"Hey Dee-Jay Let's Play that Song and Keep Me Shopping All Day Long": The Effect of Famous Background Music on Consumer Shopping Behavior

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Background music is one of the main retail atmospherics, as it stimulates emotions and cognition mainly when other cognitive cues are either absent or reduced. However, no studies have analyzed the effect of music notoriety on consumer behavior. This paper aims at analyzing the effect of the type of music, whether or not famous, on the retail patronage, thus covering a gap in the literature. Findings show that famous music reduces shoppers' cognitive activity. It distracts attention from store cues such as promotion messages. On the other hand, famous music enhances positive feelings that, in turn, enhance shoppers' patronage.

INTRODUCTION

Atmospherics affect consumer behavior (e.g., Turley and Milliman, 2000), in particular sales due to odor (Herrmann et al. 2013), product evaluation due to lighting (Ballantine, et.al., 2010); patronage intentions due to store layout (Jacobs, et.al., 2010), price perception due to colors and lighting (Babin, et.al., 2003), purchase intentions due to merchandise arrangement (Law, et.al., 2012). Atmospherics impact in-store behavior through the mediation of emotions and attitudes (Wirtz and Mattila, 2007; Vaccaro, et.al., 2009; Puccinelli, et.al., 2007). For example, slow tempo music compared to fast-tempo music produces affective responses and consequently positive outcomes such as satisfaction, positive disconfirmation of expectations and relaxation (Oakes, et.al., 2003). Moreover, music induced pleasure was found to affect store evaluation, by the mediation of the attitudes toward the servicescape and the sales personnel (Dube and Morin, 2001).

Music, among atmospheric cues, is a powerful emotional stimulus, an efficient and effective means for triggering moods and shaping retail experience (Jain and Bagdare, 2011). Music can alter moods, which alters behaviors (Donovan, et.al., 1994; Oakes, 2000); in particular, music likeability (valence) exerts a positive influence on consumers' mood (Grewal, et.al., 2003). Most studies have analyzed emotional (Alpert and Alpert, 1990; Grewal, et.al., 2003; Morrison and Beverland, 2003) and behavioral (Broekemier, et.al., 2008; Cameron et.al., 2003; Morin et.al., 2007) responses rather than cognitive ones (Areni, 2003; Oakes, 2003; Sweeney and Wyber, 2002).

Music has been manipulated both in its structural characteristics such as time (rhythm, tempo, phrasing); pitch (melody, mode, harmony) and texture (timbre, orchestration and volume), and in its affective elements such as valence (liking), familiarity and types (Jain and Bagdare, 2011). However, no studies have yet analyzed the notoriety of the music and its effect on consumer behavior. Some papers have considered familiarity as a proxy of notoriety (Garlin and Owen, 2006; Yalch and Spangenberg, 2000); however, familiarity does not imply notoriety and vice versa. Notoriety is an objective experience, that is, a music track is famous when it has been widely recognized as such. This means that the chance individuals have been previously exposed to the music is high, so that it could imply that they could be familiar with the music. However, familiarity, like originality, is a subjective experience. It is function of the tempo, tone and melody. People could not know or be familiar with the famous music, as well as they could know non-famous music since they could have been exposed to it before. Moreover, the familiarity effects easily fade over time. Therefore, music to be familiar has to be heard before, due either to actual prior experience, or to context effects, which create a feeling of familiarity. Generally multiple exposures to background music have proven to lead to increase in liking and recognition, as demonstrated Szpunar et.al. in 2004. But the mere exposure could have negative effects too since people could dislike the music they have repeatedly heard (Zajonc, 1980).

Contrary to advertising research (e.g., Pieters, et.al., 2002) familiar music attracts much attention than unfamiliar one because it rapidly recalls memories. On the other hand, notoriety affects both cognition (negatively or positively) and emotions (positively).

This paper aims at analyzing the effect famous-vs-non famous music on retail patronage. Three questions are addressed: 1) Does famous (vs non famous) music cognitively impact patron's behavior?; 2) Does the notoriety of the music impact consumers' affective feelings?; 3) Does famous (vs non famous) music contribute to consumers' identification with the mall?

