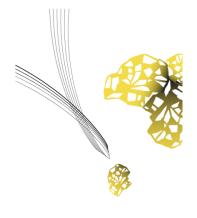
Master Thesis

The influence of music tempo and occupancy rate on alcohol consumption, time spent and money spent in restaurants



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Two years ago, I made the decision to start with the pre-master program of Communication Science and am glad that I made this decision. The completion of this thesis was the final step to my master degree in Marketing Communication after two years of academic studies at the University of Twente. I had a great experience at the University of Twente and the time and energy invested was really worth it. This research is special to me because the subject ''consumer behavior'' has always fascinated me. During my job in a restaurant in the past eleven years, I deal with different types of people and experienced that music definitely has an influences on consumer behavior. In the restaurant, tempo of music influences people and therefore people react with a positive feeling. They stay longer in the restaurant, consume more beverages when the background music was present. The goal of this research was to validate this assumption.

In the past two years, I learnt a lot during my education. My education has shaped me into a person who thinks further when other people would stop thinking. I want to thank my family and friends who helped me during the study by motivating me to accomplish it with success. I would also like to thank my supervisors for their helpful feedback, flexibility and constant interest in my work. Finally, my special thanks to my brother who gave me the opportunity to gather data for this study in his restaurant. With his help, I had the opportunity to gather data and ask visitors of the restaurant to participate in this research.

ABSTRACT

The role of music in marketing and consumer behavior has been addressed in education, psychology, communication, and other fields to determine its effects on behavior, mood, and preferences (Alpert & Alpert, 1991). Music is known to influence people's behavior, particularly consumer's behavior. Several experimental studies showed that different music and structural components of the music (sound, level, tempo, tonality) affected consumer's behavior (Gueguen, Jacob, Lourel & Le Guellec, 2007). The present study, contributes to a further understanding of the effect of music tempo and occupancy rate on consumer behavior in restaurants.

This study was done in a Greek restaurant in Steenwijk. Participants were observed in a real-life setting and were asked to complete a questionnaire to gather information about their behavior regarding alcohol consumption, time spent and money spent in the restaurant. We also had an observation checklist in the restaurant to register entry and exit time of participants. When leaving the restaurant, the participants were asked to fill in a questionnaire. With the questionnaires, the participants were asked about their emotions in the environment and to evaluate the environment in an anonymous manner. Two music conditions were compared: slow music condition and fast music condition. The occupancy rate (crowding) in the restaurant was also investigated to gather information about the influence of this factor on consumer behavior. The two conditions for occupancy rate were compared: high occupancy rate and low occupancy rate.

The results revealed no significant evidence that music tempo or occupancy rate has an influence on the total time spent in the restaurant by participants. However, an interaction effect has been found between these two factors. Analyses showed that people spent more time in a restaurant when fast tempo music was played during crowded condition, than when fast tempo music was played in a quiet restaurant.

The results regarding alcohol consumption revealed no significant evidence that music tempo or occupancy rate has an influence on the alcohol consumption in the restaurant by participants. Again, an interaction effect has been found between these two factors. Analyses showed that people consume more alcohol in a restaurant when fast tempo music was played during crowded conditions, than when fast tempo music was played in a quiet restaurant.

Results relating to money spent in the restaurant revealed no significant evidence that music tempo or occupancy rate has an influence on the money spent in the restaurant by participants. However, an interaction effect has been found between these two factors. Analyses showed that people stay longer in the restaurant when fast tempo music was played in the restaurant during crowded conditions, than when fast tempo music was played in a quiet restaurant.

In summary, it can be concluded that when two factors (fast music tempo and high density) are congruent with each other, there will be an effect on the consumer behavior in the restaurant. This study found evidence about people consuming more alcohol, spending more time and money in the restaurant when there was fast music played and the environment was crowded. The fact that two congruent factors could influence consumer behavior was also confirmed in literature (Mattila & Wirtz, 2001; Eroglu, Machleit & Chebat, 2005; and Caldwell & Hibbert, 1999). Marketers and store managers in different organizations should choose congruent features in the environment to influence consumer behavior.

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1. Introduction

Picture yourself in a restaurant. You are sitting in a table with your friends, around you other visitors of the restaurant are having dinner with a drink. The waiter brings you the menu and you have to make a choice. After ten minutes of looking to your menu, you decide to start with a tuna salad and some olives. Then, you order a steak with extra potatoes and mushroom sauce. You start with an Ice Tea and then switch to Heineken beer. After your dinner, you order vanilla ice cream with chocolate sauce and you end with a delicious Irish coffee. Now, how did you make these decisions? Was it conscious? Of course, you made the decision to choose it, but did you plan in advance to order these products? If you would be probed to explain, for all products individually, why you chose them, you would likely have trouble explaining this. Some of your choices are easy to explain because you had a valid reason for ordering it. Dijksterhuis, Smith, Baaren and Wigboldus (2005), claimed that people often choose subconsciously, or at least almost subconsciously. Most of the products you buy or order were chosen after a short moment of awareness. Several factors could have an influence on the behavior of the human being. Consumer behavior is an interesting topic for many marketers and researchers. All of us have to deal with making choices in different occasions. It could be a purchase decision or a choice for a specific service. One of the recent advances in consumer research is the acknowledgment that people making purchase decisions respond to more than the tangible product or service being offered. Sometimes, the place, or more specifically its atmosphere, is more influential than the product itself in the purchase decision (Kotler, 1974; and Milliman, 1986). Philip Kotler was one of the first researchers who introduced the phenomenon atmospherics. Kotler (1974) stated that the atmosphere is the primary product. This author described atmospherics as 'the conscious designing of space to create certain effects in buyers". More specifically, atmospherics is the effort to design "buying environment' to produce specific emotions in the buyer that enhance his purchase probability (Kotler, 1974). Mari and Poggesi (2013) stated that we still lack an up-to-date systemization of both theoretical and empirical findings within this field. This study tries to fill this gap by including the role of music tempo and the occupancy rate in a restaurant setting. The influence of music tempo and occupancy rate on alcohol consumption, time spent and money spent in a restaurant will be investigated. An example, McElrea and Standing (1992) claimed that listening to slow music while eating, significantly increased the time spent dining, as well as the restaurant bill. Studies which focus on the influence of music tempo and occupancy rate on consumer behavior, claimed that there is a lack of information about the effect of music tempo and the occupancy rate on consumer behavior in a restaurant.

2. THEORETICAL FRAMEWORK

In this section, existing literature on music tempo as an environmental atmospheric will be reviewed in order to look into the influence of background music on consumer behavior in restaurants. The focus is on the total alcohol consumption, total money spent and total time spent in a restaurant. Furthermore, the effect of density and congruency between the factors music tempo and density in an environment is discussed. Finally, the conceptual model of this research is discussed.

2.1 THE TEMPO OF MUSIC IN AN ENVIRONMENT

Several studies have been conducted by scholars about the influence of music on consumer behavior within service environments (Milliman, 1982; 1986; Yalch and Spangenberg, 1990; North, Shilcock and Hargreaves, 2003). According to Demoulin (2011), music has probably been the most investigated element of atmospherics because music can be modified easily and at low cost.

Myung, McCool and Feinstein (2008), stated that consumers often face the conflict of making a decision among several alternatives. A question to consider is ''How do several individuals make different choices in an environment?''. In a restaurant, many decisions can be made regarding different sorts of drinks and desserts. Atmospherics (e.g. lighting, layout, sounds, colors, temperature) could stimulate perceptual and emotional responses of consumers and affect their behavior in an environment (Kotler, 1974; Caldwell and Hibbert, 1999). Mari and Poggesi (2013) explained atmospherics as 'the effort to design buying environments to produce in the buyer specific emotional effects that enhance his purchase probability'. They described the primary sensory channels for atmosphere as sound, scent, touch and sight. The choice for a specific design (e.g. slow or fast music tempo) in an environment could be an essential decision in marketing context. Milliman (1986), claimed that in some cases the place, or more specifically its atmosphere, is more influential than the product itself in the purchase decision. Harrell and Hurt (1976), reported that the atmosphere of an environment can take on a dynamic quality, and conditions of crowding can alter the psychological atmosphere of a store to evoke different patterns of consumer behavior.

