The influence of background music on patrons in a South African coffee shop setting: An exploratory study

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ABSTRACT

The primary objective of this exploratory study was to investigate the perceptions and preferences of customers regarding the background music in a coffee shop setting. Specific secondary objectives focused on aspects such as the role of music to contribute towards the total store atmosphere, and whether customers prefer live music to prerecorded music. It hypothesizes that male and female patrons have different preferences regarding the playing of romantic music.

A non-probability area sampling method was used as the patrons who visited the selected coffee shop at that point in time were requested to participate in the study. In total 120 respondents completed the questionnaire.

The results show that patrons prefer live music to prerecorded music and that male and female customers do not differ significantly with respect to preference for type of music played in coffee shops. It was also found that certain musical instruments (e.g. the clarinet) could be annoying to some customers. The managerial implications for managers are listed and directions for future research are offered.

INTRODUCTION

Most studies focusing on the effects of music in service environments have its roots in the concept of atmospherics, introduced by Kotler (1973). Although authors may differ in defining the concept (Kotler, 1975; Yalch and Spangenberg in Levy and Weitz, 2001), there is general agreement that music is one of a range of physical environmental dimensions that can influence the behaviour of customers within the service environment (Jordaan and Prinsloo, 2001; Oakes 2000; Herrington and Capella, 1996; Baker, Levy and Grewal, 1992). According to Levy and Weitz (2001:490) the objectives of the retailer's communication programme, namely to inform, remind and persuade customers, will best be achieved when the elements of the retail promotion mix (advertising, public relations, sales promotion, sales people, store atmosphere and visual merchandising) is utilised and applied in a synergistic manner. Store atmosphere includes aspects such as odours and scent, air temperature, lighting, décor and colour, and music and sound.

Berman and Evans (2001) emphasise the importance for retailers to establish, communicate and maintain the firm's image in order to position it in the customers' minds. According to these authors numerous factors contribute to a retailer's image, for example, customer service, store location, price levels, community service, sales promotion, and attributes of physical facilities (atmosphere). Store atmosphere can be divided into four key elements: exterior, store layout, interior (point-of-purchase displays), and general interior. The latter, according to Berman and Evans (2001:604) includes various elements that affect customers' perceptions, such as colour, lighting, fixtures, temperature, merchandise, cleanliness, and sound (including music). Retailers realise the importance of music as a means to differentiate the store from competitors and to maximize store image (Sweeney and Wyber, 2002).

Based on Baker's (in Herrington and Capella, 1994) framework for store design (which identifies three dimensions of the store environment, namely the social dimension, the design dimension and the ambient dimension), Martineau (in Sullivan and Adcock 2002:149) offers another viewpoint on the concept of atmospherics: "a store's personality is that way in which the store is defined in the shopper's mind, partly by its functional qualities and partly by an aura of psychological attributes". The *ambient* element in a store's design can then be viewed

as part of that aura of psychological attributes, and according to Martineau "it is from this beginning that the field of atmospherics, or the manipulation of the ambient dimension developed." Sullivan and Adcock (2002:150, 156) are of the opinion that atmospherics comprises of the following elements: visual (colour, lighting); olfactory (scent); tactile (temperature); taste (taste sensations); and aural (volume, pitch, tempo). Music is considered as the key aural element because the identification and control of other types of sounds in an environment is almost impossible.

Retailers realise the importance of music and also that the playing of music in itself is not enough. The music needs to be applied to differentiate the store from competitors and to maximize store image rather than serving as a distraction to shoppers (Reda, 1998).

OBJECTIVES OF THE ARTICLE

Some researchers have suggested that the results of studies examining the effect of music on consumer responses (e.g. time spent in a store or expenditure) may have been largely due to musical preferences rather than the musical characteristics, such as tempo and volume (Herrington and Capella, 1996). The findings of a study done by Sweeny and Wyber (2002), to determine the effects of music on consumer perceptions and behavioural outcomes, indicate that consumers' liking of music played a major role in explaining their emotional states and cognitive processes. Thirty years ago Kotler (1975:219) stated that restaurants recognize that customers select these outlets as much for their atmosphere as for their cuisine, and restaurants are therefore investing heavily to achieve surroundings that will attract and excite customers.