THEORETICAL BACKGROUND

Atmospherics guide consumers preference towards immediate choice, enhance consumer experience in retail (Puccinelli, et.al., 2009), increase purchase level (Morin, et.al., 2007), shopping time (Yalch and Spangenberg, 2000) and expenditure patterns (Guéguen and Petr, 2006).

Atmospherics or some elements of it, such as music and odor, can negatively impact consumer decision making process (Shankar, et.al., 2000). Cognitive psychology studies show that low cognitive activity reduces the strength of the relation between stimulating cues and attitudes (e.g., Mick, 1992). Consequently the presence of atmospheric cues is likely to cause either decision postponement (Chernev, 2003) or negative emotions, such as anxiety, frustration and stress, which leads to dissatisfaction and reduces the likelihood to purchase (Iyengar and Lepper, 2000). This could cause confusion in the customer overwhelmed by atmospheric cues, leading to an unpleasant shopping experience and dissatisfaction (Jacoby and Morrin, 1998).

Background music is a major element of retail atmospherics (e.g., Garlin and Owen, 2006; Milliman, 1982, 1986; Morrison, et.al., 2011). It increases sales and positive attitudes toward the store. Music has been shown to stimulate emotions (e.g., Chebat, et.al., 1993, Dubé, et.al., 1995, Lin, 2010) and cognition mainly when other cognitive cues are either absent or significantly reduced (e.g., Chebat, et.al., 2001). Prior research across various disciplines such as marketing (e.g., Demoulin, 2011), psychology (e.g., Webster and Weir, 2005) and music (e.g., Husain et al., 2002) have found a range of cognitive, affective and behavioral consumer responses stimulated by music. The main and common result is that background music directly impact shopping experience by influencing the purchase needs, overall affective evaluations and financial returns in terms of value of sales, repeat purchase, items purchased, rate of spend, quantity purchased, and gross margin (e.g., Herrington and Capella, 1996; Garlin and Owen, 2006; Oakes and North, 2008). Moreover, background music contributes to creating or enhancing retail and brand images, managing time perception, liking or disliking the store and its assortment, increasing purchase intentions (Areni, 2003; Morin, et.al., 2007).

Most prior work examines music effects as a result of the elicitation and transfer of affects, in line with typical Stimulus-Organism-Response (S-O-R) models that dominate environmental psychology (Mehrabian and Russell, 1974). Music has been found to affect emotional states, especially pleasure and arousal (Garlin and Owen, 2006). In fact, a pleasant music influences more favorable attitudes toward the servicescape and/or the provider (Dube and Morin, 2001), more affective responses to waiting (Oakes, 2003), an increased desire to affiliate and more favorable service outcomes like evaluation, patronage intentions and behaviors (Herrington and Capella, 1996; Hui, et.al., 1997). Whereas an arousing music pushes consumers to carry out their activities more quickly (Caldwell and Hibbert, 2002). Indeed, music enhances varied responses, such as expectations, perceptions, attitudes and quality evaluation, which are processed by cognitive activity (Jain and Bagdare, 2011). For example, variations in tempo and genre affect cognitive processing in terms of quality perceptions and consequently determine intended approach behavior, such as enjoyment of shopping, time spent browsing and exploring, willingness to affiliate, tendency to spend more than anticipated, likelihood of returning to the store, willingness to buy, likelihood of recommending the store (Sweeney and Wyber, 2002).

Among the number of desirable consumers' positive outcomes, patronage is one of the most effective in indicating a proficient long-term relationship; consumers who frequently visit the mall and for longer durations will likely spend more (Yavas and Babakus, 2009). All the atmospheric cues and the retail managers' efforts are aimed at increasing mall patronage (Parsons, 2003; Parsons and Ballantine, 2004). Music has been found to positively affect patronage both through its liking component (Vaccaro, et.al., 2011) and through the simple presence (Garlin and Owen, 2006).

