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ADVANCES IN GLOBAL SERVICES AND RETAIL MANAGEMENT

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From Home to the Store: Combined Effects of Music and Traffic on Consumers' Shopping Behavior

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Abstract

This study provides a theoretical framework to assess the combined effect that traffic stream and music could have on consumers' shopping behavior throughout their journey to the stores. Through the Virtual Reality (VR) simulation of a car journey, two traffic conditions (light/heavy) and two types of music (relaxing/energizing) were tested, evaluating the effects on the time spent during shopping and on consumption choices (in terms of expense, number of items purchased). Moreover, participants' physiological reactions have been analyzed by measuring their heartbeat variation (ΔHR). The results indicate that regardless of the type of music listened, heavy traffic leads consumers to spend more time in the store and to buy more products, increasing overall spending. The same effect is determined by relaxing music, regardless of the traffic encountered during the trip to the store. Finally, the most evident result on the heartbeat is given by the music, which going from relaxing to energizing, increases the hearth frequency, regardless of the traffic.

Keywords: shopping trip, atmospherics, music, traffic, consumer behavior

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Introduction

From the early 1990s to present, a number of studies have investigated the issue of environmental effect upon consumer attitudes and behavior. For example, it was highlighted that "the proximate environment that surrounds the retail shopper is never neutral" (Markin et al., 1976, p. 43). Hui et al. (2009) have studied both the path that consumers take to move around when they are in a store and the areas in which they spend most of their time. From this research, companies have comprehended how to strategically position products within the store. Broadening the perspective, the effects of "preshopping" factors, such as the shoppers' overall trip goals, the store-specific shopping objectives, and the prior marketing exposures, are unexplored (Bell et al., 2011). These factors act upon shoppers before they enter the store. Therefore, traffic around the store and music listened to before entering the store could be considered preshopping factors. Little research has been conducted to understand the role of these factors in the paths that the consumer takes to reach the point of sale (Bell et al., 2011; Hu and Saleh, 2005; Li et al., 2020).

Similarly, the use of background music in retail stores is considered atmospherics, a stimulus capable of influencing the shopping experience of consumers by modifying their needs and emotional evaluations (Herrington and Capella, 1994; Jain and Bagdare, 2011). Indeed, some

authors have highlighted the impact of the music on shopping experience, showing the capability to improve consumers' cognitive, affective, and behaviorial responses (Bruner, 1990; Oakes and North, 2008; Jain and Bagdare, 2011). Furthermore, in recent years, the structural elements of music such as genre, tempo, volume, and harmony have been thoroughly analyzed. These elements, properly manipulated, can change not only the image of the store but also the behavior and satisfaction of consumers (Oakes, 2000; Areni, 2003; Morin et al., 2007).

Although multiple research have been conducted to evaluate the role of music within the store, to the best of our knowledge, no research has yet analyzed how music that consumer listen to when going from their home to the store could impact their purchasing choices. Since music is able to modify the emotional state, it is reasonable to think that if the consumer listens to music during his journey, upon arrival he will have a very specific emotional state. This research aims to assess the combined effect that traffic stream and music could have on consumers' shopping behavior during their journey to the store. This would allow the identification of new strategies capable of improving consumer shopping experiences.

Hypotheses Development

Some authors have considered the means of transport and the traffic as variables that could influence shopping behavior. They showed that, contrary to the availability of parking space, traffic congestions do not influence the choice to shop (Hu and Saleh, 2005). Furthermore, when choosing a shop, consumers make a cost assessment based on the opportunity to access the point of sale (perceived cost / opportunity) (Zeithaml, 1981). Among these, a non-monetary cost is given by the time consumers taken to reach the point of sale, which increases as traffic intensifies. Traffic is considered *heavy* when it significantly increases the duration of the journey from the home to the store. On the contrary, it is considered *light* when the duration of the journey is determined exclusively by the road regulations and the characteristics of the route, such as maximum reachable speed, presence of traffic lights, or road signs (Daganzo, 2008). The consumer is willing to bear a high non-monetary cost, such as travel time, when the store offers multi-purpose shopping and one-stop shopping service (Kaufman-Scarborough and Lindquist, 2003) i.e., the opportunity of purchasing large quantities and varieties of products in a single shopping experience. Therefore, the amount of monetary and above all non-monetary costs are justified by the benefits deriving from the store choice. Consequently, perceived value is based on an evaluation of benefit and sacrifice (Zeithaml, 1988). In conclusion, in order to reduce the costs of multiple trips, consumers could purchase larger quantities of products. Furthermore, prompted by the retailer with suggestions on purchasing choices, consumers would persevere shopping by searching for additional products.