The restaurant industry in South Africa has lately developed into a large and competitive industry; many offering almost identical cuisine and services to their customers. In order to survive, restaurant owners have to be innovative and differentiate their service-scape to attract customers. As an atmospheric tool, playing the right type of music can contribute towards gaining a valuable competitive advantage. The first question that comes to mind is

whether there should be any music at all, and whether customers would even recall that music was being played when leaving the store.

The main aim of this article is to report the findings of a study done to determine customers' perceptions and attitudes towards music as an atmospheric influence during their visit to a popular informal coffee shop in an up-market suburb of Pretoria. More specifically, the study wanted to determine if respondents in different age groups spend more time in the coffee shop due to their liking of the music being played, and if male and female patrons differ in their preferences to listen to romantic and live music in the shop. The study also tested customer preferences towards different genres of music.

LITERATURE REVIEW

Effects of music on human responses and consumer shopping behaviour

An extensive body of research has investigated the effect of different music characteristics, such as, tempo, pitch and texture on affective responses such as appeal, attitude, affect and emotion. For a summary of some of these studies, refer to Bruner (1990). Mehrabian and Russell (1974) suggest that environmental stimuli, in this case background music, elicit certain emotional responses, namely pleasure, arousal and dominance, which in turn mediates a variety of "approach-avoidance" behaviours. Kellaris and Rice (1993:18) called for research to focus on which particular musical components produce or encourage the thoughts and feelings responsible for desirable outcomes. Overall, past research relating to tempo and genre has shown that in general, fast music is considered more arousing than slow music, and also more pleasurable than slow music (Bruner 1990, Kellaris and Kent, 1991). Another study by Kellaris and Kent (1994) found that classical music was regarded as more pleasant than pop music.

Sweeny and Wyber (2002:52) state that music has been found to affect the extent of certain behaviours in a store environment. Milliman (1982) examined the effect of tempo of background music in a supermarket, finding that the in-store traffic was significantly slower and sales were significantly higher with slow music than with fast music. In the restaurant

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context, Milliman (1986) found that slower tempo music resulted in customers staying significantly longer in a restaurant and spending more on alcoholic beverages. Herrington and Capella (1996), in contrast, found no support for the effects of tempo and volume of music on shopping time and expenditure. Playing the right type of music may influence shoppers to buy more expensive brands (Agmon 1990). The study reported in this article did not try to manipulate musical characteristics such as volume and tempo (due to the practicability of such an experiment), but rather tested the overall behavioural effects of the current coffee shop music on the customer.

Consumers also use environmental cues, such as music, in cognitive processing, when predicting or evaluating the value of an offering by both goods and service retailers. While it is known that consumers infer merchandise quality based on the retail store environment, including music, using the retail environment to infer service quality is far less discussed (Baker et al. 1994). According to Bitner (1992:63) "people may use their beliefs about the service-scape as surrogate indicators in forming beliefs about service quality". Yalch and Spangenberg (1993) investigated how consumer perceptions, including perceived "friendliness" of the store, varied with respect to different types of music, and posited that music had no effect on shoppers' opinion of the store and its merchandise. Similarly, Milliman (1986:86) found that a significant number of customers surveyed after leaving a store do not recall that music was being played.

The role and value of music in the retail environment

Herrington and Capella (1994:50) suggest that restaurant and coffee shop owners can maximize their profitability by meeting three primary objectives: getting an optimal number of consumers into the establishment; building and encouraging long-term consumer relationships; and by providing a positive in-store shopping experience (ISE) for their clients (Terblanche and Boshoff 2002; Berman and Evans 1998). How can music be utilized to achieve this goal?

Background music and store selection

The degree to which retail atmosphere influences a consumer's store selection decision varies according to the types of products and services provided by the retailer (Kotler, 1973). For some retail operations such as nightclubs, bars and discotheques, atmosphere may serve as one of the primary consumer selection criteria. Atmosphere can help define a retailer's image (Ward et al. 1992) and background music can be an important component of retail atmosphere (Langrehr, 1991; Milliman, 1982). Because of its potential impact on atmosphere, background music may influence choice between stores of the same type (Baker et al., 1992). Consequently, playing the appropriate background music may help a retailer to develop a desirable atmosphere, which in turn contributes to the image of the retailer and consumer store choice (Zillman and Bhatia, 1989).

