The Effects of Music on Customer Behaviour and Satisfaction in the Region of Larissa- The Cases of Two Coffee Bars

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Abstract: *Extending research by Stephanie Wilson (2003), who investigated the effects of music on perceived atmosphere and purchase intention in a restaurant, using four musical styles (jazz, popular, easy listening and classical) and no music, were played in a restaurant over two consecutive weeks, is closely related to the present study which also investigated the effects of music on customer behaviour and satisfaction. In the study of Stephanie Wilson, results indicated that different types of music had different effects on perceived atmosphere and the amount spent by the respondents. In the present study, the reasons of satisfaction were measured, showing that the different styles of music are not particularly related to the customers' overall satisfaction. The two main factors that influence satisfaction are the gender of the respondents and the volume of the music being played. Overall, this study contributes to the development of a model that seeks to account for the relationship between music and satisfaction.*
Keywords: *Consumer behaviour, Types of music, Satisfaction, Atmosphere, Coffee bar.*

1. INTRODUCTION

The purpose of this research is to better understand consumer behaviour and satisfaction under the influence of certain «atmospherics». Spatial aesthetics or «atmospherics» is the term used to describe the conscious designing of space to create certain effects in buyers (Kotler, 1974, p. 40, cited by EDRAO8 Conference: Movement and Orientation in Build Environments, Vera Cruz, Mexico, 28 May 2008). Atmospherics consist of many elements such as colour, brightness, shape, size, music, scent, softness, smoothness and temperature. This research is going to study music as the most important element that affects consumers' behaviour and satisfaction.

The present research has taken into consideration the theoretical model first presented by Mehrabian & Russell (1974) and further developed by Mehrabian (1980) & Russell and Pratt (1980, cited by Laurette Dube & Sylvie Morin, 1999). The Mehrabian/Russell model attempts to explain the effects of store atmosphere upon shopping behaviour.

Based upon this model, all responses to an environment can be considered as an approach or avoidance behaviour. Approach behaviour involves such responses as physically moving towards something, affiliating with others in the environment through verbal communication and eye contact, and performing a large number of tasks within the environment (Booms & Bitner, 1980, cited by Ian N. Lings, 2002) avoidance behaviour includes trying to get out of the environment, a tendency to remain inanimate in the environment, and a tendency to ignore communication attempts from others (Donovan & Rossiter, 1982, p. 37, cited by Michael Morrison et al. 2010). In order to elicit approach behaviour, consumer researchers have to understand why people react to environments in specific ways. Mehrabian and other environmental psychologists assume that peoples' feelings and emotions ultimately determine what they choose to do and how they do it. They further assume that people respond with different sets of emotions to different environments, and that these in turn, prompt them to approach or avoid the environments (Donovan & Rossiter, 1982, p. 39 cited by Michael Morrison et al. 2010). While it is obvious that the atmosphere consists of many factors, some are considerably more controllable than others. One of these factors is music ranging from its volume, tempo, type, and familiarity/unfamiliarity. Music can be used to create an approach or avoidance atmosphere as suggested by the Mehrabian & Russell model.

One way to achieve the above standard is the correct use of «atmospherics» and especially music in order to create an ideal shopping environment for the customer as he will attempt to repeat the positive shopping experience.

These studies have formed a number of contributions in relation to understanding the dimensional composition of background music in the marketing sector.

2. SIMULATION BETWEEN THE COFFEE BAR AND THE TYPE OF MUSIC.

It has been suggested that people are likely to spend more time and money in a restaurant or retail environment if the music being played is considered appropriate (Radocy & Boyle, 1997). Therefore, the participants in the present study were asked to indicate whether they thought the music being played in the coffee bar was appropriate. Responses are considered in terms of respondents' perception of the atmosphere and the amount of money they are willing to spend. Respondents were

also asked to rate their level of awareness of the music being played. Based on the characteristics of (Fashionable, entertaining and relaxing) music, the respondents characterised the coffee bar with the same adjectives as the music being played. In other words a simulation was observed between the coffee bar and the music being played in it.

3. AIM

The primary goal of this research is to examine the attitudes and the preferences of customers in retail stores.
The main objectives of the research conducted were to:

(1) Test customer buying behaviour under the influence of music
(2) Investigate the effects of music on time perception, customer satisfaction.
(3) Investigate the effects caused on purchasing behaviour and overall satisfaction by high-low volume of music as it is perceived by the customers.
(4) Measure the customers' overall satisfaction according to different types of music being played.
(5) Conduct a behavioural mapping of how customers act and react on hearing certain types of music and how it influences their purchases.

4. METHOD

The method used is a cross-sectional research. In this case the data is accumulated at a particular moment, or a relatively short period of time. Also, comparisons among the variables are being made at this time.

