uneventful and unpleasant may together be said as monotonous. The results of another two-way ANOVA examining how conviviality and attention to music influence the perception of monotony in the sound environment have been explored. The interaction

between conviviality and attention to music is statistically significant where F(4, 815) = 3.368, and p = .010. This means that the perception of monotony in the sound environment is influenced by the combination of conviviality and whether or not participants paid attention to the music. However, the effect is small. While conviviality significantly influences perceptions of monotony, the role of attention to music is less impactful. The interaction between conviviality and attention suggests that in some conditions, paying attention to music may influence monotony ratings, but the overall effect is modest. Other factors may also play a more substantial role in determining how monotonous the sound environment feels.

Null hypothesis for the first main effect states that there is no significant difference among the diners' perceptions of monotonous sonic environment and varying levels of conviviality indicating "welcoming", "neutral" or "not welcoming" The results state that $p < .05$, and the null hypothesis is rejected. The analysis found significant difference, F (2, 815) = 7.438, p = .001, partial η^2 = .018.

Table 5.23.: Descriptive Statistics (Section 5.4.7)

Conviviality	Level of attention to music during meal	Mean	Std. Deviation	N
Not welcoming	*Not paid attention*	*3.42*	*1.161*	*117*
	Paid attention	*3.94*	*0.873*	*18*
	Neutral	*3.23*	*1.285*	*35*
	Total	*3.44*	*1.171*	*170*
Neutral	*Not paid attention*	*3.94*	*1.243*	*103*
	Paid attention	*4.33*	*1.1*	*66*
	Neutral	*3.97*	*1.15*	*69*
	Total	*4.06*	*1.186*	*238*
Welcoming	*Not paid attention*	*4.12*	*1.452*	*116*
	Paid attention	*3.86*	*1.36*	*207*
	Neutral	*4.17*	*1.185*	*93*
	Total	*4*	*1.354*	*416*
Total	*Not paid attention*	*3.82*	*1.324*	*336*
	Paid attention	*3.97*	*1.292*	*291*
	Neutral	*3.93*	*1.233*	*197*
	Total	*3.9*	*1.292*	*824*
Dependent Variable: Monotonous sound environment				

The post hoc test shows significant difference among diners' perception towards monotonous sonic environment in the welcoming ambience and not welcoming ambience (p=.000); and not welcoming and neutral conviviality (p=.000). The result shows diners who perceive the ambience as welcoming rate the sound environment as

significantly more monotonous than those who find it not welcoming. Diners who perceive the ambience as neutral *also* rate the sound environment as significantly more monotonous than those who find it not welcoming. It can be inferred that perception towards monotonous environment may not lead to finding the ambience welcoming and vice- versa. This may be due to the fact that if the diner is a regular guest there may be a chance of finding the things repetitive and monotonous. But welcoming and neutral conviviality (p=.770) shows no significant difference, meaning diners who perceive the ambience as neutral and those who find it welcoming perceive in the same way regarding the monotony in the sound environment.

The second main effect null hypothesis states that there is significant difference among the diners' perceptions towards monotony in the sonic environment and different levels of attentive, inattentive, or neutral music listening during the meal. The results of the two way ANOVA states that $p > .05$, we fail to reject the null hypothesis. The analysis found no significant difference, $F(2, 815) = 1.652$, $p = .192$, partial $\eta^2 = .004$. Therefore, it can be said that paying attention to music may not directly influence monotony.

Summary of section 5.4:

In the above section the perception of the sonic environment being pleasant, chaotic, exciting, uneventful, calm, annoying, and monotonous with regard to the conviviality of the restaurant ambience and level of attention to music during meals have been assessed. This is investigated using two-way ANOVA, and the variables were evaluated independently as well as the interaction effect is also sought. It is found that participants' perception of the sound environment is influenced not only by the conviviality of the ambience or attention to music alone but by the combined effect of both.

Pleasantness: The most pleasant assessments of the sound environment are linked to the welcoming ambience, which greatly outperforms the neutral and unwelcoming settings. Even mild or passive awareness of the music enhances perceptions of the sound environment making the experience a pleasant one compared to complete disengagement with music.

Uneventfulness: In case of the perception of sonic environment on uneventfulness, it was found that the effect of whether the ambience is convivial on the perception of sound eventfulness is relatively independent of whether diners are paying attention to the

music. If the restaurant has a more convivial ambiance, customers will find the auditory environment more interesting and exciting. To improve perceptions of the eventfulness of the sound environment, a moderate level of musical awareness is sufficient.

Chaotic: In case of the perception of diners on chaotic sonic environment, the study found that the effect of conviviality on the chaotic perception of the sound environment changes depending on the level of attentiveness even though paying attention to music may not influence individually. A welcoming ambience with music may change the sonic environment. A welcoming environment was being perceived as less chaotic by the diners. However, paying attention to music or not or being neutral do not influences the perception of chaotic sonic environment.

Exciting: With regard to the combined influence of conviviality and attentiveness to music significantly affects perceptions of diners on the sound environment being exciting. It is found that the relationship between attention to music and excitement depends on the level of conviviality. Therefore, being attentive to music enhances excitement only in environments perceived as more convivial. However, diners who perceived the ambience convivial feel the sound environment to be highly exciting compared to those who do not find the ambiance convivial. Results confirm that attentiveness to music enhances engagement with and appreciation of the sound environment making it more exciting.

Calmness: The results indicate a insignificant difference on interaction effect and confirmed that the influence of attention to music on calmness is relatively consistent across different levels of conviviality, and vice versa. However, it was found that diners who perceive the ambience convivial feel the sound environment to more calm compared to those who do not find the ambiance convivial and those who are neutral. When paying attention to music while eating, diners perceived the acoustic environment as being much more calm than when they are not. Overall, the attention to music appears to play a role in shaping the perceived calmness of the auditory environment, but the effect diminishes when participants are neutral in their attention to music.

Annoyance: Results indicate that the combined influence of conviviality and attention on the perception of annoyance is notable, meaning that the effect of attention to music on annoyance depends on the level of conviviality. At times, welcoming ambience might

mitigate or enhance the annoyance level of diners by paying attention to music, depending on the context. Study suggests convivial ambience lead to the highest annoyance levels. A welcoming ambience could be associated with higher noise levels which some diners perceived annoying despite the positive atmosphere. Surprisingly, diners who are neutral toward music perceived the sound environment as the least annoying. Being actively engaged or distracted by the music contributed to a more tolerable auditory experience.

Monotonous: In case of perception of monotony in the sound environment, the combined influence of conviviality and attentiveness to music significantly affects perceptions of diners on the sound environment being monotonous. However, the effect is small. While conviviality significantly influences perceptions of monotony, the role of attention to music is less impactful. The interaction between conviviality and attention suggested that in some conditions, paying attention to music may influence monotony ratings, but the overall effect is modest. It is also found that perception towards monotonous environment may not lead to finding the ambience welcoming and vice- versa. This may be due to the fact that if the diner is a regular guest there may be a chance of finding the things repetitive and monotonous. Moreover, the degree of attention paid to music during the meal does not significantly affect the perception of monotony in the sound environment.

5.5. Identification of Factors by Factor Analysis

Attempt has been made to explore the role of music in diners' experience from the survey data. As the study uses 17 items related to music on 7-point scale (refer to Chapter 4, Section 4.4.1) reducing the items to meaningful related factors would help in further analyzing and summarizing. The study uses an exploratory factor analysis (EFA) to extract essential factors related to music that influences diners overall experience in restaurants in Assam. Due to the correlation between a number of explanatory variables, instead of using a multiple regression model containing all of these potentially associated variables, a Principal Component Analysis of selected explanatory variables is utilised in this study. PCA is a dimensionality reduction or data compression technique where it reduces the attribute space from a larger number of variables to a smaller number of factors having the highest correlations with the main component (Hair et al., 2010). Additionally, in order to guarantee the data acceptability and suitability for an EFA, all

the variables are examined using Bartlett's test of sphericity (Bartlett, 1954) and the Kaiser–Meyer–Olkin (KMO) measure of sample adequacy (MSA). This is show in the table below:

Table 5.24.: Data Suitability and Sampling Adequacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		*.929*
Bartlett's Test of Sphericity	*Approx. Chi-Square*	*6228.539*
	df	*136*
	Sig.	*.000*

For a factor analysis to be considered satisfactory, the KMO measures the sampling adequacy must be greater than 0.60 (Kaiser, 1970; Kaiser & Rice, 1974). If any pair of variables has a value below this, one of them should be considered to be removed from the analysis (Islam et al., 2017; Sultana, Siddique, & Islam, 2015). The KMO score for this study is 0.929, indicating a very good sampling adequacy score. Another measure of how strongly variables are related to one another is Bartlett's test. It is evident that Bartlett's test of sphericity is statistically significant at the 0.00 level, meaning that the associated probability is less than 0.05. This suggests that the dataset can be effectively subjected to a principal component analysis (PCA). Thus, the dataset is ideal for factor analysis, as confirmed by KMO and Bartlett's Test (Hair et al., 2010). Three variables that account for 57.308% of the total variation were produced by the Principal Components Analysis using Varimax rotation of the 17 attributes which is an acceptable level to continue (Awasthi, 2007). The total variation is shown in the table.