In a marketing context, the music selection (e.g. music tempo) in organizations could be important in influencing consumer behavior. Different studies on music tempo showed the effect of music tempo on consumer behavior, which will be discussed in this paragraph.

2.1.1 The effect of music tempo on alcohol consumption

According to Oakes and North (2008), music tempo is the speed at which a musical passage progresses. It is a variable that could be quantifiably measured in different studies to monitor the number of beats per minute (BPM). Bach and Schaefer (1979), claimed that there was an effect of music on drinking behavior. These authors found that the slower the tempo of country western music was, the faster barroom patrons consumed their drinks. Also, these authors discussed that perhaps slow tempo elicited a mood that in turn elicited rapid drinking.

Milliman (1986) examined the effect of music on the behavior of restaurant patterns. The results showed that a slower music tempo led to an increase in the average dollar amount of bar charges per customer. So the tempo of music played in an environment could influence the choice of drinks that people make and the speed in which they drink. Therefore, people could drink more, because of the music. Roballey, Rongo, Schwantes, Steger and Wininger (1985), claimed that music tempo has an effect on eating behavior and drinking behavior. They described that music tempo could affect chewing intensity, with an increased number of bites associated with increased music speed. A significant increase in the number of bites each minute was found. The effect was larger for fast tempo music compared to slow tempo music. These findings were based on cafeteria patterns of participants between 25 and 60 years of age. Slower music led to slower eating rate, but higher bar bills for customers. Background music decreased customers dining speed significantly, but the slower tempo encouraged customers to drink more. Mattila and Wirtz (2001) confirmed that music has an influence on the drinking behavior of the consumer. Customers who were listening to slow music had higher beverage revenue compared to customers who were listening to fast music. These results were based on a sample of 343 retail customers who filled in a questionnaire and participated in an interview.

In contrast to the research reported above, Stroebele and Castro (2006) described that people drink faster when exposed to fast music in comparison to slow music. McElrea and Standing (1992), presented that fast music significantly decreased the amount of time spent on consuming a drink. The authors explained these results as high arousal level induced by high tempo music. Listening to slow music while eating, significantly increased the time spent dining, as well as the restaurant bill.

The literature above provides information about the fact that music tempo has an effect on drinking behavior. In general, the study found support for the thought that people drink more when exposed to slow tempo music in an environment. Based on the literature, it can be hypothesized that music tempo will have an influence on alcohol consumption.

H1: Music tempo will affect alcohol consumption in the restaurant such that consumers drinking with slow music tempo will consume more alcohol in the restaurant than consumers dining with fast music tempo.

2.1.2 The effect of music tempo on time spent

Yalch and Spangenberg (2000) explained time as an important factor in retailing because retailers strongly believe in a simple correlation between time spent shopping and purchase amount. Existing literature suggests that the choice of music affects actual shopping time of consumers. This time relates to the desire to physically stay in or to get out of the environment. It also might relate to the length of time spent in a store or a restaurant. Music appears to have an influence on consumers' perceptions of the amount of time they spend shopping. When people stay longer in a store, this could be stimulating people to purchase more. Yalch and Spangenberg (2000) stated that playing slow music results in slower customer movement in a supermarket relative to no music or fast music. Milliman (1986), reported that compared to fast-tempo music, the slow-tempo background music in stores produced a slower pace of in-store traffic flow and a greater sales volume. Therefore, people stay longer and spent more in a store (e.g. a clothing store, restaurant, etc.) when there was slow music played. Likewise, Garlin and Owen (2006) argued that consumers in a retail environment stay longer when background music was slow rather than fast tempo.

For the effects of music tempo on time spent dining it was for instance demonstrated (Milliman, 1986) that individuals dining under the fast music condition spent less time at their tables than individuals dining under the slow tempo condition. Stroebele and Castro (2006), posit that consumers eating behavior was influenced by a wide array of factors. Not only internal physiological factors (e.g. hormones, blood glucose, genes), but also external factors (e.g. environment and social aspects) within the eating context appear to have an impact on peoples food intake. It appeared that environmental stimuli might play a factor in enhancing the motivation to eat. This was shown in Stroebele and Castro's (2006) research with 78 college students from the USA, where these students were asked to maintain their eating behavior for seven days long. According to this research, Stroebele and Castro (2006) stated that food intake was affected by music. Mattila and Wirtz (2001) confirmed the fact that customers in a slow music condition took more time to eat their meals compared to those in the fast-music condition. There was an influencing process because of the tempo of the music especially during slow-tempo music. Caldwell and Hibbert (1999), claimed that when slow music was played, customers spent more time on dining than when fast music was played. Caldwell and Hibbert (1999) described that in a restaurant the tempo of music has an effect on the time spent of people, such that individuals dining under a fast music condition spent less time at their tables than individuals dining under a slow tempo condition. McElrea and Standing (1992), claimed that listening to slow music while eating, significantly increased the time spent dining, as well as the restaurant bill.

The literature above, about the effect of music tempo on total time spent of consumers, showed that there are various studies with evidence that music tempo really has an influence on time spent of the consumers. With this in mind, this following hypothesis has been established, in which it suggests that slow music ensures that the consumer will stay longer in a restaurant.

H2: Music tempo will affect time spent in the restaurant such that consumers dining with slow music tempo will spend more time in the restaurant than consumers dining with fast music tempo.

2.1.3 The effect of music tempo on money spent in an environment

Stroebele and Castro (2006) conducted a study about the relationship of listening to music while eating food consumption in a natural environment. The results showed that the presence of music was associated with higher food intake. In their study, listening to music revealed higher food intake and longer meal duration but no significant differences in music speed. Milliman (1986) showed in his study that a slower music tempo led to an increase in the average dollar amount of bar charges per customer. So the tempo of music played in a restaurant could influence the choice of drinks of people and therefore people could drink more and spent more money.

Caldwell and Hibbert (1999) claimed that the music tempo has a significant effect on money spent on both food and drink at the restaurant. The results of their study showed that consumers spent more money in the slow music condition. McElrea and Standing (1992), confirmed this and claimed that listening to slow music while eating, significantly increased the time spent on dining, as well as the restaurant bill.

Taken together, it became clear that there is less information available in literature about the effect of music tempo on money spent in a restaurant. The studies of Caldwell and Hibbert (1999), Mcelrea and Standing (1992) and Milliman (1986) showed an effect of slow music tempo compared to high music tempo on money spent. The study of Stroebele and Castro (2006) showed no significant evidence of the effect of music tempo. Because of this, the hypotheses is formulated that slow music will have an effect on money spent in a restaurant. The aim was to find more evidence about this topic.

H3: Music tempo will affect the amount of money spent in the restaurant such that consumers dining with slow music tempo will spend more in the restaurant than consumers dining with fast music tempo.