Another line of research has considered music as a variable capable of emotionally affecting individuals (Sloboda, 1991), modifying their psychological state (Donovan, et. Al., 1994; Oakes, 2000) and, therefore, their shopping behavior (Areni and Kim, 1993; Mattilla and Wirtz, 2001; Petruzzellis et al., 2014). Several studies (North and Hargreaves, 1999; Sloboda, 1984; Vink, 2001) have shown that music, and sounds in general, are involved in many cognitive and perceptive processes thanks to the high communicative component they are endowed with. Music has feedback on consumers' physiological state, as it can modify their heart rate, blood pressure, and skin conductance (Sammler et al., 2007; Witvliet and Vrana, 2007). As literature on atmospherics

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has largely demonstrated that music is a variable capable of influencing purchase choices, it is possible to hypothesize that music can have similar effects even outside the store.

For example, Areni and Kim (1993) have shown that classical music (understood as highly cultural) leads consumers to spend more than other types of (modern) music. However, a more specific assessment of music in terms of emotional and cognitive effects on the consumer was considered. Physiologically, intense emotions are determined by the level of arousal, intended as the general level of excitement (Rickard, 2004). Although classical music is perceived as a variable with an important artistic component (Areni and Kim, 1993), the physical dimension made up of volume, pitch, rhythm, and time is crucial. For example, Mattilla and Wirtz (2001) tested two different audio stimuli, one with a fast tempo and a second with a slow tempo. Results show that fast tempo has an energizing effect on consumers, while slow tempo has a relaxing effect, with a high and low arousal impact respectively. Other authors (e.g. Dubè et al., 1995) show that the music-induced pleasure and arousal have and independent effects on consumers' willingness to a buyer-seller interaction. Finally, Vanderark and Ely (1993) showed that music with a high tempo and rhythmic content led to increasing consumers' excitement. Similarly, heavy traffic could bring the consumer into a state of intense arousal. However, the effect of music is more intense than traffic. In fact, North and Hargreaves (1997) demonstrate that in heavy traffic drivers turn down the radio volume. This because loud arousing music requires greater processing demands.

Based on what has been described so far, we assume that:

- **H1**. Regardless of the type of music listened to (relaxing / energizing), a journey to the point of sale characterized by heavy traffic conditions involves an overall expense, a number of items, and a longer shopping time for a consumer than a journey characterized by conditions of light traffic. In addition, heavy traffic leads to an increase in arousal.
- **H2.** Regardless of the traffic conditions (light / heavy), relaxing music listened to on the way to the store leads to an increase in the overall expenditure, the number of items, and the consumer's shopping time, compared to energizing music. In addition, relaxing music reduces arousal.