Table 5.25.: Total Variance Explained

Component	Initial Eigen Values	% of Variance	Cumulative %
1	*7.164*	*42.143*	*42.143*
2	*1.558*	*9.166*	*51.309*
3	*1.020*	*5.999*	***57.308***

Extraction Method: Principal Component Analysis

It is to be mentioned here that only two factors have retained after careful examination of the factor loadings. However, two items related to the third factor extracted namely “Communicating with the staff is positive because of music” and “Music becomes a barrier in my purpose of visitation” have been minutely checked if it could be adjusted in the retained factors. The item, “Communicating with the staff is positive because of music” goes well with factor 1, it matches the personality of the other items related to the factor. It also increases the Cronbach’s α of Dining Euphoria. Therefore, it is included in

Dining Euphoria even if the factor loading was .393 (Yau et al., 2015; Tabachnick & Fidell 2014; Field, 2013). But "Music becomes a barrier in my purpose of visitation" being added to both the selected factors lowers the Cronbach's α and visually verifying also this does not fit. So this item is dropped. Again, the second largest loading indicating a good fit to the respective factor is considered (Hair et al., 2010)

Table 5.26.: Factor Analysis and Reliability Testing Results

Factors	Loading	Items/ Attributes
Factor 1: Dining Euphoria Cronbach's α: .891	*Enjoy dining with pleasant music*	*.776*
	Music transforms my negative mood to positive mood	*.763*
	Background music sounds like something I would hear in this type of restaurant	*.754*
	Music in the restaurant reduces my stress and refreshes my mood	*.743*
	Effect of Background music produced in restaurant is positive	*.729*
	Music played in restaurant is appropriate for the atmosphere therein	*.617*
	Music in restaurant leads to favourable wait time and longer stay there	*.583*
	Interior design and decor of restaurant matches background music	*.519*
	Pleasant music helps in favourable service evaluation	*.478*
	Music in the restaurant corresponds with music I listen to privately	*.439*
	Communicating with the staff is positive because of music	*.393*
Factor 2: Sonic Flavours Cronbach's α: .816	*Music induces buying without planning or ends up with buying more*	*.806*
	Music enhances taste and flavor of food	*.719*
	Music induces revisit and more frequent visit to restaurant	*.717*
	Prefer ethnic music with ethnic food	*.653*
	Music influences decision in recommending the place to others	*.624*

Table 5.26 lists the factors, factor loadings for each item, and Cronbach's alpha (reliability coefficient) for each factor. A Cronbach's α value of 0.70 or more is frequently regarded as the standard for established factors that are internally consistent (Hair et al., 2010). Internal consistency and a strong correlation between the variables and retained factors are shown by the reliability coefficient range of Cronbach's alpha, which is 0.891 for Factor 1 and 0.816 for Factor 2. Additionally, factors have been given a specific name that typically corresponds to the objects (dimensions) they possess.

The first factor, which has eleven items, is named "Dining Euphoria" since it includes dimensions about how music functions, musicscape, etc. It explains 42.14% of the total variance and has a high reliability of 89.1%. The majority of the 11 products have notably high factor loadings as well.

The second component, referred to as "Sonic Flavour," accounts for 9.17% of the variance. It contains five items, such as revisit and recommendation etc. This factor's reliability is 81.6%.

The computation of factor scores is the next stage in the factor analysis process. According to Hair et al. (2003), the factor scores conceptually denote the extent to which each individual score highly on the set of items with high loading on a factor. There are two methods for calculating factor scores. The summated scale is one, while the scores provided by software programs such as SPSS is the other one. The average or sum of scores for the same factor is the summated score. However, factor loadings are not taken into consideration in this method. The software-calculated scores are not deemed suitable for this study because they contain several missing values. Therefore, a third method which uses the factor loadings to compute scores of the principal factor may be used. Such a method is used by Sarma (2000) and Goswami (2013) in consumer behaviour studies in different context.

In the factor analysis process, factor loadings applied to the raw variables give the connection between the factors and the original variables and are crucial for figuring out the characteristics of a given factor. Squared factor loadings show the percentage of a factor's variance that can be attributed to the corresponding variable. In other words, the loading square provides an explanation of the degree of relationship between the raw variable and the principal factor. As a result, this serves as a weight for the variable. This formula is a modified version of summated square.

$$Factor\ Score = \frac{\sum(\text{Loading Vij})^2 \times \text{Score Vij}}{\sum(Loading\ Vij)^2}$$

where,

Loading V_{ij} = Loading of the variable *i* under Factor *j*

Score V_{ij} = Score of respondents against raw variable *i* under Factor *j*

Using the aforementioned procedure, the factor scores of the two factors for each respondent have been determined in a different Microsoft Excel worksheet. Additionally, these scores have been added as two additional variables to the primary data sheet (SPSS for Windows) to be used as input for performing other tests. Each respondent is now given a set of factor scores, which will be utilized in the analysis that follows in place of the 11 variables.

5.5.1. Restaurant Experience and Paying Attention to Music on Dining Euphoria

To test the null hypotheses and investigate variations in diners' perceptions of dining euphoria and restaurant experience, a two-way ANOVA is performed. In particular, it evaluated the variations between diners who indicated that their experience was "satisfying," "moderately satisfying," or "dissatisfying," as well as their different levels of attentive, inattentive, or neutral music listening during the meal. The interaction effect of satisfaction levels of experience and attention levels of music during meal on dining euphoria have been assessed.

Table 5.27.: Tests of Between-Subjects Effects (Section 5.5.1)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	279.124[a]	8	34.891	37.018	.000	.267
Intercept	11687.916	1	11687.916	12400.512	.000	.938
Satisfying experience levels	60.895	2	30.447	32.304	.000	.073
Attention Levels	43.978	2	21.989	23.330	.000	.054
Satisfying experience levels * Attention Levels	23.156	4	5.789	6.142	.000	.029
Error	768.166	815	.943			
Total	20510.230	824				
Corrected Total	1047.290	823				
a. R Squared = .267 (Adjusted R Squared = .259); **Dependent Variable: Dining Euphoria Score**						

Two-way ANOVA conducted to compare the diners' perceptions of dining euphoria by satisfaction levels of experience and attention levels of music during meal. This tries to find out the interaction effect of the variables. The null hypothesis states that there is no interaction of satisfaction levels of experience and attention levels of music during meal on dining euphoria.

The results of the two way ANOVA shows that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, $F(4, 815) = 6.142$, $p = .000$, partial $\eta^2 = .029$. The eta partial squared produced a small effect size. The interaction effect between satisfying experience levels and attention levels on dining euphoria is significant indicates that about 2.9% of the variance in dining euphoria is explained by the interaction between satisfying experience and attention levels has been presented in the figure. A significant interaction means that the effect of satisfying experience levels on dining euphoria depends on diners' attention levels to music, or vice versa. A significant interaction effect can be seen with a set of non parallel lines. For instance, diners who are highly satisfied may experience the highest levels of dining euphoria when they pay attention to music, while those with moderate satisfaction might experience a smaller increase in euphoria depending on their attention level. The corrected model explains 26.7% of the variance in dining euphoria (R Squared = .267), with an adjusted R squared of .259**.** This suggests that the combined effects of satisfaction, attention, and their interaction have a moderately strong impact on dining euphoria. Practically, paying attention to music can enhance dining euphoria further, especially for diners who already report higher satisfaction with their experience.