2.2 THE EFFECT OF DENSITY IN AN ENVIRONMENT

Eroglu & Machleit (1990), described density as the number of people and objects in a limited space, resulting in a crowding experience. Perceived crowding in an environment has received considerable research interest (Eroglu & Machleit, 1990; Harrell, Hutt & Anderson, 1980; Hui & Bateson, 1991; Machleit, et al., 1994; Machleit, Eroglu & Mantel, 2000). Research to date showed that the level of crowding perceived by a consumer can affect patronage decisions as well as satisfaction with the overall consuming experience (Eroglu & Machleit, 1990). Machleit, Eroglu and Mantel (2000), posit crowding as an important environmental factor affecting consumers' retail experience. Noone and Mattila (2009), posit that crowding can be defined either from a physical (i.e. number of persons in a given space) or from a psychological perspective (i.e. perceived crowding). Machleit, Eroglu and Mantel (2000), posit that perceived crowding is a result of physical, social, and personal factors that sensitize the individual to actual or potential problems arising from scarce space (Stokols, 1972). When the number of people, objects, or both, in a limited space (referred to as density) restricts or interferes with individuals' activities and goal achievement, the individual will perceive that the environment is crowded. Perceptions of crowding were individual in nature; two different shoppers in the same store may perceive different levels of crowding depending on individual characteristics and situational constraints (Machleit & Eroglu, 2000). Milgram (1970) claimed that under high density conditions an individual is likely to experience information overload when the rate and amount of environmental stimuli exceeds the individual's capacity to cope with them. Feelings of being confined, out of control and constrained are the result of this information overload. Thus, crowding is stressful and therefore arousing (Langer & Saegert, 1977). In an environment, it is important that a consumer feels at ease because this influences spending levels, amount of time spent in the environment and willingness to visit again (Donovan & Rossiter, 1982). Roding, Solomon & Metcalf (1978) showed in their study that when density reduces an individuals' ability to perform a desired action, perceived crowding occurs. In summary, individuals attempt to feel in control (by being dense), they feel discomfort (arousal) and crowding (Ward & Barnes, 2001). Possible result may be that consumers decide to remove themselves from the uncomfortable situation (the environment) never to return again. Eroglu, Machleit and Chebat (2005), claimed that shopper hedonic and utilitarian evaluations of the shopping experience are highest under conditions of slow music (high density) and fast music (low density). Retail density has been shown to affect consumers responses such as time spent in the store and satisfaction (Machleit, Kellaris & Eroglu, 1994) and therefore it is a essential determinant of the shopping experience.

2.3 THE EFFECT OF CONGRUENCY IN AN ENVIRONMENT

Mattila and Wirtz (2001), stated that when two ambient factors were congruent with each other, shoppers evaluated the perceived environment more positively, experienced enhanced satisfaction, and exhibited higher levels of approach and impulse buying behaviors than when the environmental cues are odds with each other.

Demoulin (2011), claimed that congruence is the match between different elements of the service setting. In our setting, congruency could be defined as the congruency in a contextual way as the match between the restaurant's atmosphere and the background music. Mandler (1982) suggested that the very process of responding to (in)congruity may itself produce some affect or arousal that might contribute to individuals' evaluations. Mandler (1982) argued that people respond more effectively to moderate incongruity than they do to extreme incongruity. This is because, under the mildly incongruent situation, the novelty element increases arousal, thus leading to favorable evaluations of the situation, object, or person. For example, suppose a consumer is put in a high-density restaurant where she experiences high levels of crowding. Demoulin (2011) postulated that music congruency will generate positive emotional responses (i.e. pleasure and arousal, which will affect the evaluation of both the service environment and service quality. Demoulin (2011) expected that arousal induced by music congruency will lead to high pleasure levels.

The two factors, music and crowding due to high density, have been shown to be particularly critical in influencing customer response in both positive and negative ways. Bitner (1992) identified music as one of the ambient cues and crowding as one of the spatial/function cues. Hui and Bateson (1991) demonstrated an indirect effect of density on perceived crowding, which has influenced pleasure and ultimately approach/avoidance intentions. According to Hwang, Yoon and Bendle (2012), crowding has an effect on emotions including arousal and dominance.

Eroglu & Machleit (1990) argued that shoppers perceive retail crowding when density focuses or interferes with their activities and shopping aims. Noone and Mattila (2009) claimed that when the consumption goal is primarily utilitarian in nature, a non-crowded restaurant environment results in higher service quality evaluations. Conversely, for hedonic consumption goals, higher service quality evaluations were associated with a crowded environment. Eroglu, Machleit and Chebat (2005), reported that there was a significant interactive effect of density and music tempo on hedonic and utilitarian evaluations by consumers. Eroglu, Machleit and Mantel (2000), reported that research has shown that an increase in perceived crowding in a retail store (created from either human or spatial density) can decrease the level of satisfaction that shoppers have with the store. Eroglu & Machleit (1990) claimed that in the retail context, dense, crowded environments may induce tension and confusion, leading to less favorable evaluations of the shopping experience. High levels of perceived retail crowding are found to reduce customers' satisfaction with the shopping experience and the store, depending on their prior expectations and tolerance for density.

Eroglu and Machleit (1990) claimed that the level of in-store crowding perceived by shoppers can affect their patronage decisions as well as satisfaction with the overall shopping activity. Harrell, Hutt and Anderson (1980), stated that potential buyers may even deviate from their planned shopping experience (e.g., spend less money than planned or even leave the store without making a purchase) when the store is crowded. Eroglu, Machleit and Chebat (2005) have found a significant main effect for density on the total dollar amount spent at a mall by consumers. The average amount of money spent by consumers was higher during the dense times and less, during the low density times. These results of the research of Eroglu, Machleit and Chebat (2005) are based on data, collected from 347 respondents at a sub-urban mall in a large metropolitan city. Caldwell and Hibbert (1999) stated that at quiet times, playing music with a slow tempo, and with other low arousal structural components, can serve to retain people in the restaurant longer, and lead them to spend more money. At peak periods, however, when a faster turnover of tables is preferable, faster music can be played to reduce the average amount of time that customer spend at a table.

Based on the literature, the conclusion could be drawn that when two ambient factors were congruent with each other (i.e. music tempo and occupancy rate in the environment), shoppers could evaluate the perceived environment more positively, experienced enhanced satisfaction, and exhibited higher levels of approach and impulse buying behaviors than when the environmental cues are odds with each other. Based on this information, the following hypothesis is formulated.

H4: In a high density restaurant environment, slow- as opposed to fast- tempo music positively affects the time spent, money spent and alcohol consumption in a restaurant.

2.4 PROPOSED MODEL

Considering the fact that music tempo is a very important factor in influencing consumers' behavior, this study investigates the role of this music tempo as an environmental factor of consumer behavior in restaurants. In literature, we showed that the occupancy rate (crowding) has also an influence on consumer behavior in an environment. To validate this theory, these variables will be tested in this research. Both factors could have an influence on the PAD model from Mehrabian and Rusell (1974). This PAD model is based on the emotions and feeling of an individual, which could have an effect on the total time spent, total money spent and total alcohol consumption in restaurants. The expectations of this study are that music tempo and occupancy rate will indeed have an influence on consumer behavior (i.e. alcohol consumption, time spent and money spent). Furthermore, it was expected that both music tempo as well as occupancy rate will have an influence on perceived emotions of consumers in the environment and it will have an influence on the evaluation of the environment by consumers.

3 RESEARCH QUESTION & HYPOTHESIS

This research will investigate consumer behavior in a restaurant environment with a focus on the tempo of the music and the occupancy rate. The research questions and hypotheses will be answered through findings from literature and the results of the field research in this study. The main question has focus and has been formulated as follows:

To what extent does music have an effect on consumer behavior and what is the role of the music tempo and occupancy rate on alcohol consumption, money- and time spent in a restaurant?

In chapter 2, different information has been presented from literature. Based on this information, hypotheses have been formulated that will be discussed during the research.

4 METHOD

4.1 DESIGN

The study employed a 2 (music tempo condition: slow vs. fast) x 2 (Occupancy rate: low rate vs. high rate) experimental design. In a real-life setting, (i.e. a Greek restaurant in Steenwijk) visitors were observed and questioned regarding their behavior and emotions during their visit. The restaurant has approximately one-hundred seats and the entire place is involved in this research. In Appendix C, several pictures of the restaurant are presented to give an impression of the experimental setting. Two music conditions have been tested: the fast tempo condition (> 94 beats per minute) and the slow tempo condition (< 72 beats per minute).

Furthermore, the occupancy rate also has been measured in the restaurant. With this, the aim was to investigate if the occupancy rate has an influence on the alcohol consumption, total time spent and total money spent in the restaurant. The occupancy rate has two conditions: less than 30 visitors in the restaurant as low occupancy rate (not busy in the restaurant) and more than 30 visitors in the restaurant as high occupancy rate (busy in the restaurant).

4.2 INSTRUMENT

For this research two research methods have been used: a questionnaire (Appendix A) and an observation checklist (Appendix B). The questionnaire was used to gather information about emotions of the participants and the evaluation of the environment. The checklist gathered direct observable information regarding the time of arrival and departure of the participants, the total alcohol consumption and the total money spent by visitors on the experimental days.

