

As a real foodie, I love exploring a variety of restaurants in any suburbs I ever live. However, apart from delicious food, I also pay attention to other factors of restaurants to see if I want to return to them after the first few times. One of those factors is music and this informed my interest for this topic, Music Consumption.

Patricia Smith is an influential researcher, with around 3000 citations, provided a thorough insight into effects of the music sound level on shopping activities. More specifically, after testing purchasing behaviours in two selected supermarkets, Patricia and his colleagues (1966) figured out that noisy music reduced the time spent by customers significantly though there were no changes in sales or customer's reported satisfaction. Their study suggested a few questions needed to be answered by future researchers. For instance, two of them were if the music congruity effects caused by the sound level would still remain in different purchasing situations like restaurants or cafeterias and what would happen if the interaction time with noise was longer compared to only a 18 minute noise session in Patricia's study. These two issues were resolved in the study of Nicolas Gueguen, Le Guellec Helene and Celene Jacob (2004) where considered impacts of the sound level on drinking behaviours in bars for a whole night.

The second key theorist I want to mention is Roballey, who found that fast tempo music increases eating speed in his research with his colleagues (Roballey et al's, 1985). This research has been cited for 193 times and the most useful takeaway I found in his study was proof that fast-tempo music caused arousal whose effects increased productivity for non-complex tasks, particularly eating in this context. After Roballey's study, there have been a lot of research diving into how arousal explains structural components of music, not only tempo, impact customer's behaviours. One of them was the study of Nicolas et al (2004) already mentioned above.

Another key theorist in this field is Charles Areni, who conducted research that classical music fitting into upper-class ambience could generate desired profits for retailers (Areni and Kim, 1993) and this study has been cited for 946 times. The experiment for the research was carried out in a wine cellar of a restaurant and its findings were there were no significant impacts on the number of ordered wine bottles but there were greater spending of customers when classical music was being played compared to top forty music. I believe this study was considerably useful because other future research could use its finding as evidence that classical music affected purchasing behaviours qualitatively not quantitatively. One of the future studies referred to Areni's study as evidence was Adrian C. North, Amber Shillcock and David J. Hargreaves (2003). Furthermore, another study of Andrian C. North, Lorrain Sheridan and Charles Areni (2015) also referred to Areni and Kim (1993) as evidence but it extended a very interesting aspect on its own, which is priming triggered the music genre (not only classical music) effects on behaviours.

The first study that I will consider is a study by Nicolas Gueguen, Le Guellec Helene and Celene Jacob (2004), which evaluated the relationship between sound level of background music and alcohol consumption. The experiment involved observing 120 participants (60 men and 60 women) consuming alcohol in 2 bars (rural and urban) under 2 conditions: high sound and casual levels. The findings were high sound led to an increase in consumption, men drank much more than women and there was more consumption in rural area compared to urban area.

Firstly, I found in this study was irrelevant references in discussion about the found results. The authors claimed that the found results were consistent with other studies (including Smith & Curnow (1966), Milliman (1982, 1986) and Caldwell & Hibbert (1999)) previously mentioned in their body literature. While I acknowledged that all these studies including the current study targeting the arousal property as an attribute to impacts of the structural musical components on customer

behaviours, the following reasons would justify my reasoning why I thought these references are irrelevant. Apart from that of Smith & Curnow (1996), the focus of the rest 3 studies was how another structural component of music (tempo) affecting customer's behaviours. These 3 studies did not analyse the present study's topic, which was sound level. Additionally, even the study of Smith & Curnow (1996) also examined sound level, but it was about high sound level affected the time customer spent on those chosen supermarkets. It analysed different aspect (time) and different context (supermarkets), not consumer behaviour, hence, I found the authors' s comparison between it with their study was unconvincing and irrational.

