

The Sound of Choice

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Abstract

The purpose of this study is to test the effect of suggestive music on consumer choice in cafés. It is proposed that suggestive music influences consumer choice in cafés. The hypotheses were tested through Chi-square on a total of 283 measures. The results show that suggestive music has an effect on consumer choice in cafés. Managers who want to influence consumer choice in cafés through suggestive music may be able to do so. The results provide empirical support for the idea that suggestive music and the associations it carries represent information that consumers use for assessing choices and making selections.

Keywords: music, consumer choice, food, sales

Introduction

The fact that the atmosphere and the physical setting of a commercial environment have a significant impact on consumers is well known (cf. Bitner, 1992). Certainly, commercial environments influence customers' impressions of products and services (Almeida e Silva, Okimoto, & Tanure, 2012; d'Astous & Kamau, 2010). Researchers have turned their attention to commercial environments to investigate how the environment can influence consumer purchasing behavior; how the environment can be made to engage and attract consumers, how it can entice them to make a purchase (Schmitt & Simonson, 1997). Businesses strive to have their products and services associated with positive moods, which in turn implies a good market position relative to competitors (Hultén, Broweus, & Van Dijk, 2008). Indeed, businesses plan, design, assess and modify their physical environment continuously with the ultimate goal of influencing the behavior of their customers (Bitner, 1992). Therefore it is not surprising that the commercial environment has become an important element in marketing as well as in retailing (cf. Bitner, 1992; Hall, 2013; Lee, Heere, & Kyu-soo, 2013; Lindstrom, 2005; Wyrley-Birch, 2013). As a result of companies striving harder to influence customers, the perceptual processes as well as our senses have been granted more attention among scholars. Understanding how humans, by means of their senses, perceive and interpret the world around them has become critical (Hultén et al., 2008). Indeed, the human senses are receiving increasing attention in several commercially related fields and settings (Lee et al., 2013) (cf. Hall, 2013; Lindstrom, 2005; Wyrley-Birch, 2013).

Sensory marketing specifically draws on the consumer's senses to influence consumer behaviour (Krishna, 2012). Indeed, the atmosphere resulting from sensory marketing can be a source of differentiation from competitors (Morrison, Gan, Dubelaar, & Oppewal, 2011). That is, specific commercial environments can be developed to target specific customers (Baker, Levy, & Grewal, 1992; Dawson, Bloch, & Ridgway, 1990; Sherman, Mathur, & Smith, 1997; Sherman & Smith, 1987; Tai & Fung, 1997), and thus distinguish a venue. Increasing attention to commercial environments may in part be ascribed to escalating media clutter (cf. Ha & McCann, 2008); i.e. noise in the media resulting from competing messages. Escalating media clutter results in increasing demands on marketing because it is harder to achieve the desired impact on consumers. As a result, many venues try to distinguish their commercial environment from competitors (cf. Morrison et al., 2011) through sensory strategies (Hultén, 2011).

The consumer's perceptions of the commercial environment influence show potential purchases are evaluated. The situational factors in each specific purchase situation are critical. One of the most central components of a successful strategy is to allow stimuli such as sound, scent and temperature to interact with products in the commercial environment (Hultén et al., 2008). Sound concerns, of course, our sense of hearing, and humans have always relied on hearing and auditory stimuli to survive in different environments (Hultén et al., 2008; Passer & Smith, 2011). In fact, sound is considered one of the primary atmospheric aspects; it has a crucial influence on how a commercial atmosphere works to satisfy a customer; indeed, it can decide the impression of the commercial environment (Peck & Childers, 2007). Moreover, the mind is constantly active and susceptible to stimuli both on conscious and subconscious levels; sound is constantly being received and ascribed meaning (Hultén et al., 2008; Passer & Smith, 2011).