Mall patronage depends on a number of dimensions (e.g. price and promotions, merchandise quality and variety, accessibility) summarized in the concept of mall image (Chebat, et.al., 2010). In fact, a mall with a highly defined image is likely to attract shoppers that may identify themselves with the kind of shoppers that patronize the mall; in other words the concept of self-congruity (Sirgy, 1982). The self-congruity affects patronage; shoppers select cues from a store environment (e.g., music) and infer from these cues the personal characteristics of the typical shoppers. They then compare store/mall image with their own self-images. Thus, the selected cues help shoppers to experience self-congruity. In turn, self-congruity influences consumers attitude and behavior. The greater the fit between the mall image and the consumer self-concept, the more favorable the attitude toward the store. As behavior is consistent with the self-concept, consumers patronize stores that reflect their own images and make them feel comfortable during shopping. Marketing and consumer behavior literatures demonstrate the effects of self-congruity on brand preference, choice, satisfaction, and loyalty (e.g., Sirgy, et.al., 1991, 2000). Despite self-congruity experience affects patronage, there is a lack of research analyzing the relationship between musical cues, self-congruity and patronage intentions. Congruency between the self-concept and the image of the music itself could provide insights in explaining the relationship between musical cues, self-congruity and patronage intentions.

Although previous theoretical patronage models (i.e., Hassan, et.al., 2010; Chebat, et.al., 2010) often recognize an important role for atmospherics and retail environment effects in general, they do not acknowledge a construct representing the extent to which everything seems to work together.

RESEARCH HYPOTHESES AND THE MODEL

Numerous studies have demonstrated the influence of atmospherics on store evaluation, patronage and loyalty (Babin and Attaway, 2000; Grewal, et.al., 2003; Michon, et.al., 2003); when consumers are exposed to an environmental cue that they like, such as background music, they transfer their positive feelings to store evaluation and to in-store behavior (Gorn, 1982). This means that music preference is a valid explanation of the effects of music on behavior; consequently selecting music that fits with the service provider's image is one effective tool to obtain long term benefits (Oakes and North, 2008; Vida, et.al., 2007).

The notoriety feature of the stimulus (music) could increase or decrease the potential to change attitudes or beliefs (Wilson and Shereell, 1993). Indeed, pleasant music, as compared with less pleasant

music, is associated with more favorable service outcomes like evaluation, patronage intentions and behaviors (Caldwell and Hibbert, 2002; North and Hargreaves, 1996). Therefore, it has been hypothesized that:

H1: The more famous the music the stronger the patronage

Studies in music psychology show relevant but not convergent findings on the attentional effects of music (Allan, 2006; Jiang, et.al., 2011; Di Muro and Murray, 2012). While authors agreed on music cognitive effects, they do not agree on the optimal arousal level. On the one hand, some authors (e.g., Chebat, et.al., 2001; Mc Connell and Shore, 2011) have found that the higher the arousal, the deeper the attention; while, on the other hand, others (e.g., Jefferies, et.al., 2008) found opposite results, that is, highly arousing music may hamper information processing and soothing music helps concentration on the task.

Previous research in advertising found that famous endorsers have a higher degree of attention and generate more favorable affective responses than non famous ones; while the ad credibility increases with non famous spokespersons (Pieters, et.al., 2002). Erdogan (1999) found that famous endorsers are more effective in influencing attitude towards the advertisement, brand and purchase intention. However, Mehta (1994) has maintained that there was no significant difference for the concepts of attitude towards advertising, brand, and purchase intention for endorsed brands by celebrities and those endorsed by non-celebrities.

Since music-induced pleasure has been shown to have significant cognitive effects (e.g., Chebat, et.al., 1993; Morin, et.al., 2007), it is hard to say if the effects of soothing music found in the music psychology literature are due to its high pleasure component or to its low arousal component. Mano (1992, 1994) shows that arousal directly influences attention and that an increase in arousal produces a narrowing of attention. When arousal passes this threshold, individuals tend to focus their attention on a more limited number of objects. Sanbonmatsu and Kardes (1988) suggest that highly aroused consumers are more likely to use simpler decision rules because their capacity to process information is reduced. Their findings are generally indicative that high arousal reduces the amount of available processing capacity. Dube and Morin (2001) explore the possibility that music pleasantness does not influence store evaluation through a direct affect transfer but alternatively – or complementarily – by first altering consumer attitudes toward the environment, which then influence consumers' store evaluation.