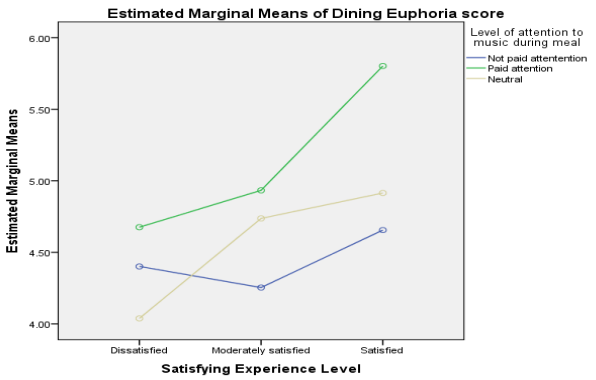

Figure 5.8: Interaction Effect of Satisfying Restaurant Experience and Paying Attention to music on Dining Euphoria

Table 5.28.: Descriptive Statistics (Section 5.5.1)

Level of attention to music during meal	Satisfying Experience Level	Mean	Std. Deviation	N
Not paid attention	*Dissatisfying*	*4.40*	*1.28*	*45*
	Moderately satisfying	*4.25*	*0.84*	*163*
	Satisfying	*4.65*	*0.96*	*128*
	Total	*4.42*	*0.97*	*336*
Paid attention	*Dissatisfying*	*4.67*	*0.92*	*20*
	Moderately satisfying	*4.93*	*1.00*	*77*
	Satisfying	*5.80*	*0.91*	*194*
	Total	*5.49*	*1.03*	*291*

Level of attention to music during meal	Satisfying Experience Level	Mean	Std. Deviation	N
Neutral	*Dissatisfied*	*4.03*	*1.16*	*44*
	Moderately satisfied	*4.73*	*0.89*	*64*
	Satisfied	*4.91*	*1.05*	*89*
	Total	*4.66*	*1.08*	*197*
Total	*Dissatisfying*	*4.30*	*1.19*	*109*
	Moderately satisfying	*4.52*	*0.94*	*304*
	Satisfying	*5.25*	*1.09*	*411*
	Total	*4.86*	*1.12*	*824*
Dependent Variable: Dining Euphoria				

The first main effect null hypothesis states that there is no significant difference among the diners' perceptions about dining euphoria and varying levels of restaurant experience indicating "satisfying," "moderately satisfying," or "dissatisfying," The results depicted in Table 5.25, the two way ANOVA show that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 32.304$, $p = .00$, partial $\eta^2 = .073$ indicating that about 7.3% of the variance in dining euphoria is explained by satisfying experience levels. The eta partial squared produced a moderate effect size.

The post hoc results show that there is difference among diners' perception about dining euphoria in the satisfying experience and dissatisfying experience (p=.000); satisfying and moderately satisfying experience (p=.000). But there is no difference between dissatisfying and moderately satisfying experience (p=.120). It can be inferred from here that diners are more likely to feel intense dining euphoria during meals if they are more on satisfying experience. The notion that contentment is linked to a significantly larger sense of euphoria during the dining experience is confirmed by the fact that diners having higher satisfying experience exhibit significantly higher dining euphoria than diners with dissatisfying experience (mean difference of 0.9481).

The second main effect null hypothesis states that there is no significant difference among the diners' perceptions about dining euphoria and different levels of attentive, inattentive, or neutral music listening during the meal. The results state that $p < .05$, and the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 23.330$, $p = .00$, partial $\eta^2 = .054$. The eta partial squared produced a small effect size (Warner, 2013).

The results of the post hoc test reveals that there is statistically significant difference between dining euphoria based on diners' attention to music during the meal. There is difference between those who pay attention to music during meal and those who do not (p=.000) indicating that diners who pay attention to music experienced significantly higher dining euphoria compared to those who do not pay attention. Next, the mean difference between those who do not pay attention to music and those who are neutral (neither attentive nor inattentive) is -0.2345. Given that this difference is statistically significant (p =.022), it can be inferred that neutral diners felt a little more euphoric while dining than those who ignored the music. This difference is statistically significant **(**p = .000) between diners who pay attention and those who are neutral, indicating that diners who actively pay attention to music have significantly higher dining euphoria than those who are neutral.

5.5.2. Restaurant Experience and Paying Attention to Music on Sonic Flavours

To test the null hypotheses and investigate variations in diners' perceptions of second factor i.e., sonic flavours and restaurant experience, another two-way ANOVA was performed. In particular, it evaluates the variations between diners who indicated that their experience was "satisfying," "moderately satisfying," or "dissatisfying," as well as their different levels of attentive, inattentive, or neutral music listening during the meal. The interaction effect of satisfaction levels of experience and attention levels of music during meal on sonic flavours have been assessed.

Table 5.29.: Tests of Between-Subjects Effects (Section 5.5.2)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	103.330[a]	8	12.916	9.886	.000	.088
Intercept	11108.440	1	11108.440	8502.302	0.000	.913
Attention level	24.610	2	12.305	9.418	.000	.023
Satisfying Experience level	3.103	2	1.552	1.188	.305	.003
Attention level * Satisfying Experience level	21.350	4	5.337	4.085	.003	.020
Error	1064.815	815	1.307			
Total	18959.891	824				
Corrected Total	1168.145	823				
a. R Squared = .088 (Adjusted R Squared = .080); Dependent Variable: Sonic Flavours score						

The interaction effect of satisfying experience and attention levels on sonic flavours is tested. The null hypothesis states that there is no interaction of satisfaction levels of experience and attention levels of music during meal on sonic flavours. The Table 5.27 provides the results of a two-way ANOVA analyzing the effects of Attention Level**,** Satisfying Experience Level**,** and their interaction on the dependent variable Sonic Flavour score. The interaction effect between attention level and satisfying experience level on sonic flavors is significant (F = 4.085, *p* = .003), with a partial eta squared of **.**020. A significant interaction effect indicates that the impact of attention to music on the perception of sonic flavors depends on diners' levels of satisfaction with their experience. The corrected model explains 8.8% of the variance in sonic flavors (R Squared = .088) with an adjusted R squared of .080. Although this is a modest amount of variance, the significant effects suggest that attention and satisfaction, particularly in combination, do influence the perception of sonic flavors to some extent as can be seen in the Figure 5.9. The non parrael line shows the underlying interaction effect of attention to music and satisfying restaurant experience on sonic flavor Therefore, it can be stated that diners who have satisfied restaurant experience may experience an enhanced perception of sonic flavors when they pay attention to music, compared to those who are moderately satisfied or dissatisfied with their restaurant experience. Conversely, diners with dissatisfied restaurant experience might report lower sonic flavors, regardless of attention level, or they might experience a lesser increase in sonic flavors when paying attention to music.

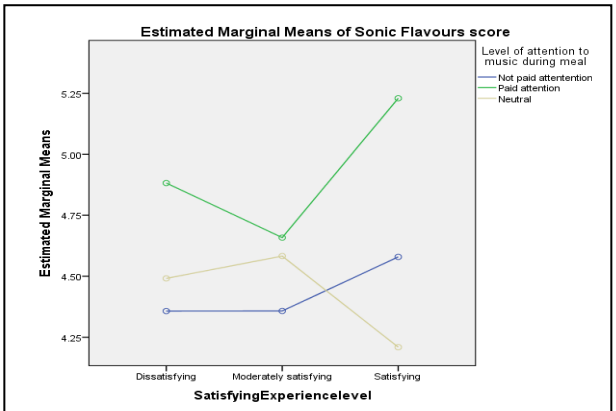

Figure 5.9: Restaurant Experience and Paying Attention to music on Sonic Flavours

The first main effect null hypothesis states that there would be no significant difference among the diners' perceptions about sonic flavours and varying levels of restaurant experience indicating "satisfying," "moderately satisfying," or "dissatisfying," The results of the two-way ANOVA states that $p > .05(.305)$, we failed to reject the null hypothesis. The analysis found no statistically significant difference, F (2, 815) = 1.188, $p = .305$, partial $\eta^2 = .003$.

Table 5.30.: Descriptive Statistics (Section 5.5.2)

Level of attention to music during meal	Satisfying Experience level	Mean	Std. Deviation	N
Not paid attention	*Dissatisfying*	*4.35*	*1.50*	*45*
	Moderately satisfying	*4.35*	*1.01*	*163*
	Satisfying	*4.57*	*1.09*	*128*
	Total	*4.44*	*1.12*	*336*
Paid attention	*Dissatisfying*	*4.88*	*0.93*	*20*
	Moderately satisfying	*4.65*	*0.98*	*77*
	Satisfying	*5.23*	*1.12*	*194*
	Total	*5.05*	*1.10*	*291*
Neutral	*Dissatisfying*	*4.49*	*1.21*	*44*
	Moderately satisfying	*4.58*	*0.99*	*64*
	Satisfying	*4.21*	*1.45*	*89*
	Total	*4.39*	*1.27*	*197*
Total	*Dissatisfying*	*4.51*	*1.30*	*109*
	Moderately satisfying	*4.48*	*1.01*	*304*
	Satisfying	*4.81*	*1.26*	*411*
	Total	*4.64*	*1.19*	*824*
Dependent Variable: Sonic Flavours				

The second main effect null hypothesis states that there would be no significant difference among the diners' perceptions about sonic flavours and different levels of attentive, inattentive, or neutral music listening during the meal. The results of the two-way ANOVA shows that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, F (2, 815) = 9.418, $p = .00$, partial $\eta^2 = .023$ with a very small effect. As the null hypothesis was rejected, post hoc test has been done for pair-wise comparisons based on diners' attention to music during the meal. There is statistically significant difference (p = .000) between diners who do not pay attention to music and those who do**,** indicating that diners who pay attention to music experienced significantly higher levels of sonic flavors than those who do not pay attention. Again, there is statistically significant difference ($p = .000$) between diners who paid attention to music and those who are neutral, indicating that diners who actively pay attention to music experienced significantly higher levels of sonic flavors than those who are neutral. There is no significant difference between diners who do not pay attention to music and those who are neutral. This no difference ($p = 1.000$), suggesting that diners who are neutral toward music has similar levels of sonic flavors as those who do not pay attention.