Sound has been deployed to build up atmospheres which companies consider optimal for their offerings. Indeed, the so-called Muzak is a genre of music specifically developed for the commercial environment; it is played in shops and department stores in order to stimulate customers (Hultén et al., 2008). Carefully selected music can help create more lasting impressions, increase perceived customer satisfaction, as well as have various effects in terms of increased sales and impulse purchases (Peck & Childers, 2007). Music has a strong impact on our mood and psychological state (Hultén et al., 2008; Passer & Smith, 2011). Indeed, since music and emotion (cf. Krishna, 2012) are strongly connected, sensations or certain states of mind can, through music, become connected to specific products through conditioning (learning) (cf. Passer & Smith, 2011). By utilizing stimuli with certain conditioning in a commercial environment, the memories of certain situations or moods can be induced (Passer & Smith, 2011). Classical conditioning explains how consumers learn through their experience; experience which is translated into associations (Grossman & Wisenblit, 1999). However, there is a paucity of published accounts of the link between music and how it may influence consumer choice of products. The practical interest of finding more and more efficient ways to influence consumers' decisions is critical to many managers. The ability to efficiently influence the customers' decisions increases the potential to meet customers' wants if the consumers can be influenced to make a purchase decision that is well matched with a venue's existing assortment or resources. The fact that food serving venues put our senses into high gear as expectations of taste and scent arise (cf. Bitner, 1992; Hultén et al., 2008), make them especially interesting. Consequently, the purpose of this study is to test the effect of background music on consumer choice in cafés.

2. Theory and Hypotheses

Many scholars consider music to be an optimal means to influence consumers. Music can trigger emotional states; it is perceived both on conscious and on unconscious levels (Hultén et al., 2008) (cf. Gardner, 1985). Certainly, music has the ability to influence the impression of the commercial environment (Peck & Childers, 2007; Schmitt, 1999), and it is an important component in the design of the atmosphere in a commercial environment (Hultén et al., 2008). Music in a commercial environment affects the arousal and pleasure level of the customers. When the arousal and pleasure level increase, this has a positive effect on the amount of purchases made (Morrison et al., 2011). Moreover, playing music in a store environment has been found to have an effect on the time consumers spend in the same environment (Andersson, Kristensson, Wästlund, & Gustafsson, 2012). More specifically, studies have shown that consumers are spending more time in environments where the music is familiar to them (Peck & Childers, 2007; Schmitt, 1999). However, when music is played at a high volume, the time a consumer spends in a store decreases (Smith & Curnow, 1966). Hence, the effect the music has may depend on the qualities of the music (Peck & Childers, 2007; Schmitt, 1999). For example, classical music has been shown to have a positive impact on retail environments; it can result in more money spent (Andersson et al., 2012; Areni & Kim, 1993). It appears that particular attention should be given to the choice of music (theme or genre), rhythm, and volume- all can be customized to suit the environment concepts as well as the audience (Hultén et al., 2008; Krishna, 2010). Indeed, music has a strong connection to lifestyle, which should be taken into account when deploying a specific music genre. That is, a specific genre may fit and work with a certain target market but put off another target market (Peck & Childers, 2007; Schmitt, 1999; Yalch & Spangenberg, 1990).

The process that ends with the consumer making a purchase starts before the actual purchase it made. At some level there must be *tension* (cf. Chrousos, Loriaux, & Gold, 1988) in the form of a problem or a need (Drysdale & Galipeau, 2009). Once tension has been established, information in one form or another forms a basis for assessing options and making a choice (Drysdale & Galipeau, 2009; Schellinck, 1983).

As mentioned, information is perceived through our senses, thus our senses can be manipulated to make consumers prioritize certain products over others (Hultén et al., 2008). Information can be treated as knowledge and knowledge can in turn be understood as a pattern of associations (Chi & Ceci, 1987). The pattern of associations in the minds of the consumers mirrors what is considered knowledge (Huffman & Houston, 1993). Accordingly, learning implies systematic association of stimuli, or association between stimuli and artefacts (Grossman & Wisenblit, 1999), all of this creating patterns of associations. The associations can be a result of personal experience and / or the result of observing the experiences of others (Hoover, Giambasita, & Belkin, 2012; Obloj & Sengul, 2012). Associations are formed through repetition. That is, an action and an outcome should be associated and repeatedly associated for connections to be created in the consumer's mind. Accordingly, it is easier to fortify associations that have already been made than to create completely new ones (Rock, 1957). Similarly, memory entails remembering past associations in terms of positive and negative reinforcements (experiences) together with associations (Repkina, 2011; Sereda, 2011). Naturally, the probability for actions which are linked with positive reinforcements increase while the probability for behaviors which are associated with negative reinforcement decrease (McSweeney & Bierley, 1984; Ruan & Wu, 2013; Shteingart, Neiman, & Loewenstein, 2013) (cf. Skinner, 1974).