Questionnaire

The questionnaire used in this study is presented in appendix A. The questionnaire started with a short introduction about the purpose of the research. Participants were instructed that the questionnaire would take 5 minutes and the questionnaire will be anonymous. The first question was an open question, asking the age of the participants. The following three multiple choice questions were formulated to gather information about the gender of the participants and if participants have visited the restaurant before and how many times. Furthermore, there were some questions based on the PAD model (i.e. pleasure, arousal and dominance) of Mehrabian and Russell (1974), which consists of items that include the state of mind of the participants in the environment (how do you feel in this

environment?). Respondents could indicate on a five-point Likert Scale (from 1 totally disagree to 5 totally agree).

The variable **pleasure** was measured with four items and assessed to what extent participants were relaxed, happy, comfortable and whether they felt good in the restaurant. The level of agreement score for this variable was α = .82.

The variable **arousal** was measured with five items and assessed to what extent the participants were tired, nervous, calm, stressful and strained in the restaurant. The level of agreement score for this variable was α = .72.

The variable **dominance** was measured with three items and assessed to what extent the participants were wakeful, dominant and attentively in the restaurant. The level of agreement score for this variable was α = .85.

The evaluation of the environment was measured with 17 items that were derived from the Environmental Rating Scale of Lobbes (2011). Positive environmental evaluation was measured with 11 items. Participants could indicate on a five point scale (from 1 totally disagree to 5 totally agree) to what extent they thought that the environment was: sociable, pleasurable, comfortable, enjoyable, atmospheric, warm, inspiring, inviting, lively, energetic and restful. The level of agreement score for this variable was α = .92. The negative environment items were: cold, unpleasant, dark and unexciting. The level of agreement score for this variable was α = .81.

Observation checklist

The questionnaire was used to gather information about the emotions and the evaluation of the environment by participants. Observation checklist was meant to gather data about the specific evening, where important information about the participants (i.e. the date of the experiment, the table numbers, total persons on a table, the music tempo condition played on the evening, the number of visitors on the evening, the temperature of the evening, total employees, the participation questionnaire by the participants, the time of arrival, time of departure and total time spent by the visitors) were noted. The total alcohol consumption and the total money spent were verified via the printed receipt of the restaurant. The printed receipt is added to the checklist. With the checklist, it was possible to gather the information regarding the measured variables in the restaurant during the experimental days with different music tempo conditions. The observation checklist used in this study is presented in appendix B.

4.3 PROCEDURE

All participants in two different conditions (i.e. slow music and fast music) were asked to answer a questionnaire. For both conditions, the same questionnaire was used. The participants voluntarily participated in the questionnaire. Just before departure they were asked if they were willing to fill in a questionnaire. They were also asked not to consult with fellow participants while completing the questionnaire. Although there are some demographic questions, the identity of the participants remains to be anonymous.

In addition to the questionnaire, a checklist was used during the observation in the restaurant. With this checklist, data was gathered regarding the point of time arrival and departure, and as a result of this, the total duration of their stay. The number of (alcohol) beverages consumed by the participants and the money spent with regard to the visit was also gathered with this checklist.

4.4 PARTICIPANTS

305 participants participated in this study. The participants were visitors of the restaurant during the experimental days. The gender of the participants was 156 men and 149 women. The fast music condition contained 181 participants (92 men and 89 women) and the slow music condition contained 124 participants (64 men and 60 women). The nature of these facts is illustrated in table 1.

		Ge	nder	
		Men	Women	Total
Music Condition	Slow	92	89	181
	Fast	64	60	124
	Total	156	149	305

Table 1. Gender of participants in the different conditions of music

A total of 111 participants (50 men and 61 women) completed the questionnaire. The fast music condition contained 54 participants (22 men and 32 women) and the slow music condition contained 57 participants (28 men and 29 women. The nature of these facts is illustrated in table 2.

		Ge	nder	
		Men	Women	Total
Music Condition	Slow	28	29	57
	Fast	22	32	54
	Total	50	61	111

Table 2. Genders of participants that completed the questionnaires

In consultation with the owner of the restaurant, three specific days were chosen: every Tuesday, Thursday and Friday. These days were chosen in order to avoid participants dining at peak times being pressurized by other visitors of the restaurant waiting to be seated. The first Tuesday started with slow music, on Thursday fast music was played, and on the Friday slow music was played again. The second week started with fast music, on Thursday, slow music was played and on Friday, fast music was played again. In the third week we started on Tuesday with slow music, we played on Thursday fast music and on the Friday again slow music. In the last week, fast music was played on Tuesday, on Thursday slow music and on the last Friday fast music was played.

The occupancy rate of the evening was measured based on the total number of tables on the evening in the restaurant. The occupancy rate in the restaurant is determined as: less than 30 visitors in the restaurant is low occupancy rate (not busy in the restaurant) and more than 30 visitors in the restaurant is high occupancy rate (busy in the restaurant). During low occupancy rate evening there were a total of 31 tables in the slow condition and 27 tables in the fast condition. During high occupancy rate evenings there were 15 tables with slow music and 34 with fast music condition. The nature of these facts is illustrated in table 3.

		Occupancy rate		
		Low	High	Total
Music condition	Slow	31	27	58
	Fast	15	34	49
	Total	46	61	107

Table 3. The occupancy rates in the restaurant in the different music conditions

4.5 STIMULUS/INDEPENDENT VARIABLES

The tempo of music has been measured based on the 'BPM Detector' and 'Beetronome' applications. In total, 60 songs have been tested on BPM and have been selectively divided in subgroups. The music has been divided into fast music and slow music. Two music tempo conditions were created based on the criteria used by Miliman (1986): music with 94 or more beats per minute was used for the fast tempo condition, while music with 72 or less beats per minute was used for the slow tempo condition. Some examples of Greek singers and songs that are played in the restaurant in the fast condition are: Despina Vandi ('A pa pa' and 'Girismata') and Anna Vissi ('To poli poli'). These songs had a high BPM value (> 94 BPM). Some examples of Greek music in the slow condition are: Natalia ('Zhto kouragio gia agape') and Notis Sfakianakis ('Soma mou'). These songs had a low BPM value (< 72 BPM). During four weeks, both slow music and fast music have been played. The first Tuesday started with fast music, Thursday started slow music, Friday again fast music, the second Tuesday slow music and so on. During four weeks, data have been collected regarding time spent, alcohol consumption and money spent in the two different conditions.

4.6 ADDITIONAL CONSIDERATIONS

It is important to prevent external influences and avoid measurement error. In order to avoid possible factors that may affect this study, only Greek music (the type of music that also normally is being played in the restaurant) was played in the restaurant. Consequently, the type of music (music genre) played in the restaurant could not influence the results within the two conditions. The volume of the music played was uniform across fast and slow tempo conditions. Therefore, the volume of music could not play a negative role in the results. The temperature of the day was tracked in order to see that it did not affect results. The lighting in the restaurant was constantly the same during the experiments. The total number of employees of the restaurant during the experiments was tracked in order to measure if this has an influence on the results. The total amount of visitors per evening has also been registered during the tests.

5 RESULTS

A standard significance level of p < 0,05 has been used for all analyses in this research.

5.1 TIME SPENT

A factorial between groups analysis of variance (ANOVA) was used to investigate the effects of the tempo of music and the occupancy rate on time spent in the restaurant.

The ANOVA revealed no statistically main effect for the tempo of music, F(1, 103) = .021, ns., as well as no statistically significant main effect for the occupancy rate, F(1,103) = 1.611, ns.

Furthermore, a statistically significant interaction indicated that the effects of music tempo on time spent in the restaurant depend on the occupancy rate, F(1,103) = 4,769, p < .031. The nature of this interaction is illustrated in Figure 1.