4.1 Participants

All the patrons presented in the coffee-bars during the testing period were eligible for the study. The sample comprised 200 subjects that is a total of 100 subjects for each condition over the 8-day testing period (25 subjects a day). The testing was carried out between 7:30 pm and 11:00 pm from Thursday to Sunday over a two week period. Patrons were approached at their tables at the end of their coffee-drink and asked to complete a questionnaire about the coffee-bar. The questionnaire was not administered until the music had been playing for at least 30 minutes to ensure that participants had sufficient exposure before responding.

4.2 Design

The cross-sectional research was conducted at «Giannouli Café», and at «Ya-Café» both coffee-snack bars in Larissa. The choice of the coffee-bars was governed by the following criteria: a) seating capacity >100, b) high-quality stereo system and speakers, c) close competitors with other coffee-bars in the area, d) a diverse range of clientele.
In the 8-day period, the presentation of the conditions occurred in the following order: 80's rock, pop music lounge and jazz. The research was based on a time series design with the aim of examining the intervention of a series of conditions.

4.3 Materials

Each condition employed several hours of music. On each night during the study, the music was played on a high quality CD player through four speakers that were suspended in each corner of the coffee-bar. The volume of the music was held constant and at a level where it was clearly audible while still allowing patrons to talk over it comfortably.

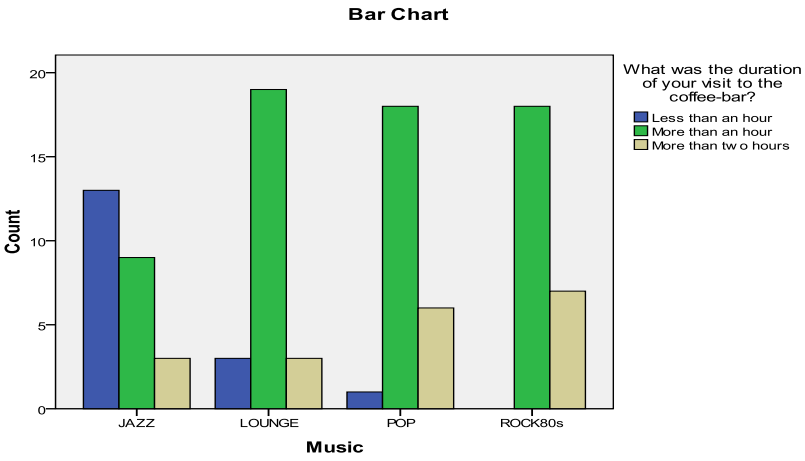
5. QUESTIONNAIRES

The questionnaires used in the research for both stores were identical in order to be easily compared.
The questionnaires were a result of questions that were used in previous researches (Michael Morrison et al. 2010; Celine Jacob 2006). The questionnaires were also a result of an indicative number of customers asked (100 customers from one store and another 100 from the other).

6. RESULTS

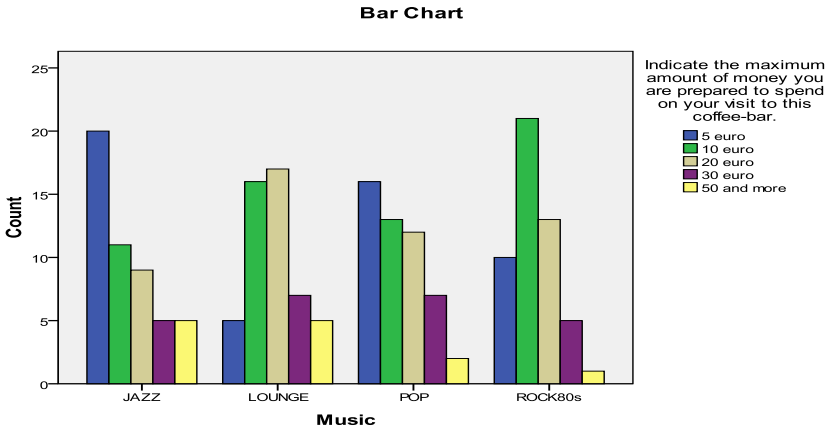
To explore the dimensions of the satisfaction, descriptive measures were used such as frequencies, matrix-pie-charts, bar-charts, cross tabulations. Descriptive statistics analysis was utilised to determine customers' perception of quality scores as well.
According to the cross tabulations in the quantitative analysis, it is quite obvious that the respondents of both the coffee-bars stayed for more than an hour while lounge, pop, and rock 80's were being played. On the contrary, the respondents indicated for staying less than an hour when jazz music was being played.