5.5.3. Preference of Volume Level and Welcoming Ambience on Dining Euphoria

In this section, the preference for level of volume and the perception on the ambiance of the restaurant being welcoming on dining euphoria is measured. A two-way ANOVA was conducted to test the null hypotheses and examine differences in diners' perceptions of dining euphoria and preferred volume levels. Specifically, it analyzed variations among diners who preferred volume levels of "soft," "moderate," or "loud," and their perceptions of ambience as "welcoming," "not welcoming," or "neutral." The analysis also assessed the interaction effect of volume preference and ambience perception on dining euphoria.

The hypothesis for interaction effect of volume levels and perception on welcoming ambience on dining euphoria is examined. The results of the two-way ANOVA return values where $p > .05$, and thus the null hypothesis cannot be rejected. The analysis found significant difference, $F(2, 815) = 9.418$, $p = .00$, partial $\eta^2 = .023$ This finding suggests that there is no combining or interacting effect of ambience and volume choice on dining euphoria, and that the influence of ambience on dining euphoria is constant across volume levels.

According to the first main effect null hypothesis, there is no significant difference among the diners' perceptions about dining euphoria and their perceptions of ambience as "welcoming," "not welcoming," or "neutral." The results state that $p < .05$, and the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 48.208$, $p = .000$, partial $\eta^2 = .106$, indicating that about 10.6% of the variance in dining euphoria is explained by perception of the ambience levels.

Table 5.31.: Tests of Between-Subjects Effects ((Section 5.5.3)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	*191.900[a]*	*8*	*23.988*	*22.855*	*.000*	.183
Intercept	*8156.957*	*1*	*8156.95*	*7771.79*	*0.000*	.905
Welcoming ambience	*101.195*	*2*	*50.59*	*48.21*	*.000*	.106
Preferred volume level	*3.416*	*2*	*1.71*	*1.63*	*.197*	.004
*Welcoming ambience * Preferred volume level*	*4.469*	*4*	*1.12*	*1.06*	*.373*	.005
Error	*855.390*	*815*	*1.05*			
Total	*20510.230*	*824*				
Corrected Total	*1047.290*	*823*				
a. R Squared = .183 (Adjusted R Squared = .175); Dependent Variable: Dining Euphoria score						

Table 5.32.: Descriptive Statistics (Section 5.5.3)

Welcoming Ambience	Preference for Level of music volume	Mean	Std. Deviation	N
Not welcoming	*Soft*	*4.22*	*0.88*	*53*
	Medium	*4.14*	*0.86*	*80*
	Loud	*4.06*	*0.44*	*37*
	Total	*4.15*	*0.79*	*170*
Neutral	*Soft*	*4.56*	*1.03*	*123*
	Medium	*4.68*	*0.97*	*102*
	Loud	*4.21*	*0.61*	*13*
	Total	*4.59*	*0.99*	*238*
Welcoming	*Soft*	*5.13*	*1.08*	*165*
	Medium	*5.41*	*1.08*	*231*
	Loud	*5.29*	*1.69*	*20*
	Total	*5.29*	*1.12*	*416*
Total	*Soft*	*4.79*	*1.09*	*341*
	Medium	*4.98*	*1.13*	*413*
	Loud	*4.44*	*1.12*	*70*
	Total	*4.86*	*1.12*	*824*
Dependent Variable: Dining Euphoria				

The post hoc results show that there is difference among diners' perception about dining euphoria in all the three levels, between welcoming and not welcoming ambience(p=.000); welcoming and neutral (p=.000) and neutral and not welcoming (p=.031). Diners who find the ambience "not welcoming" have significantly lower dining euphoria scores than those who view it as "welcoming". Diners who find the ambience "neutral" report significantly lower dining euphoria compared to those who find it "welcoming." And diners who perceive the ambience as "not welcoming" experience significantly lower dining euphoria compared to those who view it as "neutral." It can be inferred that dining euphoria is highest among diners who find the ambience "welcoming," followed by those who find it "neutral," and lowest among those who find it "not welcoming". The differences are statistically significant across all pairings, emphasizing that a welcoming ambience significantly enhances diners' sense of euphoria during their dining experience.

Secondly, the other null hypothesis for main effect states that there is no significant difference among the diners' perceptions about dining euphoria and different preferred volume levels of "soft," "moderate," or "loud," the results of two-way ANOVA reveals F value as 1.628 with a p-value (sig.) of .197. Since the p-value is greater than the standard alpha level of .05 and we failed to reject the null hypothesis.

5.5.4. Preference of Volume Level and Welcoming Ambience on Sonic Flavours

Table 5.33.: Tests of Between-Subjects Effects (Section 5.5.4)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	107.213[a]	8	13.402	10.295	.000	.092
Intercept	7754.72	1	7754.72	5957.12	0.00	.880
Welcoming ambience	39.557	2	19.78	15.19	.000	.036
Preferred volume level	1.515	2	.76	.582	.559	.001
Welcoming ambience * Preferred volume level	24.155	4	6.04	4.64	.001	.022
Error	1060.93	815	1.30			
Total	18959.89	824				
Corrected Total	1168.14	823				
a. R Squared = .092 (Adjusted R Squared = .083) ; Dependent Variable: sonic flavours score						

Another two-way ANOVA was conducted to test the null hypotheses and examine differences in diners' perceptions of sonic flavours and preferred volume levels. Specifically, it analyzes variations among diners' perception of sonic flavours who preferred volume levels of "soft," "moderate," or "loud," and their perceptions of ambience as "welcoming," "not welcoming," or "neutral." The analysis also assesses the interaction effect of volume preference and ambience perception on sonic flavours.

Two-way ANOVA conducted to measure if there exists an interaction effect of levels of ambience and preferred volume on sonic flavours. It is seen from the Table 5.29 that the F value is 4.64 with a p-value of .001, indicating that the interaction effect between welcoming ambience and preferred volume level as statistically significant**.** The interaction between ambience and volume preference indicates that the impact of ambience on sonic flavours depends on the preferred volume level. It can be concluded that diners' perception of sonic flavours in a welcoming ambience may differ depending on the

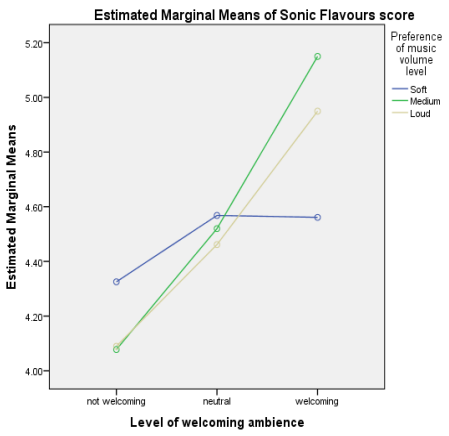

Figure 5.10: Preference of Volume Level and Welcoming Ambience on Sonic Flavours

preference towards soft, moderate, or loud music. This interaction indicates that a combination of ambience and preferred volume level can influence diners' sensory experience, particularly in how they perceive the sonic qualities of the environment. Since the elements of sonic flavours encompass factors like intention to revisit and recommendations to others, this suggests that a welcoming ambience with soft music may not produce a positive experience if diners prefer a louder music volume. The non-parallel set of lines shows the interaction effect graphically.

The first main effect null hypothesis is formulated as there is no significant difference among the diners' perceptions about sonic flavours and their perceptions of ambience as "welcoming," "not welcoming," or "neutral." The result of the two-way ANOVA shows that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, $F(2, 815) = 15.194$, $p = .000$, partial $\eta^2 = .036$, indicating that about a very small amount of 3.6% of the variance in dining euphoria is explained by perception of the ambience levels. The post hoc test shows that "welcoming ambience" has a positive and significant impact on diners' perception of sonic flavours compared to both "not welcoming" and "neutral" ambiences. However, in case of "neutral" and "not welcoming" ambience, the difference is not statistically significant, indicating that diners' perception of sonic flavours does not change much between a "neutral" and "not welcoming" ambience.