My other disappointment was the illogical way in which correlations between fast music and fast eating or drinking speed was used to justify for the findings. Specifically, after a statement "Similarly, McElrea and Standing (1992) found that fast music significantly decreased the time used in which subjects drank a soda", the authors concluded "Such results also could explain our findings". From my personal experience, I agree that fast music boosts my energy, which makes me drink faster but, in this study, there were no evidence provided to prove relation between fast music and high sound music and drinking faster does not always necessarily mean drinking more. Hence, the given conclusion was completely illogical.

On the other hand, I felt that the researchers did aware one weakness in their research. They realized that they depended too much on the assumption that arousal caused by high sound led people to drink more. They were aware that arousal was the only used inference and would need to seek for extra inferences in their further research. Additionally, the authors' s suggestion for testing the interaction between music preferences and drinking behaviours useful. This shows that the authors were not biased and avoided insisting that arousal was the only cause to the correlation between sound level and alcohol consumption.

Next, I will consider a study by Adrian C.North, Amber Shillcock and David J.Hargreaves (2003), in which the correspondence between customers' s spending for meals on restaurants and musical style was analysed. The researchers conducted this study with 393 customers divided into 3 groups and each group was having meals at the restaurant under 3 music conditions: pop music, classical music, and no music. There were 2 data analysis methods including MANCOVA and ANCOVAS. While the first one focused on the differences between conditions in participant's spending on each meal (starters, main courses, deserts, ...), the second one investigated any differences between conditions in the total participant's spending for all meals. After the experiment, researchers found that classical music led to the greatest spending and their findings from the present study were consistent with the previous studies, with Areni and Kim (1993), North and Hargreaves (1998).

I found a concerning issue related to the experimental design. While researchers did make other aspects of the restaurants, such as decoration, lighting, etc constant to focus on the music conditions, their design was not optimal enough since each participant was only exposed to one music condition. It would have been better if each group 's spending was investigated under all 3 music conditions and the researchers could have had more data collected to compare rather than depending on one group for one condition. Additionally, another limit was the billing system did not permit investigation of spending on a person-by-person basis. There may have been a case in which within one participant group, there was a minority of people spending a lot while the rest did not spend much under the classical music condition. It could have been inappropriate to generalize everyone under the same group spending more money when classical music was played.

I acknowledged the researchers attempted to stay objective when judging the found results. More specifically, when comparing their findings in this present study with the previous studies, they did

not only consider their own previous studies (North and Hargreaves (1998)) but also another people's study (Areni and Kim(1993)). The comparison showed their present study's findings were consistent with the previous studies. In addition, I appreciated how the authors avoided overstating their conclusion. Their conclusion was "It is possible to utilize background music to increase customer spending". The authors used "possible" but not other words like "certain" since they were self-aware that there was a lack of evidence for 3 reasonings for classical music promoting customer spending (synergy between classical music and other aspects of the restaurant atmosphere, customer's musical preferences, upmarket atmosphere promoted by classical musical). My only last disappointment with this study was the authors should have discussed about the impacts of pop music on customer spending in their experiment rather than just showing quantitative data measures without discussions about them. Since the title of this article is "The Effect Of Musical Style On Restaurant Customer Spending", it would have been much more convincing if the authors compare the effects caused between pop music and classical music rather than concentrating too much on classical music.

I will examine a final study by Adrian C.North, Lorraine Sheridan, and Charles Areni (2015), which analyses how the congruity between music genres and purchase decisions is strongly affected by priming. The two music genres included in this study were classical music and country music and they were associated with social identity and utilitarian products respectively. The researchers carried out this study by doing an experiment by asking a group of 180 undergraduate university students (90 females and 90 males) about the maximum amounts they could spend for social entity and utilitarian products while listening to each of these two music genres under two separated conditions where priming and no priming took place prior to presentation of the products. Additionally, the test also occurred under no music condition and with this one, priming did not take place.

Researchers found that experimenters were more likely to pay more for the social entity products while classical music was played and this effect was even triggered when experimenters were initially primed with stereotypically upmarket images. By contrast, they were willing to spend more for utilitarian products when country music was played, and this was exacerbated when participants were primed with utilitarian stereotypes. The reported results were that there was a drop in spending when incongruent music was played.