Relevant characteristics of background music

Given the potential benefits of background music, a retailer might be prompted to ask, "What type of music should I be playing?" The answer to this question is not straightforward. Given the potential for influence and profitability, it is important to understand the nature of music and the specific musical characteristics, which are purported to elicit behavioral responses. More specifically, retailers need to be aware of the specific manipulable characteristics of music and how these factors can influence shopping behaviour. However, of all the things we know about background music we probably know the least about characterising effective background music. From the musical literature (Herrington and Capella, 1994:54) two general categories of musical characteristics can be identified: *structural* (physical) and *affective* (emotional). In addition to specific characteristics of music, retailers should be aware that several factors might moderate the effects of any one of the structural or affective characteristics on behaviour The structural characteristics of music are the objective and observable qualities of a musical composition. Six of the primary structural dimensions of music are: tempo, volume, mode, pitch, rhythm and harmony (Bruner, 1990). There is some evidence to suggest that any one of the various structural components in isolation is capable of eliciting specific musical effects. Research conducted in retail environments indicates that

shoppers spend less time, but not less money, in a retail establishment when the volume of the background music is relatively loud (Smith and Curnow, 1966) and that shoppers spend more time and sometimes more money in a retail establishment when the tempo is relatively slow (Milliman, 1982, 1986). Previous research in a restaurant environment by Roballey et al. (1985) found that fast tempo (122 BPM) music significantly increased diner eating speed in terms of bites per minute. Higher tempos and high rhythmic content also lead to an increase in physiological arousal (Verark and Ely, 1993), which is associated with approach-avoidance behaviours (Mehrabian and Russell, 1974). In a study by Kellaris and Altsech (1992) it was found that listeners prefer tunes composed in major rather than minor modes.

While the effects of such musical characteristics as tempo, volume and mode on consumer behaviour would seem to be widely supported, one major musical dimension is often overlooked: the listener's affective evaluations of the music. Typically, only the musician is cognizant (aware) of the precise levels of the physical characteristics (e.g. tempo, volume) of a musical composition. To the average listener, music is not an objective fact. Instead, music is defined in terms of the meaning assigned to it by the listener, which is determined in part by the observer's musical culture (Wright, 1975). A listener assigns meaning to a song, regardless of structural characteristics, on the basis of his or her musical culture, which refers to a collection of musical experiences. Members of society influence these musical experiences – more specifically, and perhaps more significantly, by family members, peers, and the mass media. Because of the significance and impact of social approval on an individual's values of all types, it stands to reason that peer and preference groups may have the most influence on musical tastes (Wright, 1975). As stated earlier, this study merely tested whether respondents had a preference for a certain genre, which could in turn have been ascribed to an emotional or affective connotation to a certain composition of music.

Selecting the appropriate background music

The limited number of research studies done in this field does not make the selection of background music for a coffee shop or any other service setting a difficult task. Herrington

and Capella (1994:57) identify three factors to consider before a final choice on background music is made.

- A retailer must carefully define the selected target market and the demographic details of this market, for example: age, income, marital status, education, gender, and ethnic background. Most of this information can be obtained by examining customer data and/or by conducting market research. Efforts should be made to also determine the ethnic characteristics of target segments. Musical tastes vary by culture (Wright, 1975), and culture often varies by ethnic background. Herrington et al. (1994:59) emphasise the fact that background music should reflect the ethnic background of shoppers. This is particularly important for the South African scenario where (especially after 1994) shoppers from a particularly wide variety of cultural backgrounds are frequenting coffee shops and restaurants more regularly.

- Retailers must also ensure that the selected background music fits the image which the store or coffee shop wants to convey. In order to do this, they must determine the most appropriate type of music to play based on customer and store characteristics. There are numerous examples of providers who use music to help create atmospheres that are consistent with their service offerings. Restaurants offering international menus (e.g. Mexican, Chinese, Italian, and French) often play music of the country of origin. Other restaurants specialising in a particular type of cuisine also use music in a similar fashion. Some BBQ restaurants play either rhythm and blues or country and western, depending on the theme, to create an ethnic atmosphere (Herrington and Capella, 1996:37). South African coffee shops have, as a rule, not taken to the idea of playing or performing African music, but some restaurants have moved in that direction. Long before the introduction of African rhythm to restaurants, however, diners were called to the "boma" by the sound of African drums – a prelude to a wonderful meal of succulent meat with traditional side dishes of vegetables and pap. Foreign visitors often remark on the eerie sound of the drums, the scent of the sweet indigenous wood fire mingling with the earthiness of the food, and the experience of dining out under the stars of the African sky – a unique sensory experience creating a lasting memory.

