The Effect of Fast-tempo Background Music of Fast-food Commercials on Consumer Purchasing Behaviors

Introduction

Background music is often involuntarily exposed to consumers in various ways. It is now often played throughout commercials, fast-food stores, clothing stores, shopping malls, restaurants, and even in restrooms and hotel lobbies. Therefore, many consumers' significant decisions are frequently influenced by such extensive use of background music. Background music in each commercial is different depending on the marketing strategy of a company, and one main aspect of music that people consistently react to is the tempo (Kerr & Das, 2014). The tempo of background music is known to affect arousal rating. activation is also known as arousal ratings, which refers to assessing the physiological level of activation of individuals behavioral responses regarding to stimulus. Therefore, marketing researchers have conducted various studies investigating the correlation between music tempo and involuntary responses of consumers leading to impulsive buying (Stano et al., 2022).

Music for Advertisement

Traditionally, music is written with different combinations of notes, rhythms, and tempo, and music is commonly allocated to different genres depending on the style as it can generate a certain mood and emotions. Therefore, composing with specific styles or genres is the most common musical technique used in television commercials to target the company's objective (Cook, 1994). A distinctive but well-suited music style for a commercial is enough to captivate the targeted audience in a specific social and demographic group. In detail, the study by Stout and Leckenby (1988) has showcased that consumers tend to show more personal connections with the advertisement when using the major or mixed modes with a faster tempo for the background music. The faster tempo was generally able to be linked with positive and favorable comments. On the other hand, advertisements with minor mode and slower or moderate tempo have been examined to be more irritating and overall rated less favorable (Bruner, 2016).

In the study of the effects of music genre and tempo on brain activation patterns in 10 nonmusicians, it was shown that music tempo has a direct relationship with the beta wave (Hurless et al., 2013). The beta wave represents a type of brainwave associated with our normal waking state of consciousness: alertness, active concentration, and focused mental activity.

Impulsive buying

Impulsive buying is an unplanned and spontaneous purchase without sufficient consideration, which is based on immediate desires and emotional interests. Advertisements are designed to generally target the natural responses of human behavior as their marketing strategies. In the studies by Milman ***(1986)***, it indicated that music possibly impacts consumers' natural purchasing behaviors: how long consumers spend in a shop as well as the number of purchases; in two different studies, it has both been shown that consumers took more time in the shop with slow tempo music as background music. On the other hand, when looking at what triggers consumers' impulsiveness, it showed that faster-tempo music determines consumers' spontaneous behaviors (Petrotta & GALLI, 2020). Moreover, impulse buying tendency and product involvement could be found to be associated with personality traits, and that predict online impulse buying.

A study by Garza et al (date) was to determine the relationship between impulsivity and fast food consumption in employed adults and the reasons for purchasing fast food. The result was that

67% of the employed adults (participants) consumed fast food for one or more meals throughout the past 7 days. Moreover, the most common reason for participants to consume fast food was convenience and socialization, and it was reported that both fast food consumption and BMI (body mass index) was shown to have a correlation with greater impulsivity. Accordingly, the findings illustrate that greater impulsivity directly correlates with greater fast-food consumption.

Fast food commercials

Fast food is one of the most consumed foods worldwide and it took place and most individuals' 'go-to' food. According to previous research, there were several motivations for fast food consumption among individuals: convenience, time efficiency, affordability, advertising, and marketing (Nicoleta, 2013). Therefore, there are a lot of factors that can stimulate an individual's impulsive responses. Moreover, most fast food commercials exploit different marketing appeals, including music, which is associated with the stimulus. The main intention of televised fast-food advertisements is to encourage the purchase of a specific food product (McClure et al., 2013). Fast food companies exploit several different marketing strategies, including music, to trigger impulsive behavior to encourage customers to purchase their food products. Yet, music is not the main feature that discerns the purchase sales. Cooperation with other marketing factors produces the best result. Other than background music, the main marketing appeals included in typical fast-food commercials are visual and scent stimuli (Krishna, 2012). Visual and scent stimuli play a crucial role in evoking the desire and cravings for food (Lambert et al., 1991). These cues can trigger people's behavioral response of impulsive eating and buying by making our brain interpret the commercial as a sign of potential nutrition. Therefore, incorporating both music and visual and scent stimuli appeal in the commercials can possibly bring out greater outcomes.