Figure 1. Type of music-Time spent



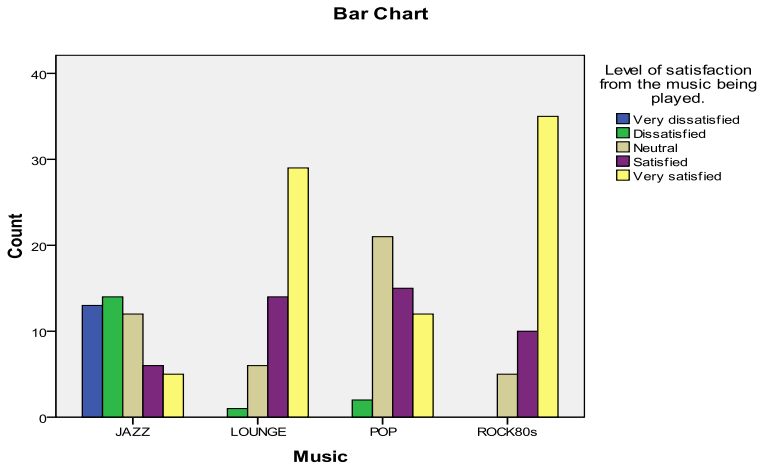
It is clear from the graph below that the type of music does not influence in a great degree the amount of money that the respondents intend to spend as the amounts of money in every case are in low levels. However, it seems that jazz music influences the participants to spend bigger amounts of money comparing with the other types of music. The same happens with lounge music as it also influences customers to spend more during their visitation to the coffee bar. That could be happening because jazz and lounge music have as fans certain groups of people.

Figure 2. Type of music Money spent



It is obvious from the graph below that the most satisfied respondents are those who were listening to lounge and rock music. As for pop music, the views are positive but for jazz it is clear that the respondents are not that satisfied. There is a trend detected in the answers of the participants (as for their satisfaction), which shows that they are influenced by music.

Figure 3. Type of music-Satisfaction



By applying the binomial regression (Wald method-variable dimension reduction), a new model is being created in order to find which of the independent variables (that is Gender, Volume of music, Type of music, Visitation background and Characterisation of the cafeteria) affect the overall satisfaction. The target is the overall satisfaction (dependent variable). By applying the Wald method we conclude to the following model.

$$Log(\mathrm{P}/1-\mathrm{P})_{SATISFACTI\ ON\ \_NEW} = 4.51 * X_{GENDER\ \_NEW}\ 7.61 * X_{MEDIUM} + 24.8 * X_{LOW}$$

Notifications :

1. SATISFACTION_NEW=0 → NOT SATISFIED
2. SATISFACTION_NEW=1 →SATISFIED
3. GENDER_NEW it takes the price «1», when the person answering is a woman and the price of «0», if the person is a man.
4. MEDIUM it takes the price «1», when the respondent characterising the music as medium volume music and the price «0» in any other case.
5. LOW it takes the price «1», when the respondent characterises the music as low volume music and the price «0», in any other case.

It is clear that from the 5 factors, the statistical model concluded in the 2 most important ones (gender and volume) that affect customers' satisfaction and emphasized the case where the volume of the music is low. Specifically, the most satisfied customers were those who were listening to the music being played at a low volume (24.8), and the customers who were listening to medium volume of music (7.61), were less satisfied. It is also observed that the type of music being played was not so important, the visitation background and the characterisation of the coffee bar were not so important after all.

6. CONCLUSION

This study revealed that different types of music influenced the participants' perceptions of the coffee bars' environment. It is obvious that a positive relationship was found between the participants' perceptions of the coffee bars and their perception of the music. The cross tabulations used in the research showed that different styles of music led to different perceived characteristics of the coffee bars.

According to the statistical analysis, it appears that the type of music does not influence to a great degree the amount of money that somebody intends to spend, as in every type of music the amounts of money to be spent are at low levels. Nevertheless it appears that Jazz music influences the customers to spend more. The same happens with lounge music as it also influences customers to spend more during their visitation to the coffee bar. That could be happening because jazz and lounge music have as fans certain groups of people.

Due to the fact that the number of people drinking their coffee-drink in the coffee bars fluctuated on the same day before, during the testing period, it is quite difficult to assess the influence of music on actual sales.

The results of this study suggest that several other factors may be influencing the relationship between the respondents' perceptions and the music being played. For example, the results showed that the more people being at the coffee bars (3 and more), the more the coffee bars were perceived as entertaining, fashionable.

As far as satisfaction is concerned, the binomial model revealed that it is the volume of music and the gender of the participants and not the type of music that mostly affect satisfaction.

The particular analysis can be available to estimate behaviours of potential customers to other coffee bars. By seeing if a potential customer has the above characteristics (gender: female and volume of music: low), his future satisfcation can be clearly estimated.

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