- When selecting the music to be played, Herrington and Capella (1994) suggest that the following aspects should be considered: First, preference for any given tune or music tends to be closely related to familiarity. The more familiar the listener is with a tune the more probable it is that (s)he will like it, according to Zissman and Neimark (in Herrington and Capella, 1994). Second, music preference tends to increase with the number of exposures up to a point after which the preference begins to decline with each successive exposure.

HYPOTHESES

For centuries music has been known to have a powerful effect on human behaviour (Sweeney and Wyber, 2002). In the social science context, music is particularly known for its effectiveness in triggering moods, and in the marketing domain, music has been shown to affect consumer behaviour, particularly shopper behaviour and the time they spend in the shop. (Herrington and Capella, 1996; Milliman, 1982, 1986). Therefore the following hypothesis is proposed:

Ho1: Respondents in different age groups who like the background music in the coffee shop do not differ significantly with respect to the time they spend in the shop
Ha1: There is a significant difference between respondents in different age categories with respect to the time they spend in a coffee shop due to their liking of the background music.

Research has shown that response to music tends to vary by gender. According to Stipp (1990), female patrons normally tend to prefer slower, softer music, while males prefer louder, faster music. It is assumed that males would prefer to listen to live music while females would prefer to listen to romantic music. In this regard the following hypotheses are proposed:
Ho2: No significant differences exist between males and females with regard to their preferences to listen to romantic music in a coffee shop.
Ha2: There is a significant difference in the preferences of male and female patrons to listen to romantic music in a coffee shop, and
Ho3: No significant differences exist between males and females' preferences to listen to live music in a coffee shop.

Ha3: There is a significant difference in the preferences of male and female patrons to listen to live music in a coffee shop.

METHODOLOGY

Sampling and data collection

For the purpose of this exploratory study it was decided to follow a non-probability area sampling approach. Due to a limited budget one Honours Marketing student acted as a field worker who targeted patrons who visited the selected coffee shop. The data was collected by means of a self-administered questionnaire, which was handed out to a total of 120 respondents. This rather small sample allows for the possibility of sampling and survey errors, for example accuracy and precision, as mentioned by Cooper and Schindler (1998:217). Future studies should address this shortcoming.

During the study, the musical variables (such as tempo, volume, genre) were not manipulated in any way due to the impracticality of such an experiment. Therefore this study had an ex post facto design. The customers received the questionnaire (which was field-tested prior to the study) just after they had placed an order with the waitron. The data gathered in the questionnaire was statistically analyzed in order to test the hypotheses.

FINDINGS

Descriptive statistics

Sixty one percent female and 39 % males completed the questionnaire. The ages of the respondents were evenly spread among the four categories (28% in the 18-25 age group; 23% in the 26-35 age group; 25% in the 36-50 age group; and 24% in the above 50 age group). A disappointing aspect of the study is the fact that only 3% of the sample consisted of non-white customers, while 72% white Afrikaans speaking and 25% white English speaking respondents participated in the study. Forty percent of the respondents said they visit the coffee shop less than once a week, while 25% of the respondents visit the coffee shop three or more times a week.

The findings on the question posed to patrons to rank the seven genres of music (jazz, rock, classical, gospel, romantic, heavy metal, and kwaito) in their order of preference, indicated that classical music was the most preferred genre, followed by romantic music and jazz. Table 1 contains the means, standard deviations and reliability results for the items used in a seven-point Likert scale questionnaire (1=totally agree and 7=totally disagree).