H2: The more famous the music the higher the affective response and the lower the cognitive activity

Music needs to fit with the image of the store or service provider: consumers perceive more congruent fast loud music in a dance club or a bar, whereas slower, softer music is preferred in health spa (Caldwell and Hibbert, 2002). Fit or consistency will be more effective in positively influencing consumer behavior in stores and servicescapes (Morrison and Beverland, 2003; Oakes and North, 2008). Sirgy et al (2000) maintain that the effects of store environments on retail patronage are mediated by self-congruity. According to them, atmospherics significantly affect retail image and the general context within which consumers decide to patronize. Self-congruity, in fact, operates through a psychological mechanism by which shopper's match their self-concept to the retail patron image. The more appropriate the environmental cue the more effective the influence on consumer behavior. As self- congruity correlates with preferences (Branaghan and Hildebrand, 2011), consumers more favorably patronize stores perceived as congruent with their self-image. Therefore, it has been hypothesized that:

H3: Consumer self-congruity mediates the music effect on patronage.

FIGURE 1
THE MODEL
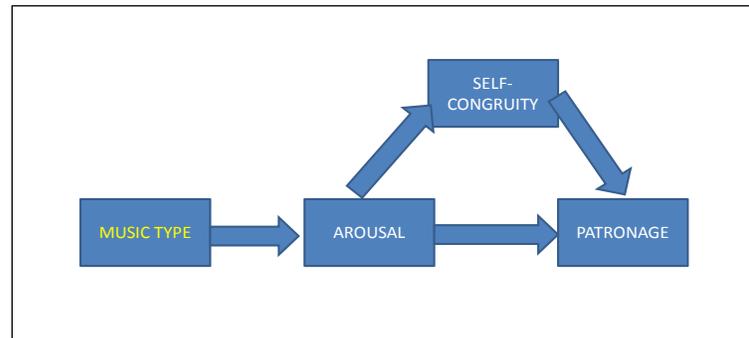
EXPERIMENTAL DESIGN

The proposed model was tested during a mall intercept through background music manipulation in a real shopping context. The experimental design compares famous vs. not famous music conditions. 200 famous and not famous songs selected from a pool by an independent performing right organization formed 2 playlists of 100 tracks for each condition. These original pop and rock songs from the 1970s to 2010 were relatively homogeneous in terms of style and genre; they were global hits across generations according to their performance in the hit charts. The playlists have equal duration, which clearly exceeded the maximum shopping duration of individual customers (that is 90 minutes in Knoferle, et.al., 2011). Both sets of famous vs. non famous music pieces have the same tempo, in order to control for arousal which is related to tempo (Balch and Lewis, 1996; Chebat, et.al., 2001; Husain, et.al., 2002; Kellaris and Kent, 1994). For each playlist half of the songs have BPM values between 85 and 125, 25 songs have BPM values lower than 85 and the rest higher than 125 BPM. The track mood was mild, with neither energetic/aggressive nor ambient/atmospheric peaks. The two playlists were balanced in relation to melody, tone, vocals, instruments, production, and other some specific features such as solos, riffs, grooves, vibratos and crescendos. Due to the algorithm with which the songs were played, each track were performed every 5 hour within the same day in order to avoid/minimize the probability of repeated exposure of any customer to the same song. Moreover, the two playlists were played at the same moderate volume in order to avoid any volume effect (Babin, et.al., 2004).

The experiment was conducted in a large, urban shopping mall in Italy during the openings hours (from 9 a.m. to 8 p.m.). The mall's sound system was used to play the selected songs. Mall management allowed the systematic manipulation of the music in the mall over the course of two weeks in November 2011 in order to avoid season's and bank holidays as well as to minimize the effect of other contextual variables that might influence consumers' perception and attitudes, such as the presence of events and/or promotions within the mall. Managerial constraints limited treatment implementations to 2 days per week. Data were collected in two different waves, the same days, at the same hours, in order to minimize the effects of the circadian rhythms. Trained interviewers invited shoppers to participate in the study. During the experiment, consumers were asked to state their perceptions of the mall's environment. The questionnaire focused on mall image, affective states, mall attitude, consumer profile, and consumers' shopping experience. All scales, primarily drawn from the literature, included multiple items, as respondents were asked to rate their perceptions of the mall and the moods in the shopping environment.