It has been noted how several studies rely on classical conditioning as a basis for understanding consumers' purchasing behavior when subjected to various forms of auditory stimuli in a commercial environment (Peck & Childers, 2007). In its typical form, classical conditioning transpires when a stimulus that produces a response is combined with a second stimulus that does not naturally produce such a response, but after repeated exposures of the combination of the two, the second stimulus alone produces the same response as the first (Bierley, McSweeney, & Vannieuwkerk, 1985; McSweeney & Bierley, 1984) (cf. Skinner, 1974). In terms of music, the approach may, for example, assume that there is a link between the mood conveyed by the music played in the commercial setting and the consumers' perceived sensation. Interestingly, results of these studies show that the perceived sensation is influenced by music in cases where the consumers are not aware of the music, but when the consumers are aware of the music, the perceived sensation is not influenced (Peck & Childers, 2007). A potential explanation for this is that consumers in the latter case observe their own feelings and evaluate them more consciously and thoroughly since they are aware that they are under the influence of a stimulus and that somebody is trying to influence them (Peck & Childers, 2007; Schmitt & Simonson, 1997). However, several studies have demonstrated how certain music affects certain groups of customers. In other words, some groups share similar associations (Hultén et al., 2008).

Music specifically creates moods and is therefore a means to manipulate behavior (Mossberg, 2009). For example, music may entail information that form a basis for assessing options and making a choice (cf. Drysdale & Galipeau, 2009; Schellinck, 1983). Music can be understood as a pattern of associations (cf. Chi & Ceci, 1987). That is, the music at a venue may be regarded as conditioned stimuli, carrying its associations as it has been paired with other stimuli in the past. Arguably, such pairing occurs at several levels, for example, with regard to specific words in lyrics or with regard to music theme, genre, rhythm, or volume. Music generates emotions as it is reminiscent of earlier experiences (associations). As the music played at a venue becomes a part of the consumer's perception of the venue, the conditioned stimuli of the music becomes part of the commercial offering in the specific situation. Put differently suggestive music, carrying clear, strong and relevant associations should generate emotions and function as information that form a basis for assessing product options. This leads us to the following hypothesis:

Hypothesis: *Suggestive music influences consumer choice in cafés.*

3. Method

To test the effect of suggestive music on consumer choice in cafés, consumers' choice (sales) were compared under two conditions: Under the experimental condition, music was played in the café. Under the control condition, no music was played. The experiment took place at a café in Sweden.

Conditions and measures

To identify a pool of songs those were deemed to carry strong and relevant associations with the choices of food offered by the café, a focus group was formed. Specifically, six (cf. Fern, 1982; Stokes & Bergin, 2006) heterogeneous participants took part in the focus group to identify a music genre relevant to the choices of food offered by the café.

Visitors to the café were invited to take part in the focus group which took place at a nearby location. The respondents were shown pictures of three meals that reflected the offerings of the café and were instructed to give an account of what music they associated with each meal. The images had been selected on the basis of the factors of visual clarity and high recognition; a meal with fish, a shrimp sandwich, and a meal with meat. The fish meal carried strong associations, but with no clear pattern. The meat dish was associated with popular music, but the musical pieces suggested were scattered in terms of genre and content. The clearest musical associations were made with the shrimp sandwich. The shrimp sandwich was associated with summer, and as the respondents turned their attention to the origin of raw materials (e.g. cruises and the coast were discussed), a clear genre in terms of classical sea/coast related folk songs (e.g. guitar, accordion and lyrics referring to the coast/sea) could be identified. Accordingly, a set of six songs clearly belonging to this genre was chosen as the experiment variable. As the café mostly sold baguettes, consumer choice was assessed in terms of the relative sales of the types of baguettes sold -shrimp, bacon, brie, falafel, salami, and chicken. Sales data was gathered as registered sales.

