

# **The Value of Music: The Effects of Music on Atmosphere in a Bank and a Bar**



**Two studies by Dr Adrian C. North, David J. Hargreaves, Jennifer McKendrick**

**Summary by Claire Wells, PRS  
July 2004**

## **Introduction**

This summary is from a report on two studies carried out by Dr Adrian C. North, David J. Hargreaves and Jennifer McKendrick, from the Department of Psychology, University of Leicester, on the effect of music on customers' perception of atmosphere.

The aim of these studies is to research into the effects of music on atmosphere. The studies concern two venues, a banking hall and a bar both based in the East Midlands.

The studies looked at the following factors:

How music affects:

- Atmosphere
- Purchasing
- Ability to influence perception

These studies are linked to a previous study undertaken by North and Hargreaves (1996) which took place in a student cafeteria which found that diners' liking for the music played increased their liking for the cafeteria.

The present studies hope to find if the same is true for the two new venues.

## Study one- the bank

By studying people's opinions, perceptions and purchasing behaviour through various scientific tests the study hoped to find out if music does affect atmosphere.

Many research studies have already looked into the possibility of environmental variables such as lighting, crowding, layout and smell having an impact on atmosphere of a business and customers' purchasing intentions. The acknowledgement for the introduction of the concept of store atmospherics usually goes to Kotler (1973-1974):

*'the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability'*

Other studies have shown that effects upon the perception of a store and its image are related to:

- patronage frequency
- money spent
- store choice
- brand loyalty
- promotion sensitivity
- price sensitivity
- responses to new brands

More recently Cherulnik (1991) found that people shared common conceptions of restaurant façades, allowing them to distinguish between four common types of restaurant. From just looking at the façade, the subjects were able to describe the quality of food, ambience, and the characteristics of the fellow diners. This was also studied by Leather and Lawrence (1995) investigating the effect of specific social and environmental features on the perception of pubs; for example untidiness had a generally negative effect on judgements of the landlord.

Findings such as these can indicate that customers' perception of the physical environment is a crucial aspect of in-store marketing. This study looks at whether music has the same impact as the other variables.

## The study

The first study took place in a banking hall; with classical, easy listening and no music being played to the customers over three weeks.

Below is a selection of the tracks that were played. (For full listing please refer to actual study.)

<b>Classical</b>	<b>Easy Listening</b>
The Four Seasons (spring) - Vivaldi	A Whiter Shade of Pale
Fifth Symphony - Beethoven	Passion Flower
Nessun Dorma - Puccini	Smoke Gets in Your Eyes
Flower Duet - Delibes	Roses From the South

All easy listening tracks performed by James Last and his orchestra

From the following 20 adjectival scale customers were asked to rate the banking hall and the music.

masculine	down-market
exciting	youthful
spiritual	peaceful
cerebral	fun
up-market	tacky
restful	feminine
sophisticated	invigorating
happy	aggressive
fresh	fashionable
rebellious	dignified

Statistical analysis of these 20 adjectives showed that four factors were underlying customers' responses namely:

- dynamic/upbeat
- dignified
- assertive/aggressive
- inspirational

The sample taken from this bank comprised 331 people, and showed that the average number of visits to the bank per month from this sample was 5.09.

The study used the same classical and easy listening music as the earlier cafeteria study. The testing was carried out between 9am and 5pm from Monday to Friday over three consecutive weeks in October and played at a quiet volume on a continuous loop. Customers were approached with the questionnaire as they walked towards the exit; it was stressed that it was an independent academic study rather than a survey for the bank.

## The results

The results showed that the banking hall was perceived as less 'dynamic/upbeat' when no music was played than when either of the two types of music was played. It was also seen as more 'inspirational' when classical music was played than when easy listening was played or when there was no music.

This means that the use of music/no music did influence the perceived atmosphere of the banking hall. Also there was a positive correlation for each of the 20 adjectives between the rating of the music and ratings of the banking hall. For example, the more that customers perceived the music as being 'fun', so the more the banking hall was also perceived in this way.