The Positive and Negative Affect Schedule (PANAS) scale was used to investigate the effects of musical cues on consumer emotional responses, instead of PAD (Baker, et.al., 1992; Chebat, et.al., 1993; Yalch and Spangenberg, 1990), since it is a finer-grained measure of affective response. As regards the mall atmosphere, interviewees were asked to assess their perception of the mall atmosphere, using the Chebat et al. (2010) adaptation of Ailawadi and Keller (2004). The mall patronage was measured through

a two 7-point scale in response to the question: "How do you often come to the mall X?" (Chebat et al. 2010) and finally the self-congruity was measured through Sirgy et al. (1997) scale.

Music notoriety, which indicates the hit/non hit status was manipulated. These musical excerpts were controlled in tempo, which is related to the music arousing properties, and pretested in terms of familiarity, which measures the exposure, tempo, which is related to the music arousing properties, and notoriety, which indicates the hit/non hit status. 20 graduate and undergraduate students were exposed to the two different playlists, asking them whether they recognize or not the music. As a result, the notoriety of the music (F = 11.401; p = .003) was positive for the famous playlist (M = 4.3) and negative for the not famous one (M = - 4.8).

304 consumers participated in the study after their shopping and were willing to complete the questionnaire. The sample has an average age of 39.5 years (SD = 1.49) and is composed of 55.9% females, over 75% with at least a high school level of education, and about 45% employed.

FINDINGS

In order to verify the effects of famous music on consumer patronage, as stated in H1, we proposed PANAS factors (negative feelings, pleasure and arousal) as mediators, because we hypothesized that consumer affective states should explain the psychological mechanism through which music notoriety affects patronage intentions. Mediation analysis results are shown in the tables.

First of all (table 1) music significantly affects only two of the proposed mediators: pleasure (p < .01) and only marginally arousal (p < .10), but not the negative feelings (p = .18). Music variation in notoriety does not influence the negative affect; maybe because the kind of music we chose for the experiment is generally used for commercial settings, therefore it is appropriate for the mall environment too. On the contrary music variation in notoriety significantly affects the positive affective states: our findings suggest that when consumers listen to a famous music during their shopping activity feel less pleasure as compared to a not-famous music (β = -1.04, p < .01). This could be due to the overexposure effect that leads to a decrease in positive feelings. What is important to observe is that consumers are significantly more aroused because of the famous music effect (β = .20, p < .10), due to the recognition effect and to the memories associated to the famous musical tracks.

All affective states significantly influence mall patronage (table 2), suggesting that consumers' intention to return to the mall is strictly related to their feeling during shopping activity. Consumers' negative moods (β= -.57, p < .01), whether or not music induced, reflect on their intention to not return to the mall for their future purchases, the more the negative affect the less the likelihood consumers will return to the mall. Arousal exerts a positive influence on patronage (β= .29, p < .05), even though with a lesser intensity than pleasure (β = .55, p < .01). In fact when consumers are in a positive mood as excitement or pleasure, the likelihood they will return to the mall is strengthened.

The total and direct effect (table 3) of music notoriety on mall patronage has a positive sign (β= .09, p = .65). This means that consumers' desire to return to the mall for their future purchases could be enhanced by famous music that makes the atmosphere more comfortable and pleasant. However the coefficient is not significant. This means that the music effect is not enough to explain the mechanism that leads individuals to come back to the same mall, since the direct relation between background music and patronage has not been verified. However the c' prime path is significant suggesting that the mediation successfully occurred. Music has an effect on store patronage only through positive feelings. Consistently with Zhao et al (2010), pleasure proves to be a mediator (Table 4): when background music enhances positive states, mall patronage is strengthened. The negative sign (β= -.5754, p < .01) suggests that a competitive mediation occurs, that is, additional mediators should be involved. Famous music contributes to enhancing the consumer likelihood of patronizing the mall when it is perceived as pleasant. Therefore, H1 is partially verified.

Focusing on the effect of music notoriety on affective states and cognitions, music does not significantly stimulate negative feelings (p = .18). Since music in both conditions is perceived as not irritating and annoying, it is likely to be perceived as congruent with the mall atmosphere. Music

notoriety was found to significantly influence the pleasure and the arousal level; in particular the more the notoriety, the less the pleasure (β = - 1.04, p < .01) and the stronger the arousal (β = 0.20, p < .10). Famous music activates consumers during their browsing into the mall, while not famous music makes more comfortable and pleasant their stay. Specifically, famous music proves to be more arousing than not famous one, which has been ranked as relaxing and calming.