Procedure

The experiment was performed during two weeks when the customers at the venue, each day, were immersed in either the experiment or the control condition. Specifically, on the days the music was deployed, it was played at lunchtime between 11:30 to 14:00. The time of day was chosen in consultation with the staff at the venue and because lunchtime was considered to be the time of day when the majority of the baguettes were sold (the limitation in time was due to the fact that staff at the venue was reluctant to be subjected to the music in question for a whole day). The volume in the café was adjusted in joint consultation with the venue staff so that it was at a comfortable level.

4. Results

Descriptive

In total 283 measures (purchases) were made. Sales under the experiment (music) and control conditions (no music) was 154 and 129 respectively (see Table 1). As the data collected in the experiment was nominal, the hypothesis was tested through Chi-square.

Table 1. Descriptives

Choice	No Music	Music	Difference	Total
Shrimp	8	37	29	45
Bacon	20	18	-2	38
Brie	25	20	-5	45
Falafel	5	16	11	21
Salami	26	19	-7	45
Chicken	45	44	-1	89
Total	129	154	25	283

Hypothesis

Hypothesis: *Suggestive music influence consumer choice in cafés.*

The results reject Ho as $\chi(5) = 24,192 p = ,000$ (2-sided) (see Table 2-3).

Table 2: Cross tabulation

		<i>Shrimp</i>	<i>Bacon</i>	<i>Brie</i>	<i>Falafel</i>	<i>Salami</i>	<i>Chicken</i>	<i>Total</i>	
Music	0	Count	8	20	25	5	26	45	129
		% within Music	6,2%	15,5%	19,4%	3,9%	20,2%	34,9%	100,0%
Music	1	Count	37	18	20	16	19	44	154
		% within Music	24,0%	11,7%	13,0%	10,4%	12,3%	28,6%	100,0%
Total		Count	45	38	45	21	45	89	283
		% within Music	15,9%	13,4%	15,9%	7,4%	15,9%	31,4%	100,0%

Table 3. Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24,192	5	,000
LikelihoodRatio	25,877	5	,000
Linear-by-Linear Association	7,107	1	,008
N of Valid Cases	283		

Additional results

Looking at the individual choices and total sales, the result show statistically significant differences across the two conditions (music and no music) with regard to shrimp and falafel baguettes: *H₀ is rejected as $\chi(1) = 18,689p = ,000$ (2-sided) and $\chi(1) = 5,762p = ,016$ (2-sided) respectively. The result shows no statistically significant differences across the two conditions (music and no music) with regard to bacon,brie,salami,chicken, and total sales: *H₁ is rejected as $\chi(1) = ,105p = ,746$ (2-sided); $\chi(1) = ,105p = ,456$ (2-sided); $\chi(1) = 1,089p = ,297$ (2-sided); $\chi(1) = ,011p = ,916$ (2-sided)and $\chi(1) = 2,208p = ,137$ (2-sided) respectively.**

5. Conclusions

The results show that adding suggestive music influences consumer choice in cafés. Specifically, suggestive background music belonging to the genre sea/coast related folk songs (e.g. guitar and accordion and lyrics referring to the coast/sea) results in increased sales of shrimp and falafel baguettes. In addition, while the difference is not statistically significant, the results show that adding suggestive background music results in increased sales overall. With regard to bacon, brie, salami, chicken baguettes, the results show that adding suggestive background music results in very small (but virtually identical) and not statistically significant decreased sales.