A.I.D.A model

The A.I.D.A model is commonly used in the business industry when brands create their marketing strategies. The model displays four different stages that consumers experience when making decisions: attention, interest, desire, and action. The A.I.D.A model of marketing communication focuses on the transactions and purchases made by individuals (Hassan et al., 2015). The model is effectively used to assess the impacts of commercials on consumers by controlling each and every step of the emotional transformation. This begins from different levels depending on the commercial and individuals and to see any purchases made by the consumers involved (Kojima et al., 2010). Therefore, each aspect of marketing appeals brings the consumers' attention to different levels on the stages of A.I.D.A model. Music is a supplement to what makes an effective commercial; it is more likely for it to evoke involuntary responses the consumers when music is used in the advertisement. Therefore, it is often used to captivate consumers' attention and gain interest through music (Kellaris & Kent, 1992).

Hypothesis

The main objective of this study is to examine the relationship between the fast-tempo background music of fast-food commercials and purchasing behavior of consumers. Previous research suggests that fast-tempo music stimulates cognitive processes and behavioral responses related to impulsivity: decreased decision-making deliberation, reduced inhibitions, and increased risk-taking decisions (Tendai & Crispen, 2009). Impulsive behaviors such as including spontaneous purchasing decisions, are often determined from heightened arousal and energizing effects of fast-tempo music.

Therefore, it can be hypothesized that fast-tempo background music triggers impulsive behavior of consumers, which controls their responses to purchase products from the commercials. Moreover, by having fast-tempo background music incorporated with other marketing appeals, and visual and scent stimuli, in the commercial, it will maximize the effect. Therefore, it will stimulate the consumers' impulse buying.

Method

Objective:
The objective of this research is to identify the impact of fast-tempo background music in advertisements on consumers' purchasing behaviors and decision-making processes. The research will be conducted as a controlled experiment by manipulating the presence of different tempos in commercials: fast, moderate, and slow.

Research participants
A total of 100 participants of age 18 and up will be sampled in Seoul, South Korea, recruited randomly to represent diversity and varying levels of familiarity with fast foods. Moreover, the participants from the general community will be selected by utilizing online survey panels or research participants' platforms: these will allow me to streamline the recruitment process.

The commercial
A set of fast food commercials will be created for the study. The commercial will not use fast foods from any famous brands (this is to minimize any biased decision makings from the participants). The commercial will include direct images and videos of the food which includes visual appeals and pleasure: close-up shots and vibrant colored backgrounds.

Background music
The background music in the commercial will be non-lyrical and generic background music. The music will be directly made for this experiment in consideration of the different musical preferences of each participant when using famous or well-known music for the experiment. This is to directly look at the effect of the tempo of music on consumers' responses. The same music will have three versions: fast tempo, moderate tempo, and slow tempo. The music will contain the same instrumentations but sped up fast or slow. Once again, this is to purely focus on the impact of tempo on consumers' decision-making.

Impulsivity
The study will use Barratt Impulsiveness Scale (BIS-11) self-report measure to record the impulsiveness of the 100 participants (Citation). BIS-11 is a commonly used self-report questionnaire for measuring impulsivity. It consists of 20 elements that invest different features of impulsivity: attentional, motor, and non-planning impulsiveness. The subscale score in front of the questionnaire will provide a total score that shows the general measure of impulsivity. BIS-11 is a self-report measure, therefore, it highly depends on the participants' own reporting of their impulsivity.

Purchasing behavior
The increase in purchases will be measured by keeping track of the number of participants ordering/purchasing the food after watching the commercial. This will allow recording the effectiveness of different music tempos as one of the marketing appeals, as well as showing the impact on consumers' impulse stimuli. After the commercial, all the participants will be brought to

the ordering app, and they will have a choice to purchase the fast food that was projected in the commercial. Each participant's decision will be tracked down to numerical data, and generalize each division's results/data.

Experimental design

This method uses a controlled experiment, self-report, and online tracking on measuring the purchase increase.

1. Randomly recruit 100 participants aged 18 and up by utilizing online survey panels or research participants' platforms.
2. Divide 100 participants into 4 different sections.
    a. 25 participants in each section: commercials with fast-tempo music, moderate-tempo music, slow-tempo music, and no music.
3. The participants will watch the fast food commercial (burger).
4. After the commercial, it will bring the participants to a food ordering app/link.
    a. Track whether the participants press 'yes' or 'no' to order the fast food, to gather statistics from online tracking.
5. Gather the data of each division's participants' decision on whether to purchase the fast food that was projected in the commercial.
6. Hand out the BIS-11 questionnaire to the participants (this will be tested through an online survey).
7. Let the participants complete the questionnaire on their own.
8. Calculate the scores with the provided scoring guideline of BIS-11.
9. With the calculation of the total and subscale scores, analyze the BIS-11 scores for each division for this research: fast-tempo music, moderate-tempo music, slow-tempo music, and no music.
10. Analyze the data and have a generalized summary of each division's decision-making and impulsivity.

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