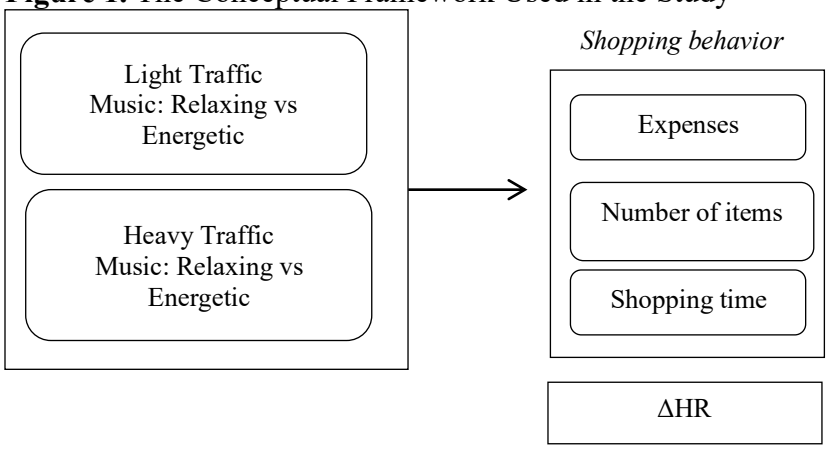
Methodology

To test the conceptual framework proposed in Figure 1, a *between-subject* study was carried out considering traffic (heavy / light) and music (relaxing / energizing) as factors, and total expenses, number of products purchased, and time spent to choose products as dependent variables. In order to measure the level of participants' arousal, their heart rate variation was evaluated using the Heart Rate Variation (ΔHR) given by the difference between the final heart rate (HR_F) and the initial heart rate (HR_I):

$$\Delta HR = HR_F - HR_I \quad (1)$$

The value obtained with equation (1) can be considered to evaluate arousal (Karageorghis et al., 2006). Physiologically, intense emotions are determined by the level of individuals' arousal, differentiating them from normal emotions (Rickard, 2004).

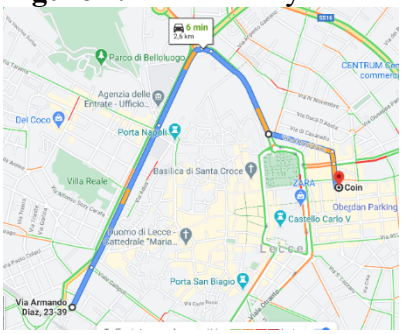
Figure 1. The Conceptual Framework Used in the Study



Stimuli

Using a video camera capable of recording in 360° mode (Virtual Reality, VR) two videos were prepared. Both videos showed the view of a consumer driving his car for 1.6 mi (2.6 km) in an Italian city. The route leads from a city square to a shopping center and represents a typical route taken from a residential area to a shopping area, where several stores and retailers are located (Figure 2).

Figure 2. The Itinerary Rom a Residential Area to a Shopping Area



Weather conditions and other environmental parameters remained constant in both videos. The two videos only differ for the traffic conditions – heavy and light – experienced during the route taken to reach the point of sale (Elefteriadou, 2014; Hu and Saleh, 2005). The first video, with a duration of 5 minutes and 49 seconds (with an average speed of 17.36 mi/h), showed the route with light traffic (see Figure 3). The second video, lasting 7 minutes and 54 seconds (with an average speed of 11.65 mi/h), showed the route with heavy traffic (see Figure 4). The first video was recorded around 1 pm when the number of means of transport in circulation is greater due to the presence of schools, companies, and small shops that attract a large number of people during school and work breaks, on the route. The second video, on the other hand, was recorded a few minutes later, around 1.30 pm, when the flow of cars and other vehicles was almost nil. Finally, a 2-minute video was considered to stabilize the mood (Myrick, 2015). Wearing a VR headset, participants were able to observe the route from the driver's point of view.

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Figure 3. The Itinerary From the Home to the Store With Light Traffic

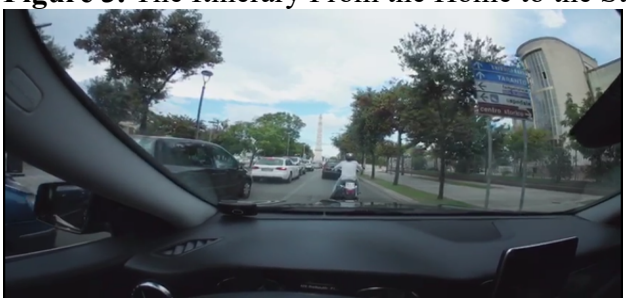
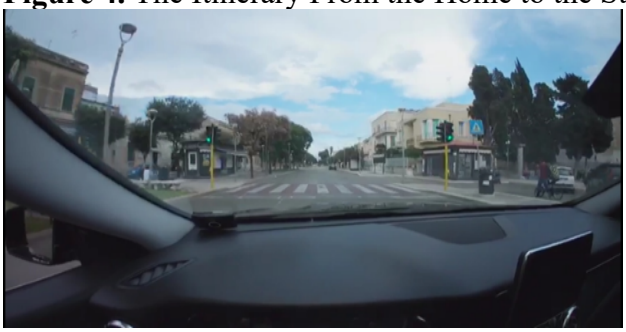