Table 5.34.: Descriptive Statistics (Section 5.5.4)

Welcoming Ambience	Preference for Level of music volume	Mean	Std. Deviation	N
Not welcoming	*Soft*	*4.32*	*0.96*	*53*
	Medium	*4.07*	*0.80*	*80*
	Loud	*4.08*	*0.74*	*37*
	Total	*4.15*	*0.85*	*170*
Neutral	*Soft*	*4.56*	*1.07*	*123*
	Medium	*4.52*	*0.97*	*102*
	Loud	*4.46*	*0.83*	*13*
	Total	*4.54*	*1.01*	*238*
Welcoming	*Soft*	*4.56*	*1.42*	*165*
	Medium	*5.15*	*1.18*	*231*
	Loud	*4.95*	*1.49*	*20*
	Total	*4.91*	*1.32*	*416*
Total	*Soft*	*4.52*	*1.23*	*341*
	Medium	*4.79*	*1.15*	*413*
	Loud	*4.40*	*1.08*	*70*
	Total	*4.64*	*1.19*	*824*
Dependent Variable: Sonic Flavours				

The second main effect null hypothesis states that there is no significant difference among the diners' perceptions on sonic flavours and different preferred volume levels of "soft," "moderate," or "loud,". The results of two-way ANOVA reveals F value as .582 with a p-value (sig.) of .559. Since the p-value is greater than the standard alpha level of .05, the effect of preference of music volume on sonic flavours is not statistically significant. This shows that diners' preferences for music volume (soft, moderate, or loud) do not have a notable impact on their experience of sonic flavours.

5.5.5. Analyzing Dining Euphoria and Sonic Flavours based on Demographic Profile

With an attempt to determine if the diners' demographic data show any statistically significant differences in terms of dining euphoria and sonic flavours, the analyses are conducted. Independent samples t-tests and one-way ANOVA are used to compare the means of the respective sample groups.

Table 5.35.: Dining Euphoria and Demographic Profile

Variables (For Dining Euphoria)		N	$\bar{X}$ (Mean)	F	t	p	Significant Difference at α=0.05
Gender	*Male*	*439*	*4.90*	*1.621*	*1.107*	*.268*	*No Difference*
	Female	*376*	*4.81*				
Marital Status	*Currently single*	*530*	*4.79*	*.544*	*-2.066*	***.039***	*Statistically Different*
	Married	*294*	***4.96***				
Occupation	*Self earning*	*728*	***4.93***	*.902*	*4.987*	***.000***	*Statistically Different*
	Not earning	*96*	*4.32*				
Average Spending	*Upto Rs.2500*	*454*	*4.86*	*2.863*		*.036*	*Rs.2501-Rs.5000 & Rs.5001-Rs.10000*
	Rs.2501-Rs.5000	*210*	*4.99*				
	Rs.5001-Rs.10000	*103*	*4.62*				
	Above Rs.10000	*57*	*4.73*				
Monthly Income	*Upto Rs.35000*	*199*	*4.56*	*8.018*		*.000*	*Upto Rs.35000 & Rs.65000-Rs.100000; Upto Rs.35000 & Above Rs.100000*
	Rs.35000-Rs.65000	*224*	*4.82*				
	Rs.65000-Rs.100000	*267*	*4.98*				
	Above Rs.100000	*134*	*5.10*				

Independent samples t-tests are conducted to examine whether participants' levels of dining euphoria differed significantly based on their gender, marital status and occupation. The results of the independent samples t-test indicated that the levels of dining euphoria among individuals differed significantly based on their marital status and occupation. They are indifferent in terms of gender. ANOVA test has been conducted to check the difference in income level and categories of average spinning in restaurants on dining euphoria. The results show a difference in average spending while dining out on dining euphoria is Rs.2501/- -Rs.5000/- & Rs.5001/-. The result also shows differences in Monthly Income on dining euphoria are in Upto Rs.35000/- & Rs.65000/- - Rs.100000/- and Upto Rs.35000/- & Above Rs.100000/-.

Table 5.36.: Sonic Flavours and Demographic Profile

Variables (For Sonic Flavours)		**N**	**$\bar{X}$ (Mean)**	**F**	**t**	**p**	**Significant Difference at α=0.05**
Gender	*Male*	*439*	*4.6813*	*7.632*	*1.006*	*.268*	*No Difference*
	Female	*376*	*4.5967*				
Marital Status	*Currently single*	*530*	*4.5794*	*.002*	*-2.181*	***.029***	*Significantly Different*
	Married	*294*	***4.7680***				
Occupation	*Self-earning*	*728*	***4.7016***	*.141*	*3.671*	***.000***	*Significantly Different*
	Not earning	*96*	*4.2303*				
Average Spending	*Upto Rs.2500*	*454*	*4.7412*	*4.106*		***.017***	*Rs.2501-Rs.5000 & Above Rs.5001*
	Rs.2501-Rs.5000	*210*	*4.5540*				
	Above Rs.5001	*160*	*4.66*				
Income	*Upto Rs.35000*	*199*	*4.44*	*11.452*		***.000***	*Upto Rs.35000 & Rs.35000-Rs.65000; Upto Rs.35000 & Above Rs.65000*
	Rs.35000-Rs.65000	*224*	*4.71*				
	Above Rs.65000	*401*	*5.02*				

The results of the independent samples t-test indicate that the levels of sonic euphoria among individuals differed significantly based on their marital status and occupation. They have indifferent sonic flavours in terms of gender. Additionally, ANOVA results show significant difference between levels of income on sonic flavours among the *Upto Rs.35000 and Rs.35000-Rs.65000 and also Upto Rs.35000 and Above Rs.65000 groups.* There is significant difference in levels of average spending while dining out with sonic flavours among *Rs.2501-Rs.5000 and Above Rs.5001 group.*

Summary for section 5.5:

The above section tried to explore the role of music in diners' experience. First of all the study used an exploratory factor analysis (EFA) to extract essential factors related to music that influences diners overall experience in restaurants and extracted two factors. The first factor which has eleven items, is named "Dining Euphoria". The second factor named as "Sonic Flavour" contains five items. The interaction effect of satisfaction levels of experience and attention levels of music during meal on dining euphoria revealed that the effect of satisfying experience levels on dining euphoria depends on diners' attention levels to music, or vice versa. Paying attention to music enhanced dining euphoria further, especially for diners who already report higher satisfaction with their experience than diners with dissatisfying experience. It is also reported that diners are more likely to feel intense dining euphoria during meals if they are more on satisfying experience. Also, paying attention to music leads diners to experience significantly higher dining euphoria than those do not pay attention to music during meal.

The interaction between attention to music and satisfaction levels indicate that diners' perception of sonic flavors was influenced by both the factors altogether. This suggests that attention to music may enhance the sensory dining experience, especially for diners who are already more satisfied with their experience. Additionally, attention to music is an important factor in enhancing the perception of sonic flavors. However, satisfying experience levels alone do not have a significant effect on sonic flavors.

The study suggested that variations in diners' music volume preferences (soft, moderate, loud) does not play an important role in their overall sense of euphoria during the dining experience. The influence of ambience on dining euphoria is constant across volume levels. However, a welcoming ambience significantly enhances diners' sense of euphoria

during their dining experience showing that welcoming ambiance is an important factor in diners' experience.

The results of the interaction effect indicated that a combination of ambience and preferred volume level can influence diners' sensory experience, particularly in how they perceive the sonic qualities of the environment. Welcoming ambience has a small but meaningful impact on the perception of sonic flavours. However, even in the presence of interaction effect diners' preference for volume (soft, moderate and loud) does not significantly affect the sonic flavours score.

The diners who are married reported higher levels of dining euphoria compared to those who are currently single. Self-earning individuals experienced higher dining euphoria than those who are not earning. Moreover, gender does not influence the overall dining euphoria. Study suggested dining euphoria among individuals who spend Rs. 2501/-–Rs. 5000/- and Rs. 5001/- –Rs. 10,000/- during dining experiences varies significantly. Also, individuals with monthly income Upto Rs.35000/- & Rs.65000/- -Rs.100000/- and Upto Rs.35000/- & Above Rs.100000/- varies significantly in terms of dining euphoria.

In terms of sonic flavours also, married individuals reported higher sonic flavours compared to those who are currently single. Self-earning diners experience higher level of sonic flavours compared to those who are not earning. Study suggested that sonic flavours are not influenced by gender. Difference in sonic flavours are between diners with income levels of Upto Rs. 35,000/- and those in the Rs. 35,000/- –Rs. 65,000/- and between Upto Rs. 35,000/- and above Rs. 65,000/- groups, highlighting income as an influencing factor in sonic preferences. Also difference in sonic flavours is observed among diners spending Rs. 2,501/- –Rs. 5,000/- and those spending above Rs. 5,001/- while dining out.