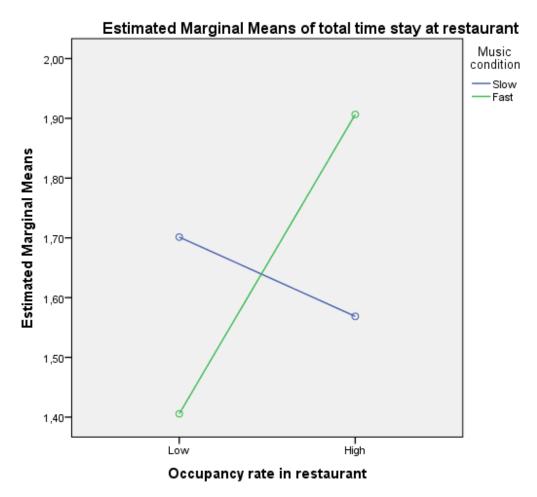


Figure 1. The effects of music tempo and occupancy rate on time of stay of participants

Simple effects analyses were used to further examine the interaction between music tempo and occupancy rate. These analyses indicated tempo has a statistically significant (positive) effect on time spent when the occupancy rate in the restaurant is high, F(1, 103) = 7,419, p < .008. However, the effects of slow music tempo on time spent did not depend on the occupancy rate in the restaurant, F(1,103) = .349, ns. Only for fast music tempo the occupancy rate was of importance. For slow tempo, occupancy rate did not impact the total stay of consumers in the restaurant.

5.2 ALCOHOL CONSUMPTION

A factorial between groups analysis of variance (ANOVA) was used to investigate the effects of the tempo of music and the occupancy rate on alcohol consumption in the restaurant.

The ANOVA revealed no statistically main effect for the tempo of music, F(1, 103) = .746, ns., as well as no statistically significant main effect for the occupancy rate, F(1,103) = .317, ns.

Furthermore, a statistically significant interaction indicated that the effects of music tempo on alcohol consumption in the restaurant depend on the occupancy rate, F(1,103) = 7,072, p < 0,009. The nature of this interaction is illustrated in Figure 2.

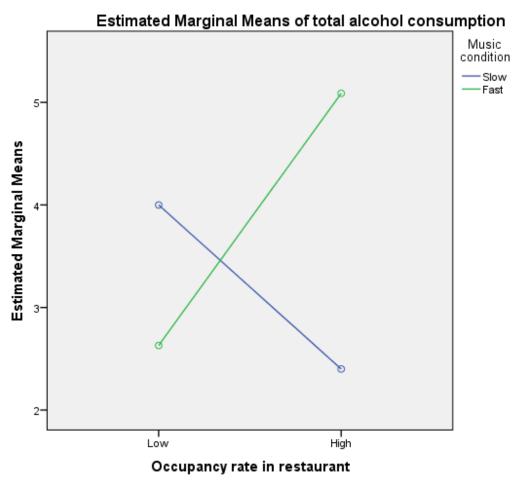


Figure 2. Effects of music tempo and occupancy rate on alcohol consumption

Simple effects analyses were used to further examine the interaction between music tempo and occupancy rate. These analyses indicated that music tempo has a statistically significant effect on alcohol consumption when the occupancy rate in the restaurant is high, F(1, 103) = 6,459, p < ,013. As can be seen in Figure 2, only under the condition of a high occupancy rate, fast tempo music resulted in higher levels of alcohol consumption (M = 5,09, sd = 3,67) than slow music (M = 2,40, sd = 1,92). However, the effects of slow music tempo on alcohol consumption did not depend on the occupancy in the restaurant, F(1,103) = 1,837, p < .001. Only for fast music tempo the occupancy rate was of importance. For slow tempo, occupancy rate did not impact the total alcohol consumption of consumers in the restaurant.

5.3 MONEY SPENT

A factorial between groups analysis of variance (ANOVA) was used to investigate the effects of the tempo of music and the occupancy rate on money spent in the restaurant.

The ANOVA revealed no statistically main effect for the tempo of music, F(1, 103) = .033, ns., as well as no statistically significant main effect for the occupancy rate, F(1,103) = .065, ns.

Furthermore, a statistically significant interaction indicated that the effects of music tempo on time spent in the restaurant depend on the occupancy rate, F(1,103) = 4,083, p < ,046. The nature of this interaction is illustrated in Figure 3.

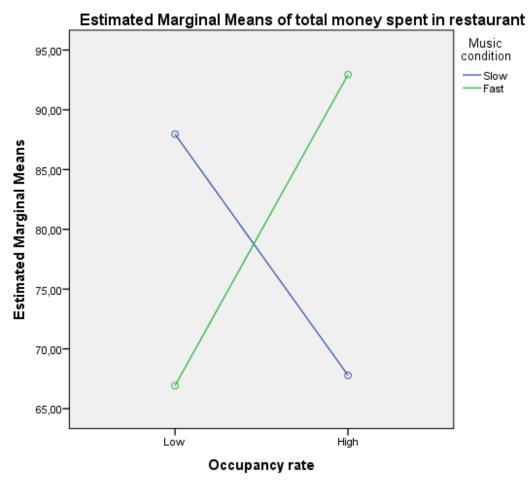


Figure 3. Effects of music tempo and occupancy rate on money spent

Simple effects analyses were used to further examine the interaction between music tempo and occupancy rate. These analyses indicated that music tempo has a statistically marginal significant effect on money spent when the occupancy rate in the restaurant was high, F(I, 103) = 3,224, p < 0.075.

As can be seen in Figure 3, only under the condition of a high occupancy rate, fast tempo music resulted in higher levels of money spent (M = 92.9, df = 63.91) than slow music (M = 67.8, df = 24.04). However, music tempo did not impact money spent when the occupancy rate in the restaurant was high, F(1.103) = 2.57, ns. Only for fast music tempo music the occupancy rate was of importance. For slow tempo, occupancy rate did not impact the total money spent of consumers in the restaurant.

5.4 PLEASURE, AROUSAL AND DOMINANCE

Additionally, a study is done about the evaluation of the environment by the participants. The PAD model was central in this study, in which the emotion of the participants in the environment has been analyzed. The aim of this study was to investigate if the music tempo and the occupancy rate have an influence on the emotions of the participants. The results are based on analyzes of the questionnaires.

Pleasure

A factorial between groups analysis of variance (ANOVA) was used to investigate the effects of music tempo and the occupancy rate in the restaurant on pleasure experienced by the participant. The ANOVA revealed no significant main effect for condition of music, F(1,101) = 2,444, ns., as well as no statistically no main effect for the occupancy rate, F < 1. Furthermore, there is no significant interaction indicated that the effects of the condition of music on pleasure depend on the occupancy rate in the restaurant, F < 1.

Arousal

A factorial between groups analyses of variance (ANOVA) is used to investigate the effects of music tempo and occupancy rate in the restaurant on arousal experienced by the participant. The ANOVA revealed no significant main effect for the condition of music, F(1,96) = 2,572, ns. There is found a marginal significant main effect for arousal regarding the occupancy in the restaurant, F(1,96) = 2,782, p < .09.

Furthermore, there is no significant interaction indicated that the effects of condition of the music on arousal depend on the occupancy rate in the restaurant, F < 1.

Dominance

A factorial between groups analysis of variance (ANOVA) is used to investigate the effects of condition of music and occupancy rate in the restaurant. The ANOVA revealed no significant main effect on the condition of the music, F < I, as well as no statistical main effect for the occupancy rate on the evening, F < I.

Furthermore, a there is no statistically significant interaction indicated that the effects of the condition of music depend on dominance depend on the occupancy rate in the restaurant, F < I.

Evaluation of the environment

A factorial between groups analysis of variance (ANOVA) is used to investigate the effects of the condition of music and the occupancy rate in the restaurant on positive and negative environment evaluation by participants. First, the results for the positive environment evaluation. The ANOVA revealed no statistically significant main effect for the conditions of music, F(1,99) = 1,832, ns., as well as no statistically significant main effect for the occupancy rate in the restaurant, F < 1.

Furthermore, there is no statistically significant interaction indicated that the effects of music condition on positive environment evaluation depend on the occupancy rate in the restaurant, F < 1.

The results for the negative environment evaluation shows that there is no statistically significant main effect for the condition of music, F(1,103) = 3,629, ns., as well as no statistically significant main effect for the occupancy rate in the restaurant, F < 1. Furthermore, there is no statistically significant interaction indicated that the effects of music condition on negative environment evaluation depend on the occupancy rate in the restaurant, F < 1.