6. Discussion

The results support the conception that suggestive music generates moods and therefore may be deployed to influence consumer behavior (cf. Mossberg, 2009). It appears that suggestive music, or the pattern of associations (cf. Chi & Ceci, 1987) it carries, represents information that form a foundation for assessing choices and making a selection (cf. Drysdale & Galipeau, 2009; Schellinck, 1983). The fact that a positive statistically significant effect on sales was observed with regard to shrimp baguettes, and that this effect was the strongest, is in line with this argument. As mentioned, when identifying a genre and a pool of songs that were deemed to carry strong and relevant associations with regard to the choices of food offered by the café, the clearest musical associations were found with regard to the shrimp sandwich. Indeed, the shrimp sandwich carried associations with summer, and as the participants considered the origin of raw materials, the distinct music category of classical sea/coast related folk songs was recognized. Consequently the set of songs clearly belonging to this genre was selected as the experiment variable. Thus, in a sense it seems apparent that the songs were tailored to carry associations with the shrimp sandwich in mind. In other words, it may not be a coincidence that the music had an effect on the choice of shrimp baguettes as the music genre deployed (classical sea/coast related folk songs) was clearly and strongly associated with shrimp baguettes in the focus group. However, it seems plausible that any sea related food would be likely to be influenced by the same suggestive music. That is, as long as the dish is congruent with the music played in the background (cf. Mattila & Wirtz, 2001). The degree of congruence can be conceived as the degree to which associations are the same (cf. Panda, 2003). In terms of information, the degree of congruence can be categorized in terms of expectancy and relevancy. The former implies the extent to which the information induced follow an expected pattern. The latter implies the extent to which information is useful in the given context. Congruent information is expected and relevant, incongruent information is unexpected and relevant, while irrelevant information is simply uninformative (cf. Heckler & Childers, 1992; Lee & Mason, 1999). Moreover, the degree of congruence of the information with existing ideas decides whether the consumer takes the information into account or disregards it (Lewis & Porter, 2010).

However, the fact that a positive statistically significant effect on sales was observed with regard to falafel baguettes complicates matters. The effect on falafel topping is harder to explain in terms of the music genre deployed. Clearly, at first glance there is no obvious link or congruence between classical sea/coast related folk songs and falafel.

Tentatively, however, it may be that among the available versions (shrimp, bacon, brie, falafel, salami, chicken), falafel may be suggested the most exotic one (to Swedes), or the one which is the least congruent with classical sea/coast related folk songs. That is, falafel is a traditional and clearly Middle Eastern dish, and thus it may be considered to be incongruent to western (and Swedish) folk songs. Indeed, incongruent arrangements have been arranged by marketers with the intent of promoting the attention given to commercials (Heckler & Childers, 1992; Lee & Mason, 1999). Incongruent arrangements may stand out from the background of competing information or messages (Lee & Mason, 1999), which requires more extensive processing by the customer (Heckler & Childers, 1992). More extensive processing implies enhanced recall (Russell, 2002), but not necessarily enhanced persuasion (e.g. Hudson & Hudson, 2006; Lee & Faber, 2007; Lord & Gupta, 2010; Russell, 2002). However, even though incongruence promotes recall and congruence promotes persuasion (Russell, 2002), it may be that incongruent suggestive music was enough to trigger the observed effect in the context at hand. Indeed, past studies into the effects of incongruence show inconsistent results (cf. Dens, De Pelsmacker, Wouters, & Purnawirawan, 2012; Hudson & Hudson, 2006; Lord & Gupta, 2010; Moorman, Neijens, & Smit, 2002), which may be explained by the range of different ways of how congruence has been operationalized (Lee & Faber, 2007).

In practical terms, the results suggest that managers who want to influence consumer choice in cafés through suggestive music may be able to do so. Tentatively, it may even be possible to deploy specific music genres to promote specific choices or the sales of specific types of food. The control in the presents study (i.e. no music) limits the conclusions that can be drawn with regard to the possible link between the specific associations of the music and specific choices. Future studies should specifically address this issue by preferably deploying a set of suggestive music genres together with controls in the form of more neutral music genres, and test the effect on choices explicitly matched with suggestive music genres. Put differently, further research should test the effect of specific suggestive background music genres on specific food choices. Such studies could take into account a wider array of possible choices over a longer time. Other fruitful paths for further studies include testing the effect of suggestive background music in other types of venues and / or on other types of choices (e.g. products or services of various price and / or characteristics implying varying degrees of consumer involvement in the purchase).

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