Figure 4. The Itinerary From the Home to the Store With Light Traffic



After, the audio stimuli were prepared. To reduce bias due to musical style and subjective preferences, classical music was used. The melodies were selected from Elizabeth Miles' "Tune your brain" audio playlist (Mattila and Wirtz, 2001). Two sets of musical pieces were tested. The first group – Relaxing – contained low-arousal music with a slow tempo. The second group – Energizing – consisted of high-excitement tracks, with a fast tempo. In order to match the duration of the audio stimulus with the duration of the video stimulus, a total of four audio stimuli were prepared. Two audio stimuli lasting 5 minutes and 49 seconds containing respectively tracks from the Relaxing set and tracks from the Energizing set. In the same way, two audio stimuli lasting 7 minutes and 54 seconds were prepared drawn from the two sets of tracks.

Measures

A questionnaire consisting of a list of convenience products, usually available in common supermarkets, was administered to evaluate consumers' shopping behavior after the audio-visual stimulation. The products were classified into two macro categories: food and beverage goods, and home and hygiene goods. For each product a price has been indicated in Euros (€). This price was calculated by averaging the prices applied to the product by 6 different stores present in the area. Participants were asked to consider the need to do their usual shopping for the week. They were then asked to indicate which and how many products they would purchase (Garlin and Owen, 2006). The response time to the questionnaire was measured for each respondent (Donovan et al., 1994; Garlin and Owen, 2006). Finally, the usual socio-demographic data were collected.

Sample

Expert interviewers involved 124 participants randomly selected from students with 2 free hours or adults with free time, all with valid driving licenses. The experimentation took place for two weeks from 12 a.m. to 2 p.m. near a university campus. The interviewers intercepted possible

respondents and, after explaining the experimental procedure, invited them to participate in the experiment. In order to protect consumers' anonymity and reduce evaluation apprehension (Podsakoff et al., 2003), the questionnaire assured participants that their responses would remain anonymous and that there were no right or wrong answers.

The sample consisted of 62 men and 62 women aged between 19 y.o. and 59 y.o. (M = 35.2; SD = 13.2). 54.3% of the sample was made up of students, and 45.7% of workers (self-employed, professional employees, entrepreneurs). The sample was normally distributed according to income: 31.9% with an income of less than € 20,000; 43.35% with an income between € 20,000 and € 50,000; 10.4% with an income between € 50,000 and € 100,000; and 1.5% with an income exceeding € 100,000.

Procedure

The experimental procedure consisted of several stages. In the first step, each participant who respected the characteristics described above was invited to sit on a chair positioned in an atrium of a university campus. In the second step, they were asked to wear the VR headset, wireless headphones for listening to the audio stimuli, and a digital clock capable of measuring and recording the heartbeat. In a third step, before starting the test, the video stimulus was shown to stabilize the mood (Myrick, 2015). In the fourth step, the recording of the heartbeat was performed. Each participant was randomly assigned to one of the two videos (heavy traffic or light traffic) and to one of the music pieces (energizing or relaxing). In the fifth step, at the end of the visualization of the video, the heartbeat was recorded again, and the questionnaire was administered.

Data Analysis

The collected data was analyzed using the SPSS software. Total expense (Expenses) was calculated by making the product between the number of units purchased of each product and the relative price. Considering traffic (heavy / light) and music (relaxing / energizing) as factors, four groups of data were encoded and analyzed. To verify the relationship between the variables taken into account, a multivariate analysis of variance (MANOVA) was conducted.

Findings

Analyzing the traffic as the first variable (Table 1), it can be observed that in both musical conditions, heavy traffic leads consumers to have higher overall expenses (M = 54.34 € in Relaxing condition and M = 47.74 € in Energizing condition) than in the light traffic condition (M = 50.45 € in Relaxing condition and M = 42.85 € in Energizing condition). Moreover, consumers tend to purchase a higher number of items passing from M = 20.67 in Relaxing condition and M = 17.68 in Energizing condition) to M = 22.91 in “Relaxing” condition and M = 20.39 in Energizing condition). In addition, the time spent on choosing products increases of ΔM = +40.56 sec in Relaxing condition and of ΔM = +38.17 sec. Finally, ΔHR does not appear to be significantly influenced ($p > .05$) by the traffic conditions for the same type of music that consumers listened to. Therefore, H1 can be partially confirmed.