6 DISCUSSION

6.1 SUMMARY OF THE RESULTS

This research investigated the influence of music tempo and occupancy rate on the alcohol consumption, the total time spent and total money spent by participants in a restaurant. Furthermore, it has been investigated whether the music tempo and occupancy rate has an effect on the emotions and the environmental evaluation of the participant in a restaurant. The results of this study are based on observations and questionnaires.

Existing literature indicates that music tempo in a restaurant affects the alcohol consumption, time spent and money spent in the restaurant. Based on existing literature, we suggested that slow tempo music stimulates participants to consume more alcohol, to stay longer and to spent more money in a restaurant compared to participants in a fast tempo music condition. This hypothesis was not confirmed.

There was no statistical evidence found that participants in a slow tempo music condition consume more alcohol, spent more time and spent more money in the restaurant. Occupancy rate also had no effect on the alcohol consumption, time spent and money spent of the participants in the restaurant. However, significant interaction effects of music tempo and occupancy rate was found on alcohol consumption, time spent and money spent in the restaurant. Participants in the fast music condition consumed more alcohol, stayed longer and spend more money in the restaurant when the occupancy rate was high (more than 30 participants).

Furthermore, it was examined whether the tempo of music condition had an influence on pleasure, arousal and dominance that was experienced by participants. There was no main effect between the two conditions of music tempo on these aspects. Also, we investigated whether the occupancy rate in the restaurant has an influence on pleasure, arousal and dominance experienced by participants. There was no significant evidence that participants experienced more pleasure, arousal or dominance when it was busy or less busy in the restaurant.

We examined whether the tempo of music condition had an influence on the evaluation of the environment by participants. Analyses showed that there was no influence of music tempo on the evaluation of the environment. There was no significant difference between the participants' evaluation of the environment in the fast music condition and the slow music condition. The same measurements were also done with the occupancy rate. The results has shown that the two factors had no influence on the evaluation of the environment by participants. It can be concluded that when it was busier in the restaurant, it would not necessarily mean that participants are more positive about the environment regarding to when it was less busy in the restaurant.

6.2 LIMITATIONS

There are imitations notable in the present research and should be taken into account in future research. Firstly, the research was done in a summer period, therefore the restaurant had more tourist visitors than during other periods. Tourists could have other behavior compared to local residents of Steenwijk. For future studies, it is interesting to investigate the consumer behavior in different seasons in a year.

Furthermore, the Greek restaurant is located in Steenwijk, a small city in the Netherlands. There could be differences of consumer behavior between residents of small cities and bigger cities in the Netherlands. It is possible that consumers from small cities act differently (e.g. they go to a restaurant and drink their coffee at home instead of in the restaurant) compared to consumers in larger cities.

In this study, the volume of music was not included in the analysis. Previous studies indicate that music volume can affect consumer behavior (Baker & Cameron, 1996); Caldwell & Hibbert, 2002; Kellaris & Rice, 1993; and Smith & Curnow, 1966). According to Stroebele and Castro (2006), the louder the music, the more people drank. Future research should focus on the music volume and the effect of it on consumer behavior. The combination of music tempo and music volume could also an interesting research for in the future.

Dijksterhuis et al. (2005) explained that French music played in a store led to an increase in sales of French wine, whereas German music led customers to buy more German wine. In this study, there was used only Greek music. The tempo of the music was very important, but the genre of the music could also have an influence on the results of this study. The fact that Greek music was played in the restaurant could have an impact on the results of this study. The genre (i.e. Greek music) could generate different behavior among consumers. For example, consumers could experience slow Greek music as boring and therefore they stay less in the restaurant. There is no evidence about this, and therefore this could be a reason to do a follow-up study on this issue.

Furthermore, existing literature showed that food intake was affected by music (i.e. Stroebele and Castro, 2006). All participants of this study were students from the United States of America. This research was not conducted in a real-life setting and therefore, results could be affected by this fact. In this research the study was actually in a real-life setting. This study was done in a Greek restaurant in Steenwijk, where the participants were actual visitors of the restaurant. The visitors of the restaurant did not know that they were participating in a study and therefore they have behaved spontaneously during their visit. The results of this study were based on facts and are reliable compared to the study of Stroebele and Castro (2006).

After measuring and selecting the tempo of the music, five employees of the restaurant have listened to the music. They were asked to indicate whether they found the music fast or slow. This was done to test if there were no errors in the measurements made regarding to the BPM of the music. There were no errors found based on the opinions of the employees and the measurement of the researcher regarding the tempo of music.

Morrison and Beverland (2003) described several organizations that have successfully matched their background music to their desired positioning (e.g. brand image, store design, heritage). It became clear how important it is to have a high level of congruity between music and the environment. This fact is supported with the results of this study. When it was busy in the restaurant and there was fast tempo music played, visitors consumed more alcohol, spent more time and spent more money in the restaurant. For marketing managers, it is very important to know what to do in certain situations regarding their music choice.

Mandler (1982) claimed that people respond more effectively to moderate incongruity than they do to extreme incongruity. This was because, under the mildly incongruent situation, the novelty element increases arousal, thus leading to favorable evaluations of the situation, object, or person. For example, suppose a consumer is put in a high-density restaurant where she experiences high levels of crowding. Demoulin (2011), postulated that music congruency will generate positive emotional responses (i.e. pleasure and arousal, which will affect the evaluation of both the service environment and service quality. Demoulin (2011) expects that arousal induced by music congruency will lead to high pleasure levels. In this study there was not found evidence that music tempo or occupancy rate has an influence on the level of pleasure or arousal.

Eroglu, Machleit and Chebat (2005), claimed that shopper hedonic and utilitarian evaluations of the shopping experience are highest under conditions of slow music (high density) and fast music (low density). They reported that music tempo should be used mildly incongruent to get a positive evaluation. In contrast to these results, this study showed that congruent factors (fast music with high density) ensures positive outcomes. Possible reasons for this could be that customers of a restaurant are more hedonic, recreational and focused on pleasure and entertainment.

Lastly, existing literature has shown that the level of in-store crowding perceived by shoppers could affect their patronage decisions as well as satisfaction with the overall shopping activity (Eroglu & Machleit, 1990). Potential buyers may even deviate from their planned shopping experience (e.g., spend less money than planned or even leave the store without making a purchase) when the store was crowded (Harrell, Hutt & Anderson, 1980). Density had an effect on the total dollar amount spent at a mall by consumers. The average amount of spent money by consumers, was higher during the dense times compared to the low density times (Eroglu, Machleit & Chebat, 2005). In this study, density has influence on consumer behavior (i.e. time spent, money spent and alcohol consumption) when there was played fast tempo music in the restaurant.

6.2.1 DEVIATIONS

On different evenings it appeared that German tourists visited the restaurant. These visitors were not excluded from this study, because they were seen as consumers and therefore no distinction has been made between demographic origins. It has been noticed that these visitors drank a lot of beer. The alcohol consumption on that day was different compared to other tables and other evenings. This behavior had to do with the drinking behavior of the Germans. Probably, this had nothing to do with the music tempo of the evening.

6.3 IMPLICATIONS FOR FUTURE RESEARCH

Because this study has shown opposite results compared to existing literature, this study can serve as a starting point for future research. The fact that the results were from a real-life setting with 305 participants, must be a reason to pay more attention to these results and to do further investigation on the influence of music tempo on consumer behavior.

This study presents enough evidence that when two factors (music tempo and occupancy rate) are congruent with each other, there will be an effect on alcohol consumption, money- and time spent in a restaurant. The effect of two congruent factors on consumer behavior was also confirmed in different literature (Mattila & Wirtz, 2001; Caldwell & Hibbert, 1999). On the other hand, Eroglu, Machleit and Chebat (2005) claimed that music tempo should be used mildly incongruent (fast music when it quiet and slow music when it is busy in an environment). This is in contrast with the results of this study. For future research, it will be interesting to conduct a study that focuses on the difference of these two studies.