Table 1   Reliability results of customer perceptions of background music

Statements	Means	Std dev.	Alpha
Like the type of music	2.060	1.489	.9158
The background music is relaxing	1.920	1.300	.9162
Stay longer when this music is played	2.720	1.990	.9419
This music makes dining more fun	2.200	1.627	.9082
This music should be played more often	2.380	1.751	.9061
Like romantic music	2.370	1.495	.8747
Should play more romantic music	2.740	1.673	.8656
Romantic music makes dining more fun	2.440	1.578	.8752
Prefer romantic music to other styles	3.270	1.953	.9174
Should have more live music	3.100	1.997	.9766
Prefer coffee shops with live music	3.100	2.028	.9426
Live music will enhance the atmosphere	3.020	2.040	.9402
Spend more time here when there is live music	3.440	2.100	.9534

The results in Table 1 confirm that the instrument for the evaluation of the total data set

resulted in very satisfactory reliability test results. The internal consistency (Cronbach's alpha) for the first five scale items (time spend by four age groups) was .9329; the reliability for the scale items regarding male and female's preferences for romantic music was .9093; and for male and female's preferences to listen to live music .9648.

Inferential statistics

With regard to H1, a visual inspection of histograms and normal probability plots, indicated that the variables in the questionnaire did not have normal distributions. Consequently, the non-parametric Kruskal-Wallis test was used to test for significant differences across the four age groups with respect to the *time they spend* in the coffee shop due to the liking of the background music being played. The results indicated (at a significance level of 0.05) that

there is not a significant difference in the mean scores of the four age groups (p= 0.208). Hypothesis 1 was therefore not accepted.

The same procedure (tests for normal distributions) as described above was followed for Hypotheses 2 and 3. For H2 it was also necessary to use a non-parametric test (the Mann-Whitney U Test) to determine whether significant differences exist between male and female respondents' preferences with regard to their liking of *romantic music* being played in the coffee shop. Instead of comparing the means of the two groups as in the case of a t-test, the Mann-Whitney U Test actually compares medians. It converts the scores on the continuous variable to ranks, across the two different groups. It then evaluates whether the ranks for the two groups differ significantly. The results of this test showed that there was not a significant difference between the two groups with regard to their preferences to listen to romantic music (p=0.516). Hypothesis 2 was therefore rejected. The Mann-Whitney U Test was also used to test whether significant differences exist between male and female respondents' preferences with regard to the use of *live musicians* instead of prerecorded music while visiting the coffee shop. Likewise, the results indicated that there was not a significant difference between the two groups with regard to their preferences to listen to live musicians (p=0.555). Table 2 provides a summary of the results of the non-parametric tests used to test the hypotheses.

Table 2   Results of non-parametric hypotheses tests

Hypotheses	Tests	p-values
H1: Preferences of respondents in four age categories with respect to the time they spend in a coffee shop	Kruskal-Wallis	0.208*
H2: Preferences of male & female patrons to listen to romantic music in a coffee shop.	Mann-Whitney U	0.516*
H3: Preferences of male & female patrons to listen to live music in a coffee shop.	Mann-Whitney U	0.555*

* p< 0.05

CONCLUSION

The work done by Herrington and Capella (1996) served as a basis to develop a scale for the study, as the existing literature could not provide scales that suited this specific study. Although the reliability tests were satisfactory, some problems were encountered when tests for normality were executed. Future studies should endeavour to increase the sample size, and also include a more balanced racial distribution in the sample. It is also recommended that more coffee shops be included in future studies to enable the researcher to compare the findings of various target groups.

Derived from the findings of this study are some managerial implications for coffee shop owners and other retail enterprises:

- As one of the dimensions of atmospherics, music contributes towards the creation of an environment that enhances the customers' in-store shopping experience; playing the right music for a specific retail shop can elicit certain emotional responses or moods in customers that could lead to an increase in satisfaction with the store, repeat visits and enhancing store loyalty.
- The fiercely competitive environment in which many retail organizations find themselves compel managers to differentiate their service-scape in order to survive. This implies the need for thorough research to determine, for example, the demographic profile of the patrons who visit the store and also what their specific music preferences (classical or blues, and live musicians or prerecorded music) are.

The importance of music in restaurants (or more specifically coffee shops) has not been thoroughly researched locally. In the South African context therefore, future research could focus on the following:

- A sample of the same respondents' opinions regarding the background music of different coffee shops could be examined.

- Researchers could investigate the perceptions of respondents from different ethnic backgrounds, and the effects that this may have on restaurant/coffee shop selection.
- More in-depth (experimental) research should be done on the effects of harmony, pitch, melody and other musical characteristics on customers' emotional responses.
- Customers are not the only people affected by music in a coffee shop. Future research may examine the effects of music on the employees of coffee shops and the extent to which it impacts on their productivity and/or emotional well-being.

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