5.6. Experience on Level of Music Volume

It is to mention here that diners experience different levels of music volume in the restaurants. The respondents were asked questions on their personal level of listening music in general, preferred music level in a restaurant and music level that they have experienced in the restaurant during their visit. With these information three paired sample t tests were performed but the null hypotheses could not be rejected. The result was not statistically significant ($p > 0.05$), indicating no significant difference between

individuals' usual personal music listening level and their preferred music level in a restaurant (p= 0.591. with mean difference 0.030). Secondly, this comparison was also not statistically significant, suggesting no meaningful difference between individuals' usual personal music listening level and the music level they actually experienced in the restaurant (mean difference = 0.012, p-value = 0.851). Thirdly, the result of the last pair also not statistically significant, indicating no meaningful difference between diners' preferred music level in the restaurant and the music level they experienced (mean difference = -0.018, p-value = 0.758). Therefore, it can be said that across all three pairs, the differences are minor and not statistically significant, implying that diners generally did not perceive a significant discrepancy between their usual personal music level, their preferred music level in a restaurant, and the actual music level they experienced in the restaurant. This could suggest that the restaurant's music level aligns reasonably well with diners' preferences and expectations and giving them a pleasant experience.

Table 5.37.: Tests of Between-Subjects Effects (Section5.6)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	*33.344[a]*	*5*	*6.669*	*3.565*	*.003*	*.021*
Intercept	*4683.697*	*1*	*4683.697*	*2503.593*	*.000*	*.754*
Music Volume Preference	*27.392*	*2*	*13.696*	*7.321*	*.001*	*.018*
Music Tempo Preference	*.967*	*1*	*.967*	*.517*	*.472*	*.001*
Music Volume Preference Music Tempo Preference*	*.929*	*2*	*.464*	*.248*	*.780*	*.001*
Error	*1530.307*	*818*	*1.871*			
Total	*15102.000*	*824*				
Corrected Total	*1563.650*	*823*				
a. R Squared = .021 (Adjusted R Squared = .015); Dependent Variable: Music level experienced in restaurant						

It is also further tried to analyse and examines the perception of diners on music level experienced in the restaurant and preference for levels of volume (soft, medium, loud). Also, preference of music tempo being ‘fast’ and ‘slow’ on music level experienced in the restaurant is measured by a two-way ANOVA. Finally, the analysis also assesses the interaction effect of volume preference and preference of music tempo on music level experienced in the restaurant.

Table 5.38.: Descriptive Statistics (Section 5.6)

Preference of music volume level	Preference of music tempo type	Mean	Std. Deviation	N
Soft	*Fast music*	*4.12*	*1.856*	*25*
	Slow music	*4.07*	*1.363*	*316*
	Total	*4.08*	*1.402*	*341*
Medium	*Fast music*	*4.02*	*1.451*	*96*
	Slow music	*4.18*	*1.29*	*317*
	Total	*4.14*	*1.329*	*413*
Loud	*Fast music*	*3.3*	*1.622*	*30*
	Slow music	*3.53*	*1.24*	*40*
	Total	*3.43*	*1.41*	*70*
Total	*Fast music*	*3.89*	*1.575*	*151*
	Slow music	*4.09*	*1.329*	*673*
	Total	*4.05*	*1.378*	*824*
Dependent Variable: Music level experienced in restaurant				

The interaction effect between volume preference and tempo preference is not significant. This implies that the combined influence of volume and tempo preferences does not have an additional impact on how diners perceive the music level. The volume preferences of patrons have a substantial impact on the perception of the music level in the restaurant, but neither their tempo preferences nor their interaction with one another do. This suggests that focusing on aligning the volume level with diners' preferences may enhance their experience, while tempo may be less critical in shaping their perception of music volume. Only 2.1% of the variance in perceived music level can be explained by the whole model, suggesting that additional factors might possibly be involved. However, the variables preference for levels of volume and preference of music tempo are assessed separately to check the main effects on perception of diners on music level experienced in the restaurant.

The null hypothesis for main effect being there is no significant difference between perception of diners on music level experienced in the restaurant and preference for levels of volume (soft, medium, loud). The two-way ANOVA results states that $p < .05$, the null hypothesis is rejected. The analysis found significant difference, F (2, 818) =7.321, $p = .001$, partial $\eta^2 = .018$, indicating a very small variance. Thereafter, the post hoc test provides the pair wise comparison and shows that there is statistically significant difference in soft and loud volume (p=.005) and medium and loud (p=.001). But there is statistically no significant difference between medium and soft volume on music level experienced in the restaurant. Significant differences in music levels experienced are

observed between diners with a loud volume preference compared to those preferring either soft or medium levels. This suggests that diners who prefer loud music perceive the music level in the restaurant as being closer to their preference, while those preferring soft or medium levels may experience it as too loud.

For the next main effect, the null hypothesis states there is no significant difference between music level experienced in the restaurant and preference of music tempo (fast music and slow music). The results state that $p > .05$, and we failed to reject the null hypothesis.

In addition to this, further analysis is done for (i) personal level of listening music in general and (ii) preferred music level in a restaurant with preference for music tempo. While conducting Independent sample t test for personal level of listening music in general and preference for music tempo (fast or slow) a statistically significant difference has been seen between personal level of listening music in general and music tempo (fast and slow music) with following statistics t= 6.404; *p*=.000, F=61.971. Also, preferred level of listening music at restaurant and music tempo showed a significant difference with following statistics t= 3.344; *p*=.001, F=25.970. It can be concluded that as individuals preferring fast tempo are likely to have a higher personal listening level in general compared to those preferring slow tempo. Also, there is a significant difference in the preferred level of listening music at restaurants between diners who prefer fast music tempo and those who prefer slow music tempo. Individuals preferring fast tempo likely prefer a higher music listening level in restaurants compared to those preferring slow tempo. This showed a significant impact, indicating that diners' preferred music tempo affects how loud they want the music to be in a dining establishment.

Summary for section 5.6:

The perception of music level experienced in the restaurant is significantly influenced by diners' volume preferences but not by their preferences of music tempo. There is no interaction effect of volume and tempo preferences on how diners perceive the music level that they experience in the restaurant. The results indicate that whether diners prefer slow or fast music tempo do not have a noticeable impact on their perception of the music level experienced in the restaurants. It is found that diners who prefer loud music perceive the music level in the restaurant as being closer to their preferences, while those preferring soft or medium levels experienced it as too loud. Again, music

tempo preference influences diners' perception on the extent of loudness in music to be preferred in a restaurant setting.

5.7. Convivial Restaurant Ambience, Attention towards music during Meal and Demographic Profile

In order to understand whether diners feel the restaurant ambience welcoming, lively and to see whether they pay attention to the music as per their age, gender and occupation independent sample t test and one-way ANOVA are conducted.

Table 5.39.: Convivial Restaurant Ambience and Demographic Profile

Variables		N	$\bar{X}$ (Mean)	F	t	p	Significant Difference at α=0.05
Gender	*Male*	*439*	*3.44*	*.947*	*-1.969*	***.049***	*Significantly Different*
	Female	*376*	*3.59*				
Occupation	*Self-earning*	*728*	*3.55*	*.023*	*3.306*	***.001***	*Significantly Different*
	Not earning	96	3.15				
Age	18-25 years	170	2.75	*2.732*		**.043**	26-35 years & 36-45 years; 36-45 years& Above 46 years
	26-35 years	480	2.91				
	36-45 years	100	3.24				
	46 years & Above	74	3.34				

It can be seen from the Table5.37, gender and occupation have an effect on conviviality. Females may feel that the restaurant ambience is more convivial than male counterpart. Those who are financially independent also feel the ambience to be livelier and more welcoming than those who are not earning. In case of age there is a difference between the age brackets of 26-35 years and 36-45 years and 36-45 years & Above 46 years on conviviality of the restaurant atmosphere.

Table 5.40.: Attentiveness towards music and Demographic Profile

Variables		N	$\bar{X}$ (Mean)	F	t	p	Significant Difference at α=0.05
Gender	*Male*	*439*	*3.01*	*.328*	*2.16*	***.031***	*Significantly Different*
	Female	*376*	*2.84*				
Occupation	*Self earning*	*728*	*2.97*	*2.859*	*3.72*	***.001***	*Significantly Different*
	Not earning	*96*	*2.50*				
Age	*18-25 years*	*170*	*2.75*	*3.251*		*.025*	*26-35 years& 36-45 years*

Variables		N	$\bar{X}$ (Mean)	F	t	p	Significant Difference at α=0.05
	26-35 years	*480*	*2.91*				
	36-45 years	*100*	*3.24*				
	46-55 years	*55*	*3.05*				
	56 years and above	*19*	*2.63*				

Next with an attempt to measure the diners' attentiveness towards music with age, gender and occupation, Independent Samples t test and one-way ANOVA are used.