Furthermore, in this study the music volume did not play a role. However, music volume could be an important factor influencing consumers in different environments. Different studies (Smith & Curnow, 1966; Milliman, 1986; Stroebele & Castro, 2006) showed that music volume have an influence on consumer behavior. For example, Stroebele & Castro (2006) claimed that when the music was loud, people drank more. Music tempo and music volume have usually been investigated separately using different study designs. Future research should focus on the effects of music tempo and music volume together on consumer behavior. Occupancy rate could also included as a third factor.

This study was done in a Greek restaurant in Steenwijk. This city is not particularly large in terms of population compared to other large cities in the Netherlands (e.g. Amsterdam, Rotterdam, Utrecht) and has a certain small-town feel. Most of the visitors of the restaurant are living in Steenwijk. These visitors could have different behavior compared to Dutch people from other cities. For future research, it could be interesting to conduct a study in different cities in the Netherlands.

Prior to the study, there was only Greek music played in the restaurant. In different studies (Yalch & Spangenberg, 1990; Areni & Kim, 1993; North, Shilcock & Hargreaves, 2003) it was claimed that genre is an important factor in influencing people in environments. This means that the fact that Greek music was played in the restaurant, could have an impact on the results of this study. Future research should focus more on the genre and the music tempo in a restaurant setting.

In existing literature it was shown that textual references to alcohol in music lead to higher revenues of alcoholic beverages. According to Engels, Slettenhaar, Bogt and Scholte (2011), people were exposed to many references to alcohol, which might influence their consumption of alcohol directly. The results in that study showed that customers who were exposed to music with textual references to alcohol spent significantly more on alcoholic drinks compared to customers in the condition with no textual references to alcohol. This could be an interesting topic for future research.

6.4 PRACTICAL IMPLICATIONS

In this study there was found an effect of congruence. The results showed that when two factors (music tempo and density) are congruent with each other, there will be an effect. The fact that two congruent factors could influence consumer behavior is also confirmed in literature (Mattila & Wirtz, 2001; and Caldwell & Hibbert, 1999). Marketers and store managers should choose congruent features in the environment to influence consumer behavior.

The results of this study showed that when it was busy in the restaurant (e.g. bar, cafeteria, store), it is good to play fast tempo music. This research has shown that consumers stay longer, consume more alcohol and spend more money in the restaurant. A restaurant and marketer could take profit of this information by using fast tempo music when the occupancy rate is high in the environment. By doing this, there will be generated more money for the restaurant. According to Eroglu, Machleit and Chebat (2005), research on crowding and music is relevant to retailers given the demonstrated influence these stimuli have on shopper purchases and patronage behaviors. The findings of this study offer restaurant managers insights toward management of the pre-process of using music when it is busy in the restaurant.

In existing literature, a lot of information about the influence of slow music tempo on consumer behavior is presented (e.g. eating and drinking behavior, time spent and money spent). It is wise for many marketers and organizations to pay attention to the outcomes published in existing literature. It is possible for restaurants and stores to conduct a similar experiment regarding the music tempo for the organization. By doing so, it is possible to experience the influence of the music tempo on the own customers of the organization. From an organizational perspective, there are many benefits from the kind of music that is played, focusing on the effect of music on customers.

REFERENCES

Alpert, M. I. and Alpert, J. I. (1991). Contributions From a Musical Perspective on Advertising and Consumer Behavior, *Advances in Consumer Research*, 18, 232-238.

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.

Bach, P. J. and Schaefer, J. M. (1979). The tempo of country music and the rate of drinking in bars. *Journal of Studies on Alcohol and Drugs*, 40 (11), 1058-1059.

Baker, J. and Cameron, M. (1996). The Effects of the Service Environment on Affect and Consumer Perception of Waiting Time: An Integrative Review and Research Proposition, *Journal of Academy of Marketing Science*, 24, 338-349.

Bitner, M. J. (1992). Servicescapes: The impact of Physical Surroundings on Customers and Employees. *Journal of Marketing*, 56, 57-71.

Caldwell, C. and Hibbert, S. A. (2002). The Influence of Music Tempo and Musical Preference on Restaurant Patrons' Behavior. *Psychology & Marketing*, 19, 895-917.

Caldwell, C. and Hibbert, S. A. (1999). Play that one again: The Effect of Music Tempo on Consumer Behavior in a Restaurant. *European Advances in Consumer Research*, 4, 58-62.

Demoulin, N. T. M. (2011). Music congruency in a service setting: The mediating role of emotional and cognitive responses. *Journal of Retailing and Consumer Services*, 18, 10-18.

Donovan, R. J. & Rossiter, J. R. (1982). Store atmosphere: an environmental psychology perspective. *Journal of Retailing*, 58, 34-57.

Dijksterhuis, A., Smith, P. K., Baaren, R. B. and Wigboldus, D. H. J. (2005). The Unconscious Consumer: Effects of Environment on Consumer Behavior. *Journal Of Consumer Psychology*, 15 (3), 193-202.

Engels, R. C. M. E., Slettenhaar, G., Ter Bogt, T. and Scholte, R. H. J. (2011). Effect of alcohol references in music on alcohol consumption in public drinking places, *American Journal on Addictions*, 20 (6), 530-534.

Eroglu, S. A., Machleit, K. A. and Chebat, J. C. (2005). The Interaction of Retail Density and Music Tempo: Effects on shopper responses. *Psychology & Marketing*, 22 (7), 577-589.

Eroglu, S. A. and Machleit, K. A. (1990). An empirical study of retail crowding: Antecedents and consequences. *Journal of Retailing*, 66, 201-221.

Garlin, F. V. and Owen, K. (2006). Setting the tone with the tune: A meta-analytic review of the effects of background music in retail settings. *School of Marketing*, 59, 755-764.

Gueguen, N., Jacob, C., Lourel, M., and Le Guellec, H. (2007). Effect of Background Music on Consumer's Behavior: A Field Experiment in a Open-Air market, *European Journal of Scientific Research*, 16, 2, 268-272.

Gueguen, C., Jacob, C., Le Guellec, H., Morineau, T. and Lourel, M. (2008). Sound Level of Environmental Music and Drinking Behavior: A Field Experiment With Beer Drinkers, *Clinical and Experimental Research*, 32 (10), 1795-1798.

Harrell, G. D., Hutt, M. D. and Anderson, J. C. (1980). Path analysis of buyer behavior under conditions of crowding. *Journal of Marketing Research*, 17 (1), 45-51.

Harrell, G. D. and Hutt, M. D. (1976). Buyer Behavior Under Conditions of Crowding: an Initial Framework, *Advances in Consumer Research*, 3, 36-39.

Hui, M. K. & Bateson, E. G. (1991). Perceived control and the effects of crowding and consumer choice on the service experience. *Journal of Consumer Research*, 18, 174-184.

Hwang, J., Yoon, S. Y. & Bendle, L. J. (2012). Desired privacy and the impact of crowding on customer emotions and approach-avoidance responses: Waiting in a virtual reality restaurant. *International Journal of Contemporary Hospitality management*, 24 (2), 224-250.

Kellaris, J. J. and Rice, R. C. (1993). The Influence of Tempo, Loudness, and Gender of Listener on Responses to Music. *Psychology and Marketing*, 10, 15-29.

Kotler, P. (1974). Atmospherics as a Marketing Tool, School of Management, 49 (4), 48-64.

Langer, E. J. & Saegert, S. (1977). Crowding and cognitive control. *Journal of Personality and Social Psychology*, 35, 175.

Lobbes, M. (2011). De invloed van kleur op het dranktempo van gasten in een restaurant. University Twente: Enschede.

Machleit, M. A., Eroglu, S. A. and Mantel, S. P. (2000). Perceived Retail Crowding and Shopping Satisfaction: What Modifies This relationship?, *Journal of Consumer Psychology*, 9 (1), 29-42.

Machleit, K. A., Kellaris, J. J. & Eroglu, S. A. (1994). Human versus spatial dimensions of crowding perceptions in retail environments: a note on their measurements and effect on shopper satisfaction. *Marketing Letters*, 5, 183-194.