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Table 1. Expenses, N° Items, Time and ΔHR in Different Traffic Conditions Light / Heavy and Under Each Music Stimulus Relaxing / Energizing

Music	**Relaxing**						**Energizing**					
Traffic	***Light***		***Heavy***		***MANOVA***		***Light***		***Heavy***		***MANOVA***	
	M	***SD***	***M***	***SD***	η^2	***p***	***M***	***SD***	***M***	***SD***	η^2	***p***
Expenses (€)	50.45	17.69	54.34	11.11	.03	*.02*	42.85	18.83	47.74	17.69	.20	*.04*
N° Items	20.67	6.34	22.91	3.86	.09	*.05*	17.68	7.54	20.39	6.26	.01	*.03*
Time (sec)	140.89	58.82	181.45	62.18	.23	*.01*	144.60	51.14	182.77	54.15	.12	*.02*
ΔHR(Bpm)	–14.67	16.01	–14.81	13.83	.12	.38	21.06	14.46	18.46	19.54	.26	.28

On the other hand, by evaluating the differences defined by the music listened to in particular traffic conditions (Table 2), it is possible to state that in both traffic conditions light / heavy, relaxing music increases the total expenses from 42.85 € and 47.74 € to 50.45 € and 54.34 € respectively. Also the N° of items purchased increase from 17.68 and 20.39 to 20.67 and 22.91 respectively.

However, the duration of the shopping time shows ambiguous and significantly borderline results. If the traffic is heavy, relaxing music increases the duration of shopping time (from 132.77 sec to 181.45 sec, $p = .05$), whereas, in light traffic conditions the energizing music increases the duration of the shopping time (from 144.60 sec to 140.45 sec), but this last result is not significant ($p > .05$). Finally, relaxing music also significantly reduces the consumers' heart rate in both traffic conditions. Therefore, H2 is confirmed (Table 2).

Table 2. Expenses, N° Items, Time and ΔHR in Different Music Stimulus Conditions Relaxing / Energizing and in Each Traffic Conditions Light /Heavy

Traffic	**Light**						**Heavy**					
Music	***Relaxing***		***Energizing***		***MANOVA***		***Relaxing***		***Energizing***		***MANOVA***	
	M	***SD***	***M***	***SD***	η^2	***p***	***M***	***SD***	***M***	***SD***	η^2	***p***
Expenses (€)	50.45	17.69	42.85	18.83	.04	*.00*	54.34	11.11	47.74	17.69	.02	*.01*
N° Items	20.67	6.34	17.68	7.54	.01	*.01*	22.91	3.86	20.39	6.26	.05	*.02*
Time (sec)	140.89	58.82	144.60	51.14	.23	.06	181.45	62.18	132.77	54.15	.22	*.05*
ΔHR(Bpm)	–14.67	16.01	21.06	14.46	.17	*.00*	–14.81	13.83	18.46	19.54	.29	*.00*

Discussion and Conclusions

The music listened by the consumer during the journey (for example in the car) is not a variable that the retailer can control, even though it influences the consumer's choices. Consequently, it is necessary to acquire more information on traffic. The results have some practical and managerial implications. Each retailer should perform an analysis on the average arrival times at the store, starting from various strategic points of the environment, at a different time of the day. In this way, the retailer is able to know which traffic conditions consumers were subjected to before entering the store. Therefore, knowing that in conditions of heavy traffic, both the expense, the number of items, and the average shopping time are higher than in light traffic conditions, regardless of the type of music listened to by the consumer, the retailer could activate proximity communication. Therefore, if the predisposition to greater purchases is conditioned by heavy traffic, it is assumed that the consumer has a greater openness to seeking information before purchasing. Accordingly, a communication from the retailer carried out near the store is considered positively.