In terms of the sample size of 180 students, while I think it was the decent sample size, I do acknowledge that researchers made a good decision there was no gender bias in the sample, no male or female dominance, which could impact the results. However, I was disappointed with this study since participants were limited to students who may have not been financially independent. This may have affected the participant's answers when they were asked how much they would pay for the given items.

Furthermore, I appreciated how authors did not assume country music and classical music were attributes for utilitarian and society products. For example, the authors refer to another academic study of Ellis (2010) to make their selection of country music more convincing. Nevertheless, I found a statement "research on the sociology of music has established that country music fosters a utilitarian mindset, prompting a focus on pragmatic aspects of domestic life indicative of lower rather than higher socio-economic status" referred to the studies of Blair and Hyatt (1992), Lewis (1999) was slightly misleading and unnecessary. This could cause a misunderstanding that country music or utilitarian products were mainly for poor people.

Before reaching to the results (I have mentioned above in the second paragraph for this study), the researchers performed ANOVA test to analyse data and ensure their correctness again through the Turkey test afterwards. I acknowledged their effort putting into their research by double checking found results and since the results was confirmed through two tests, I found them very transparent, convincing and there was no lack of justifications on their findings.

Overall, after spending my time analysing the studies of Nicolas Gueguen et al. (2004), by Adrian C.North, Amber Shillcock and David J.Hargreaves (2003), Andrian C.North, Lorrain Sheridan and Charles Areni (2015), as well as, the contributions of key theorists, namely Patricia, Roballey and Charles, I have a good grasp of the impacts of music on customer behaviours. However, there are a few limitations in each study that I would like to discuss suggestions for them before ending this body literature. Starting with Nicolas et al. study (2004), I agree with the authors' s recommendation that further research would be required to see if music preferences were the cause of excessive drinking, rather than arousal. From my personal experience, I dislike too loud music, except those songs are the ones I like. Hence, I think it is reasonable to follow the authors's suggestions. The next limitation was an unanswered question that whether synergy between classical music and other aspects of the restaurants exist or not in Adrian C.North et al study (2003). The authors suggested this idea as the first possible to explain why classical music led to greater spending but then contradicted their argument when referring that this synergy did not exist according to another previous study (North and Hargreaves,1998). This showed the authors were unsure and confused about this synergy and I believe further researchers should consider it. In my own opinion, I would not spend money on expensive food when dining out if a chosen place didn't offer me a luxurious, fancy room dining even classical music was played. Hence, I do think decoration of restaurants should be taken into consideration. Lastly, while I found priming trigger music congruity effects stronger in the last research (Andrian C.North et al, 2015), I have not seen much research diving into this application other situations. I wonder if priming effects still work if priming is applied in other settings like priming customers before they order food at restaurants. I recommend different types of priming are tried out such as watching videos instead of seeing images to see which one trigger music congruity the most.

#### References:

North, Adrian C., Sheridan, Lorrain P., Areni, Charles, S.

Music Congruity Effects on Product Memory, Perception, and Choice , *Journal of Retailing*, March 2016, *ScienceDirect*, 92(1):83-95

North, Adrian C., Shilcock, A., Hargreaves, David J., *Environment and Behavior*. Sept 2003, Vol. 35 Issue 5, p712, 7 p.

Roballey, Thomas C.; McGreevy, Colleen; Rongo, Richard R.; Schwantes, Michelle L.,

The effect of music on eating behavior

Areni, Charles S., Kim, David, The influence of background music on shopping behavior: Classical versus top-forty music in a wine store, *NA - Advances in Consumer Research Volume 20*, eds. Leigh McAlister and Michael L. Rothschild, Provo, UT : Association for Consumer Research, 336-340.

Smith, Patricia C.; Curnow, Ross, 'Arousal hypothesis' and the effects of music on purchasing behavior, *Journal of applied psychology*, 1966, *RILM Abstracts of Music Literature*;