Mandler, G. (1982). The structure of value: Accounting for taste. In M. S. Clark & S. T. Fiske (EDS.), affect and cognition: The 17th Annual Carnegie Symposium, 203-230.

Mari, M. and Poggesi, S. (2013). Servicecape cues and customer behavior: a systematic literature review and research agenda, *The Service Industries Journal*, 33 (2), 171-199.

Mattila, A. S. and Wirtz, J. (2001). Congruency of scent and music as a driver in in-store evaluations and behavior. *Journal of Retailing*, 77, 273-289.

McElrea, H. and Standing, L. (1992). Fast music causes fast drinking. *Perceptional and Motor Skills*, 75, 362.

Mehrabian, A. & Russell, J. A. (1974). An approach to environmental psychology. Cambridge, MA: MIT Press.

Milgram, S. (1970). The experience of living in cities. Science, 167, 1461-1468.

Milliman, R. E. (1986). The influence of background music on the behavior of restaurant patrons. *Journal of Consumer Research*, 13 (2), 286–289.

Milliman, R. E. (1982). The influence of Background Music on the Behavior of Restaurant Patrons. *Journal of Consumer research*, 13, 286-289.

Morrison, M. and Beverland, M. (2003). "In search of the right in-store music", *Business Horizons*, 77-82.

Myung, E., McCool, A. C. and Feinstein, A. H. (2008). Understanding attributes affecting meal choice decisions in a bundling context. *International Journal of Hospitality Management*, 27, 119-125.

Noone, B. M. & Mattila, A. S. (2009). Restaurant Crowding and Perceptions of Service Quality: The Role of Consumption Goals and Attributions. *Journal of Foodservice Business Research*, 12 (4), 331-343.

North, A. C., Shilcock, A., & Hargreaves, D. J. (2003). The effect of musical style on restaurant consumers' spending. *Environment and Behavior*, 35, 712–718.

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.

Roballey, T. C., McGreevy, C., Rongo, R. R., Schwantes, M. L., Steger, P. J., and Wininger, M. A. (1985). The effect of music on eating behavior. *Bulletin of the Psychonomic Society*, 23, 221–222.

Rodin, J., Solomon, K. and Metcalf, J. (1978). Role of control in mediating perceptions of density. *Journal of Personality and Social Psychology*, 35, 133-158.

Smith, P. C. and Curnow, R. (1966). Arousal Hypothesis and the Effects of Music on Purchasing Behavior. *Journal of Applied Psychology*, 50 (3), 255-256.

Stokols, D. (1972). On the distinction between density and crowding. *Psychological Review*, 79, 275-277.

Stroebele, N. and Castro, M. J. (2006). Listening to music while eating is related to increases in people's food intake and meal duration. *Department of Psychology*, 47, 285-289.

Ward, J. C. & Barnes, J. W. (2001). Control and affect: the influence of feeling in control of the retail environment on affect, involvement, attitude and behavior. *Journal of Business Research*, 54, 139-144.

Yalch, R. F. & Spangenberg, E. R. (2000). The Effects of Music in a Retail Setting on Real and Perceived Shopping Times. *Journal of Business Research*, 49, 139-147.

Yalch, R. and Spangenberg, E. (1990). Effects of Store Music on Shopping behavior, *Journal of Services Marketing*, 4, 31-39.

APPENDIX A: QUESTIONNAIRE

Geachte bezoeker,

Voor mijn Masteropdracht (Communicatie wetenschappen) ben ik een onderzoek aan het doen met betrekking tot de ervaringen die bezoekers hebben in een restaurant. Om dit in kaart te kunnen brengen heb ik een vragenlijst opgesteld, die u naar eigen mening mag invullen. Bij dit onderzoek bestaan er geen foute antwoorden, het gaat vooral om datgene wat u heeft ervaren. De vragenlijst zal ongeveer 5 minuten van uw tijd in beslag nemen. Ik wil u benadrukken dat de door u ingevulde gegevens <u>vertrouwelijk</u> en <u>anoniem</u> zullen worden behandeld.

Alvast bedankt voor uw medewerking aan dit onderzoek!

Vragenlijst

1.	Wat is uw leeftijd?
	Jaar
2. 0 0	Wat is uw geslacht? Man Vrouw
3. 0 0	Bent u wel eens vaker in dit restaurant geweest? Ja (ga naar vraag 4) Nee (ga naar vraag 5)
4.	Hoe vaak heeft u ongeveer in dit restaurant gedineerd? 1-2 keer 3-4 keer 5-6 keer Meer dan 6 keer
0	Hoeveel drankjes heeft u hier genuttigd? 1 á 2 drankjes 3 á 4 drankjes 5 of meer drankjes
6. 0 0 0	Hoelang hebt u hier ongeveer gezeten? 30-45 minuten 45-60 minuten 60-90 minuten 90-120 minuten 120 en meer
7. 0 0 0 0 0	Hoelang vond u de avond duren? Heel lang Lang Neutraal Kort Heel kort

8. Hoe voelt u zich in deze omgeving?

	Helemaal mee oneens	Oneens	Neutraal	Mee eens	Helemaal mee eens
Ontspannen	0	0	0	0	0
Vermoeid	0	0	0	0	0
Vrolijk	0	0	0	0	0
Nerveus	0	0	0	0	0
Op mijn gemak	0	0	0	0	0
Waakzaam	0	0	0	0	0
Rustig	0	0	0	0	0
Gestrest	0	0	0	0	0
Dominant	0	0	0	0	0
Lekker	0	0	0	0	0
Gespannen	0	0	0	0	0
Oplettend	0	0	0	0	0

9. Wat vindt u van deze omgeving?

	Helemaal mee oneens	Oneens	Neutraal	Eens	Helemaal mee eens
Gezellig	0	0	0	0	0
Aangenaam	0	0	0	0	0
Comfortabel	0	0	0	0	0
Levendig	0	0	0	0	0
Koud	0	0	0	0	0
Plezierig	0	0	0	0	0
Onprettig	0	0	0	0	0
Saai	0	0	0	0	0
Donker	0	0	0	0	0
Sfeervol	0	0	0	0	0
Uitnodigend	0	0	0	0	0
Rustgevend	0	0	0	0	0
Neutraal	0	0	0	0	0
Energiek	0	0	0	0	0
Warm	0	0	0	0	0
Zakelijk	0	0	0	0	0
Inspirerend	0	0	0	0	0

10. Wat vond u van de achtergrondmuziek?

	Helemaal mee oneens	Oneens	Neutraal	Mee eens	Helemaal mee eens
Luid	0	0	0	0	0
Prettig	0	0	0	0	0
Storend	0	0	0	0	0
Leuk	0	0	0	0	0
Druk	0	0	0	0	0
Rustig	0	0	0	0	0
Sfeerverhogend	0	0	0	0	0

				_
11	Wat vond II	van het temno	van de muziek	γ,
	vvat vona a	vali lict tellipe	, vali ac illazion	٠.

- 0 Snel
- 0 Langzaam

12. Bent u van plan om nog eens terug te komen naar dit restaurant?

- 0 **Ja**
- 0 Nee

13. Hoe tevreden was u over de dienstverlening?

- 0 **Zeer tevreden**
- 0 **Tevreden**
- 0 **Neutraal**
- 0 **Ontevreden**
- 0 Zeer ontevreden

14. Wat vond u van het bezoek aan dit restaurant?

- 0 Zeer goed
- 0 Goed
- 0 **Neutraal**
- 0 Slecht
- 0 Zeer slecht

Hartelijk dank voor uw medewerking!

APPENDIX B: SCHEME RESEARCH

Datum:
Tafelnummer:
Aantal personen:
Conditie muziek:
Drukte van de avond:
Temperatuur buiten:
Hoeveel personeel aan het werk:
Tijd van binnenkomst:
Tijd van vertrek:
Totaal tijdsduur verblijf:
Aantal alcoholische consumpties:
Aantal non-alcoholische consumpties:
Dessert:
Totale besteding door tafel:
Deelname aan vragenlijst:

APPENDIX C: RESEARCH ENVIRONMENT