In particular, in conditions of heavy traffic, the retailer could involve consumers during their expeditions and when they are approaching the store, for example through Location-Based Advertising (LBM) strategies activated by the Bluetooth Beacon on the mobile device (Shankar et al., 2016). In fact, by using the geolocalization of consumers, marketers have the opportunity to

access interesting opportunities activated by LBM strategies and, therefore, to carry out marketing actions in real-time. Thus, through the LBM, consumers avoid being indiscriminately exposed to unnecessary marketing stimuli, obtaining only those based on maximum proximity (Shankar et al., 2016). Furthermore, the high level of arousal connected to heavy traffic leads the consumer to grant the retailer permission to transfer mobile push communication through specific apps.

Among the limitations of this study, it is possible to specify that the effects of monetary costs such as the cost of parking and congestion charging were not considered (Schmocker et al., 2006). Another limitation of the research consists in not taking into account online shopping as an alternative to the offline shopping trip in heavy traffic condition (identifiable, for example, through some mobile *apps*). Since online and offline prices are similar (Cavallo, 2017), in heavy traffic condition, consumers could prefer the online shopping. Consequently, online shopping reduces the traffic congestion (Peng, 2019).

Future studies could consider other behavioral variables such as compulsive shopping. Compulsive shopping could be studied as a potential determinant of purchasing behavior in heavy traffic conditions. Finally, in order to better interpret the ΔHR data, skin conductance could be measured to evaluate the degree of activation, and, therefore, the level of arousal.

References

Areni, C. S. and Kim, D. (1993). The influence of background music on shopping behavior: Classical versus top-forty music in a wine store. *Advances in Consumer Research*, 20, 336–340.

Areni, C. S. (2003). Exploring managers' implicit theories of atmospheric music: comparing academic analysis to industry insight. *Journal of Services Marketing*, 17(2/3), 161–84.

Bell, D. R., Corsten, D. and Knox, G. (2011). From Point of Purchase to Path to Purchase: How Preshopping Factors Drive Unplanned Buying. *Journal of Marketing*, 75, 31–45.

Bruner, G. C. (1990). Music, mood, and marketing. *Journal of Marketing*, 5(4), 94–104.

Cavallo, A. (2017). Are Online and Offline Prices Similar? Evidence from Large Multi-channelRetailers. American Economic Review, 107(1), 283–303.

Daganzo, C. F. (2008). *Fundamentals of Transportation and Traffic Operations*. Emerald Group Publishing Limited, UK.

Donovan, R. J., Rossiter, J. R., Marcoolyn, G. and Nesdale, A. (1994). Store atmosphere and purchasing behavior. *Journal of Retailing*, 70(3), 283–94.

Dubé, L., Chebat, J. C. and Moris, S (1995). The Effects of Background Music on Consumers' Desire to Affiliate in Buyer-Seller Interactions. *Psychology and Marketing*, 12, 305–319.

Elefteriadou, L. (2014). *An Introduction to Traffic Flow Theory*. Springer: New York.

Garlin, F. and Owen, C. (2006). Setting the tone with the tune: A meta-analytic review of the effects of background music in retail settings. *Journal of Business Research*, 59(6), 755–764.

Herrington, J. D. and Capella, L. M. (1994). Practical applications of music in service settings. *Journal of Services Marketing*, 8(3), 50–65.

Hu, S. and Saleh, W., (2005). Impacts of congestion charging on shopping trips in Edinburgh. *Transport Policy*, 12(5), 443–450.

Hui, S. K., Bradlow, E. T. and Fader, P. S. (2009). Testing behavioral hypotheses using an integrated model of grocery store shopping path and purchase behavior. *Journal of Consumer Research*, 36(3), 478.

Jain, R. and Bagdare S. (2011). Music and consumption experience: A review. *International Journal of Retail & Distribution Management*, 39(4), 289–302.

Karageorghis, C. I., Jones, L. and Low, D. C. (2006). Relationship between Exercise Heart Rate and Music Tempo Preference. *Research Quarterly for Exercise and Sport*, 77(2), 240–50.