The notoriety of the music is reasoned to be playing a stimulating role on cognitive activity. ANOVA shows that not famous music proves to foster cognitive activity more than the famous music (F = 16.899; p = .004). Consistently with the literature on the attentional effects of music, consumers under the famous music condition proved to be distracted by the music they recognized, while under the non-famous condition they were more relaxed and concentrated on their shopping tasks, thus confirming H2.

Finally, we were expecting a mediation role of self-congruity on patronage since a perceived congruity between the individual self-image and the mall image is more likely to attract customers and keep them as patrons. However, the findings do not result as significant as a mediator. On the other hand self-congruity by itself affects mall patronage (β = .703, p < .05). This means that consumers do not identify themselves with the mall from the music, maybe because of the different type of shopping, due to the great variety of product sold, grocery and household products with apparel stores, and the mall image where the experiment took place that in turn could be function of the type of stores in the mall and the consumers' shopping style. However self-congruity effect on patronage is neither a music-induced effect nor a mediation one. H3 is not verified.

TABLE 1
EFFECTS OF MUSIC ON PANAS 1, 2 AND 3 (A PATHS)

	COEFF	SE	T	P
NEGATIVE FEELINGS	-.1151	.0861	-1.3367	.1823
PLEASURE	-1.0382	.0844	-12.3021	.0000
AROUSAL	.2013	.1052	1.9141	.0565

TABLE 2
DIRECT EFFECTS OF PANAS ON PATRONAGE (B PATHS)

	COEFF	SE	T	P
NEGATIVE FEELINGS	-.5714	.1297	- 4.4056	.0000
PLEASURE	.5543	.1378	4.0222	.0001
AROUSAL	.2979	.1230	2.4209	.0161

TABLE 3
TOTAL EFFECT OF IV ON DV (C PATH)

	COEFF	SE	T	P
CONDITION	.0888	.1958	.4537	.6504

TABLE 4
DIRECT EFFECT OF IV ON DV (C-PRIME PATH)

	COEFF	SE	T	P
CONDITION	.5385	.2310	2.3314	.0204

TABLE 5
INDIRECT EFFECTS THROUGH PROPOSED MEDIATORS (AB PATHS)

	EFFECT	SE	Z	P
TOTAL	-.4497	.1829	-2.4581	.0140
NEGATIVE FEELINGS	.0658	.0513	1.2818	.1999
PLEASURE	-.5754	.1496	- 3.8467	.0001
AROUSAL	.0600	.0398	1.5069	.1318

TABLE 6
BOOTSTRAP RESULTS FOR INDIRECT EFFECTS

	DATA	BOOT	BIAS	SE
TOTAL	-.4497	-.4538	-.0041	.1902
NEGATIVE FEELINGS	.0658	.0668	.0010	.0544
PLEASURE	-.5754	-.5787	-.0033	.1626
AROUSAL	.0600	.0581	-.0018	.0398

CONCLUSION

Background music effect on consumers mall patronage has been demonstrated. Music has proven to be an effective tool to make consumer return to the mall for new purchases because of its effect on pleasure. Music notoriety proves to have both positive and negative effects on shoppers. Famous music increases arousal, while not famous music increases pleasure.

This study provides several managerial implications. The role of atmospherics has an increasingly intuitive appeal for management to generate positive emotions and positive patronage intentions. The choice of the right level of music notoriety should be made as the reflection of the retailers' strategic objectives. Should they want shoppers to pay attention to their promotion and process the information, non-famous music is the appropriate choice. Should they want shoppers to make impulse buying through emotional reaction to music, famous music should be the appropriate choice.

One research limitation is due to the relationships between background music and other elements of atmospherics. Therefore the results provide ground for more research focusing on the interactive effects of music with other atmospheric variables such as color and scent, thus providing a more solid theoretical foundation for managerial decision-making by retailers.

Moderators in the relationship between atmospherics and patronage intentions should be added too, for example results could be analyzed according to specific consumer shopping style or to the involvement with products purchased, or better music notoriety could be analyzed according to the branding, especially in the matching of music notoriety and brand notoriety.

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