The results of the independent samples t test and one-way ANOVA reveal that there is significant difference of average attentiveness based on gender, occupation and age. Results show that male pay more attention to music during meals in restaurants than female diners. It is also observed that those who are financially independent also pay more attention to music than those who are not earning. In case of age there is difference between the age bracket of 26-35 years and 36-45 years on being attentive to music during meal suggesting younger group is less attentive to music.

Summary of section 5.7:

The result indicates gender and occupation has an effect on conviviality. There exist differences among the age brackets of 26-35 years and 36-45 years and 36-45 years & Above 46 years on conviviality. . In case of age there is difference between the age bracket of 26-35 years and 36-45 years on being attentive to music during meal.

5.8. Overview on Auditory Preference and Restaurant Experiences

With the help of the findings of the analyses, restaurants may be able to adjust the music volume to better suit the varied tastes of the diners. These findings highlight the importance of considering both music tempo and listening volume when analyzing auditory preferences and their impact on experiences, whether personal or in a restaurant environment. Aligning music settings with these preferences can significantly enhance user satisfaction and enjoyment. Restaurant management should think about creating spaces that naturally invite diners to listen to music, as this can improve the entire

sensory experience of the establishment. On the other hand, ignoring music completely cannot have the desired effect of improving the surroundings. The results suggest that restaurant owners or managers should be mindful of the ambience, as it significantly affects how annoying or pleasant the sound environment is perceived. Additionally, whether patrons pay attention to music during their meal can influence annoyance levels, but the overall ambience may modulate this effect. A welcoming ambience significantly enhances diners' sense of euphoria during their dining experience showing that welcoming ambiance is an important factor in diners' experience. For diners who are already satisfied with their restaurant experience, attention to music can enhance their sensory dining experience. The study revealed that satisfying experience levels alone do not have a significant effect on sonic flavors which includes recommendation, revisit, repeat purchase etc. But attention to music is an important factor in enhancing the perception of sonic flavors. Additionally, welcoming ambience significantly enhances diners' sense of euphoria during their dining experience showing that welcoming ambiance is an important factor in diners' experience. Therefore, focusing on aligning the level of volume with diners' preferences and motivating the diners to engage themselves with the music during the meals may enhance their experience. Although tempo may be less critical in shaping their perception of music volume it should also be taken into consideration while planning the auditory environment.

5.9. Live Music

Eating is essentially a sensory experience, and live music enhances the visual, olfactory, and gustatory delights of dining with an auditory delight (Spence & Carvalho, 2020; Kemp et al., 2019). When paired with the appropriate music, eating together becomes an even more engaging experience. Each meal is made more delightful by the energetic rhythm of a salsa band, the soulful songs of a popular or favourite singer, or the soft strumming of an acoustic guitar. Several studies have demonstrated the interconnectedness of sensory input, demonstrating how hearing can affect taste and vice versa. These days, live musical performances are used in clubs and restaurants to attract patrons (Čustović, 2021). Live music performances are recorded karaoke or live music presented with accompanist or with just a guitar in a public entertainment venue, whether or not there is cabaret or other dancing involved. In order to attract a reasonable number of patrons, the management of restaurants are taking the lead in marketing and promoting the venue and the live bands. Music in any form and style affects consumers

(Kemp et al., 2019). Be it background or foreground, recorded or live. In this section the role of live music shall be explored and a comparison of live music with pre-recorded music in a restaurant context shall be made.

5.9.1. Preference of Live music and Purpose of Visiting the Restaurant

An analysis has been carried out to assess the preference of live music while dining in the restaurant. To check if live music has different effects based on the purpose of the dine in a Chi square test has been conducted between two variables - the preference of live music and the purpose of dining in. People visit restaurant for dining on different purposes like outings with family or friends, business purpose, casual lunch/dinner and occasions such as birthdays, anniversaries, ceremonies etc. To determine whether there is a significant relationship or not among the test variables the following hypothesis has been formulated:

Table 5.41: Chi-Square Tests for Purpose of Visit and Preference of Live Music

Variable	Value	Sig. P value	Cramer's V
Purpose of visit	*9.085*	*0.028*	*0.105*

H_{0L1}: There is no significant association between preferences of live music on purpose of visiting a restaurant.

H_{0L1}: There is significant association between preferences of live music on purpose of visiting a restaurant.

Since the p-value is less than 0.05, we reject the null hypothesis. This means that there is a statistically significant association between the purpose of visit and the preference for live music. The Cramer's V value of 0.105 indicates that the association is moderate. Considering the Phi and Cramer's V range by Akoglu (2018), although the relationship is

Table 5.42.: Cross tabulation between preference of live music on purpose of visiting a restaurant

Purpose of Visit	Do you prefer live music?		Total
	No	Yes	
outing with family or friends	*98*	*376*	*474*
	20.7%	*79.3%*	*100.0%*
	68.5%	***55.2%***	*57.5%*
Business purpose	*19*	*119*	*138*
	13.8%	*86.2%*	*100.0%*
	13.3%	*17.5%*	*16.7%*
Casual lunch/dinner	*19*	*123*	*142*
	13.4%	*86.6%*	*100.0%*
	13.3%	*18.1%*	*17.2%*
Occasion	*7*	*63*	*70*
	10.0%	***90.0%***	*100.0%*
	4.9%	*9.3%*	*8.5%*
Total	***143***	***681***	***824***
	17.4%	***82.6%***	*100.0%*
	100.0%	*100.0%*	*100.0%*

significant, the strength of the association is moderate. The differences can be made clear from the Table 5.40.

The figures in the table show that out of 824 respondents, 681 prefer live music and 143 respondents does not prefer live music in a restaurant. Across all purposes, a substantial majority (82.6%) of diners prefer live music, and 17.4% indicating their non preference for live music. The diners who prefer live music comes to restaurant for outings with family or friends accounts for 55.2%, followed by casual lunch/dinner (18.1%), business purpose (17.5%) and occasion (9.3%) respectively. But if we see within the purpose of visit, the preference for occasion accounts highest of 90% whereas outing with family or friend shows 79.3%. The percentages indicate that there is positive affirmation towards live music. This means that while the purpose of the visit does influence whether diners prefer live music, the effect is not very strong. Live music is particularly valued for special occasions. Restaurants might prioritize live performances during holidays or celebratory seasons to cater to this group and add on to the total ambience.

5.9.2. Preference for Live music Vs Pre-recorded music

Restaurants have used music as a strategic weapon to create the mood they want and improve their customers' multisensory experiences. While foreground music can add to an exciting and dynamic mood, background music, when played at a low volume, has been demonstrated to generate a calm and elegant atmosphere (Keresztes and Vitera, 2013). There are evidences of using live music in different service settings. Live music has been employed in hospitals as a therapeutic and health-promoting tool. According to Tansik & Routhieaux (1999), the use of music has helped create calmer hospital settings where patients are less agitated and visitors report feeling less stressed. Hotels have started searching for creative ways to use live music in their marketing strategies in an attempt to appeal to younger consumer segments (McIntyre, 2015). By having live music, airports provide stressed-out travellers a break and enhance the overall visitor experience (Zipkin, 2017). Therefore, in order to determine whether the preference for pre-recorded music is more or for live music among the restaurant diners in Assam, a paired t -test has been conducted. The following hypothesis has been made:

H_{0L2}: The mean scores of preferences for pre-recorded music and preference for live music are not significantly different among the diners.

$H_{1L2:}$ The mean scores of preferences for pre-recorded music and preference for live music are significantly different among the diners.

Table 5.43: Result of Paired t Test for Live and Pre-recorded Music

Variables	*Mean*	*Std. Deviation*	*Paired Differences*					*t*	*df*	*Sig. (2-tailed)*
			Mean	*Std. Deviation*	*Std. Error Mean*	*95% Confidence Interval of the Difference*				
						Lower	*Upper*			
Prefer pre-recorded music while taking food in restaurant	*2.86*	*1.397*	*.427*	*2.102*	*.073*	*.283*	*.571*	*5.833*	*823*	*.000*
Prefer Live music while taking food in restaurant	*2.44*	*1.632*								

The table above presents the results of the paired t test on preferences for live music and pre-recorded music. Here, the null hypothesis is rejected (p=0.000). It can be said that the average scores of preference for pre-recorded music and preference for live music are significantly different among the diners. Diners show a significantly higher preference for pre-recorded music over live music while dining. The statistical test confirms that the difference is significant, with diners preferring pre-recorded music more than live music in the dining setting.

To have a detailed understanding of the preference for live music and pre-recorded music among diners the following Independent Samples t test is performed.