Kaufman-Scarborough, C. and Lindquist, J. (2003), "Understanding the experience of time scarcity", Time and Society, Vol. 12 Nos 2/3, pp. 349-70.

https://digitalcommons.usf.edu/m3publishing/vol5/iss2021/49
DOI: https://www.doi.org/10.5038/9781955833035

Li, P. Zhao, P. and Schwanen, T. (2020). Effect of land use on shopping trips in station areas: Examining sensitivity to scale. *Transportation Research Part A: Policy and Practice*, 132(2020), 969–985.
Markin. R. J., Lillis. C. M. and Narayana C. L. (1976). Social-psychological significance of store space. *Journal of Retailing*, 52(Spring), 43–54.
Mattila, A. and Wirtz, J. (2001). Congruency of scent and music as a driver of in-store evaluations and behavior. *Journal of Retailing*, 77(2), 273–289.
Myrick, J. G. (2015). Emotion regulation, procrastination, and watching cat videos online: Who watches Internet cats, why, and to what effect? *Computers in Human Behavior*, 52, 168–176.
Morin, S., Dube, L. and Chebat, J-C. (2007). The role of pleasant music in servicescapes: a test of the dual model of environmental perception. *Journal of Retailing*, 83(1), 115–30.
North, A. and Hargreaves D. (1997). Experimental aesthetics and everyday music listening D.J. Hargreaves, A.C. North (Eds.), *The social psychology of music*, Oxford University Press, Oxford, UK.
North, A. C. and Hargreaves, D. J. (1999). Music and adolescent identity. *Music education research*, 1(1), 75–92.
Oakes, S. (2000). The influence of the musicscape within service environments. *Journal of Services Marketing*, 14(7), 539–556.
Oakes, S. (2007). Evaluating empirical research into music in advertising: a congruity perspective. *Journal of Advertising Research*, 47(1), 38–50.
Oakes, S. and North, A. C. (2008). Reviewing congruity effects in the service environment musicscape. *International Journal of Service Industry Management*, 19(1), 63–82.
Peng, C. (2019). Does E-Commerce Reduce Traffic Congestion? Evidence from Alibaba Single Day Shopping Event. *Centre for Economic Performance*, CEP Discussion Paper No 1646 August 2019.
Petruzzellis, L., Chebat, J.-C. and Palumbo, A. (2014). 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. *Journal of Marketing Development and Competitiveness*, 8(2), 38–49.
Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 885(879), 1000–1037.
Rickard, N. S. (2004). Intense Emotional Responses to Music: A Test of the Physiological Arousal Hypothesis. *Psychology of Music*, 32(4), 371–388.
Sammler, D., Grigutsch, M., Fritz, T. and Koelsch, S. (2007). Music and emotion: Electrophysiological correlates of the processing of pleasant and unpleasant music. *Psychophysiology*, 44(2), 293–304.
Schmocker, J.-D., Fonzone, A., Quddus, M., and Bell, M. G. H. (2006). Changes in the frequency of shopping trips in response to a congestion charge. *Transport Policy*, 13(3), 217–228.
Shankar, V., Kleijnen, M., Ramanathan, S., Rizley, R., Holland, S. and Morrissey, S. (2016). Mobile shopper marketing: Key issues, current insights, and future research avenues. *Journal of Interactive Marketing*, 34, 37–47.
Sloboda, J. A. (1984). Experimental studies of music reading: A review. *Music Perception,* 22(2), 222–236.
Sloboda, J. A. (1991). Music structure and emotional response: Some empirical findings. *Psychology of Music*, 19(2), 110–120.
Vanderark, S. D. and Ely D.(1993). Cortisal, Biochemical, and Galvanic Skin Responses to Musical Stimuli of Different Preference Value by College Students in Biology and Music. *Perceptual Motor Skills*, 77, 227–34.
Vink, A., (2001). Music and emotion: Living apart together: A relationship between music psychology and music therapy. *Nordic Journal of Music Therapy*, 10(2), 144–158.
Witvliet, C. and Vrana, S. (2007). Play it again Sam: Repeated exposure to emotionally evocative music polarises liking and smiling responses, and influences other affective reports, facial EMG, and heart rate. *Cognition and Emotion*, 21(1), 3–25.
Zeithaml, V. A. (1981). How consumer evaluation processes differ between goods and services. In Donnelly, J. and George, W. (Eds.) *Marketing of Services*, Chicago: American Marketing.
Zeithaml, V.A. (1988), "Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence", Journal of Marketing, Vol. 52, pp. 2-22.