The descriptions that were found to be the strongest in the bank study were also these that were found to be the strongest in the previous student cafeteria study. Different types of music gave rise to differences in factor scores in both the banking hall and the student cafeteria. The similarity between these two sets of factors, and the finding that scores on both were affected by background music, suggests that people's responses to commercial environments can be conceived in terms of a few common dimensions, and that music can influence their perceptions of the environment in terms of those dimensions.

## **Study two - the bar**

This study investigated whether a Factor Analysis report of responses to the bars environment would lead to the same factor results as in previous studies.

Previous research suggests that music may influence customers' spending. For example Areni and Kim (1993) played classical music and top-40 chart music in a wine cellar, and found that the classical music style led to customers buying more expensive wine than did the top-40 chart music. It could be argued that the reason more expensive wine was purchased was a behaviour that 'fits' the comparatively sophisticated and up-market stereotype of classical music.

In relation to the above, North, Hargreaves and McKendrick (1997) also found that when French music was played in a supermarket the French wine outsold the German wine; the same when the music was reversed and the German music was played the German wine out sold the French.

North and Hargreaves (1996) also found that diners' estimates on the maximum amount they were prepared to pay for a variety of foods in the cafeteria varied depending on the background music played.

One idea regarding the nature of subjects' rating is that if affective responses to music can become associated with affected responses to a commercial listening situation, then each musical style should give rise to differences in the perceived characteristic of the bar, meaning that the perception of the bar should be related to the perception of the music.

Another idea is that if music can influence purchase intentions, then the different musical styles should give rise to differences in the maximum amount that customers are prepared to pay for the list of items.

## The Study

The second study took place over nine days, in a bar. Customers were also asked to rate the bar and music on eleven adjectival scales.

peaceful	invigorating	tacky	intelligent
exciting	sophisticated	youthful	liked
hostile	trendy	fresh	

The study investigated the effects of background music on the atmosphere of a commercial environment. The sample 328 members of the general public were recruited by approaching them at their tables and asking them to complete a questionnaire about the bar. Responses to the questionnaires indicated that these people visited the bar on an average of 3.47 days per month.

The 90-minute tapes were played through the bar's high quality public address system at both foreground and background level. For this study classical music and contemporary British pop were used. Below is a selection of the music played. (For full listing please refer to actual study)

<b>Classical music</b>	<b>Contemporary British pop</b>
Minute Waltz – Chopin	Ten Storey Love Song – The Stone Roses
Swan Lake – Tchaikovsky	Disco 2000 – Pulp
Air on a G String – Bach	Sun Hits the Sky – Supergrass
Cello Concerto – Elgar	The Riverboat Song – Ocean Colour Scene

They were also presented with a list of items available to buy from the bar and asked to state the amount that they would be prepared to pay. Customers were also asked to rate the characteristics of the music/no music played using the same adjectives.

## The results

The rating of the bar provided clear evidence that different musical styles and also the volume of the music influenced customers' perception of its atmosphere.

Evidence was also provided that the nature of customers' perceptions of the bar was related positively to their perception of the music. For example, the more the customers perceived the music as being 'invigorating', the more the bar was also perceived this way.

Estimates of the price they were prepared to pay, and the specific effects that the musical style and volume had varied at different times of the day. This leads to the idea that tailoring your music policy to suit your audience makes good business sense.

## Conclusion

Overall these studies suggest that music can be used to differentiate two otherwise similar stores by producing variations in their atmosphere. Perhaps these variations in atmosphere could be used to attract different types of customers.

Within this report several studies have been outlined detailing that the effects upon a store and store image are related to:

- patronage frequency
- money spent
- store choice
- brand loyalty
- promotion sensitivity
- price sensitivity
- response to new brands

As the present results demonstrate that music may affect the atmosphere of an establishment, it seems reasonable to suggest that it may consequently influence the variables above too.

The results of the research on the effect of music on customers' estimates of the maximum amount that they would be prepared to pay suggest that music could be a factor in determining pricing policy.

From this research it is clear that music should be seen as a feature of an establishment. It should be used to create the right atmosphere for the business and therefore pull in potential customers who may increase profits. Anyway that you look at it, this research proves that music deserves to be considered carefully as a potential business tool.

If you would like to see a full copy of the report please contact PRS for Music Marketing on 0207 598 3718.