H_{0L3}:There is no significant difference in the mean scores of expectations for live music between those who prefer live music and those who do not.

$H_{1L3:}$ There is a significant difference in the mean scores of expectations for live music between those who prefer live music and those who do not.

Table 5.44.: Independent Samples t Test for Preference for live music

Do you prefer live music?		**N**	**Mean**	**Std. Deviation**	**Sig. (2-tailed)**
Prefer Live music while taking food in restaurant	*Yes*	*681*	***2.62***	*1.605*	*0.000 (Null Hypothesis Rejected)*
	No	*143*	***1.57***	*1.485*	

The table depicts the means and standard deviations for the preference for live music while dining, categorized by whether respondents generally prefer live music or not. For

people who like live music in general, the mean preference score is 2.62 for live music. Of individuals who do not generally enjoy live music, the mean preference score for live music is 1.57. This suggests that among individuals who normally like live music, there is a larger average preference for live music while dining. The significance value (Sig. 2-tailed) is 0.000, which is less than the conventional threshold of 0.05. This indicates that the difference in mean preference scores between the two groups is statistically significant.

The results suggest a statistically significant difference in the preference for live music while dining between those who generally prefer live music and those who do not. Respondents who prefer live music have a higher average preference score for live music while dining compared to those who do not prefer live music.

Another test done to cross check the above finding. Here the researcher thought of analysis the diners on their extent of expectation for pre-recorded music while taking food and their preference for live music the following hypothesis is formulated:

H_{0L4}: There is no significant difference in the mean scores of expectations for pre-recorded music based on diners' preference for live music.

H_{1L4}: There is a significant difference in the mean scores of expectations for pre-recorded music based on diners' preference for live music.

Table 5.45.: Independent Samples t Test for Preference for pre-recorded music

Do you prefer live music?		N	Mean	Std. Deviation	Sig. (2-tailed)
Prefer Pre-recorded music while taking food in restaurant	Yes	681	**2.78**	1.605	0.001 (Null Hypothesis Rejected)
	No	143	**3.25**	1.485	

The table shows that for diners who like live music in general, the mean preference score for pre-recorded music while dining is 2.78 for live music. Of individuals who do not generally enjoy live music, the mean preference score for pre-recorded music is 3.25. The significance value found to be 0.001 and we reject the null hypothesis. Thus, it is statistically significant and can be stated that there is difference in the preference for pre –recorded music while dining between those who generally prefer live music and those who do not.

Again, if we look at the mean scores of the preferences in both the tables, the respondents who do not prefer live music in general but prefer pre-recorded music while dining is 3.25 and individuals who do not generally enjoy live music, the mean preference score for live music while dining is 1.57. It can be concluded by saying that the analysis reveals distinct preferences among diners regarding the type of music they favor while dining. Specifically, respondents who do not prefer live music in general show a strong preference for pre-recorded music while dining, with a mean preference score of 3.25. Conversely, the same group who do not prefer live music in general exhibits a significantly lower mean score of 1.57 for live music while dining. These findings highlight the divergent preferences within this subset of diners, indicating a clear inclination towards pre-recorded music over live performances during their dining experience. This preference can be vital for restaurant owners and managers in tailoring their ambiance to meet customer expectations and enhance overall dining satisfaction. Additionally, the preference for no music with pre-recorded music and live music was also determined. Diners apparently prefer pre-recorded music and live music over no music with marginally higher mean for both. it is worth mentioning here that the same group of diners (82.6%) have preference for live music.

5.9.3. Live Music and Attention to Music during Meal, Overall Satisfaction with Restaurant Experience, Welcoming Restaurant Ambience (Conviviality)

Independent Samples t-test is carried out to further analyse the preference for live music and certain other variables on the basis of their experience in the restaurant. Diners are exposed to different kinds of sound in the restaurant. One of such sound comes from the music played in the restaurant, be it recorded or live. Diners may pay full attention to the music during the meal, or may not pay attention or else may remain neutral to music. In order to find out the preference for live music on being attentive to the music during their meal as per their rating the following hypothesis is formulated for live music and attention to music during meal:

H_{0L5}: The mean score of attention paid to music during meal and preference for live music are not significantly different among diners

H_{1L5}: The mean score of attention paid to music during meal and preference for live music are significantly different among diners

Table 5.46.: Live music and Experience in the Restaurant

Variables	Preference for Live music		p-value	Remarks
	Yes	No		
I paid attention to music during meal	*2.81*	*3.43*	*0.000*	*Rejected*
Overall, I am satisfied with my restaurant experience	*3.42*	*3.76*	*0.001*	*Rejected*
I find the restaurant ambience welcoming	*3.44*	*3.80*	*0.001*	*Rejected*

There is a significant difference in how much attention diners pay to music during a meal between those who prefer live music and those who do not. On average, those who prefer live music (mean=2.81) pay less attention to the music (mean=3.43). The significance value found is 0.000 led to the rejection of the null hypothesis and therefore we conclude that there is significant difference between the mean scores of attention paid to music during meal and preference for live music. It's interesting to note that those who dislike live music say they listen to the music more when eating, which may be because they are more sensitive to or critical of auditory inputs in these situations. This implies that guests' concentration and interaction with the acoustic environment of a restaurant are greatly influenced by their auditory preferences.

After that another variable is measured with live music. Whether or not the preference for live music made the overall restaurant experience a satisfactory one is assessed. Therefore, to ascertain the overall satisfaction with the dining experience by preferring or not preferring live music the next hypothesis is formulated.

H_{0L6}: The mean score of overall satisfaction with the restaurant experience and preference for live music are not significantly different among diners

H_{1L6}: The mean score of overall satisfaction with the restaurant experience and preference for live music are significantly different among diners.

Those who do not prefer live music report a slightly higher satisfaction with their restaurant experience (mean = 3.76) compared to those who prefer live music (mean = 3.42). Thus, it is statistically significant and can be stated that there is difference in overall satisfaction with the restaurant experience between those who prefer live music and those who do not. On average, those who do not prefer live music are slightly more satisfied. It's interesting to note that people who dislike live music expressed more

satisfaction with their dining experience than people who do. This may indicate that factors beyond live music play a more significant role in shaping the satisfaction levels of individuals who are less inclined toward live music. According to this research, eateries ought to think about diversifying their ambiance strategies in order to accommodate a wider variety of customer preferences.

Finally, it was thought of to test live music for perceiving the restaurant ambience welcoming by the diners. A convivial atmosphere is very important for a satisfactory experience. That is why, in the next test the preference of live music for being a dining experience to be satisfactory has been checked. Therefore, the following hypothesis is formulated:

H_{0L7}: The mean score of restaurant ambience is welcoming and preference for live music are not significantly different among diners

H_{1L7}: The mean score of restaurant ambience is welcoming and preference for live music are significantly different among diners.

Independent Samples t test result showed that the p value is 0.001 and we reject our null hypothesis. Those who do not prefer live music rate the restaurant ambiance more positively (mean = 3.80) than those who prefer live music (mean = 3.44). There is a significant difference in the perception of the restaurant ambiance between those who prefer live music and those who do not.

Based on the analyses, there are notable distinctions between customers who enjoy live music and those who don't when it comes to their opinion of the restaurant's environment, satisfying dining experience, and attention to music. Diners who do not prefer live music rated the ambiance as more welcoming compared to those who prefer live music. This implies that restaurants that just use live music as a component of their atmosphere approach might not be equally successful with all diners. A balanced approach to ambiance design that accommodates both categories may improve the overall dining experience.

Thus, people who dislike live music at restaurants and pay more attention to the music, declare themselves to be more satisfied with their entire dining experience, and think the general ambiance of the restaurant is friendlier. Restaurant managers can use this

information to better understand the tastes of various client categories and adjust the environment and music selections to improve the eating experience.

Summary of the Chapter

The chapter dealt with the sonic environment of a restaurant. The aural environment of the restaurant is composed of different sound from a very mild audible to a loud sound depending upon the context. The soundscape of restaurant is dominantly created by music with other sounds. Music has a special ability to stimulate and create an atmosphere, influencing consumers' feelings and actions with or without them realizing it. In this chapter the role of music in diners' experience has been tried to examine. It is found out that the impact of level of satisfying restaurant experience on dining euphoria changes depending on whether diners pay attention to music. Paying attention to music can enhance dining euphoria. Impact of different level of attention to music on the perception of sonic flavors depends on diners' levels of satisfaction with their experience. Overall attentive to music during the meal and atmosphere being convivial create differences in the perception of the diners ranging from pleasant to unpleasant, eventful to uneventful etc. Coming to live music, most diners prefer live music yet they show a difference in their perception with respect to pre-recorded music. It can be concluded by saying that music does play an important role in their assessment of the entire dining experience.