# The role of sound in audiovisual advertisements in prompting anger and its effects on brand image and purchase intention

Bachelor Thesis for Obtaining the Degree

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Submitted to Dr. Marion Garaus

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# Affidavit

I hereby affirm that this Bachelor's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed. In particular, I did not use any text generators or other paraphrasing tools.

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# Abstract

This thesis focuses on the influence of the induced emotion of anger through audio stimuli in advertisements on the perceived brand image and the purchase intention. Therefore, the thesis researches the relationship between audio stimuli in commercials and the emotion of anger. Furthermore, the influence of the emotion of anger felt by the consumer on brand image as well as the impact of the brand image on the purchase intention are analyzed. In order to examine these relationships a quantitative research design in form of an experimental survey measuring six constructs was chosen. The survey gathered 105 valid responses which were examined and interpreted subsequently. The results showed no significant relationship between audio stimuli and the caused emotion of anger. Furthermore, no meaningful connection between the triggered emotion of anger and the brand image could be identified. Therefore, there can be concluded that annoying audio stimuli do not necessarily evoke the emotion of anger. The results show that even when anger is induced through advertising the emotion felt by the consumer does not inevitably impact their perceived brand image. Nevertheless, the thesis identified a significant impact of the brand image on the purchase intention. These results indicate that marketing planners should lay their focus on creating a positive brand image since it portrays an influential factor of the purchase intention.

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# 1 Introduction

In 2018, 400 million US-Dollars were spent solely for the use of music in commercials. This expenditure highlights the importance of sound in advertisements. Music is a crucial factor influencing the brand image, conveying emotions and, consequently, the purchase intention (Anglada-Tort et al., 2022). This thesis concentrates on sounds in advertisements, which might evoke the emotion of anger, and its influence on the perceived brand image and purchase intention.

The purchase intention can be defined as a statement of the customers' personal probability to acquire a certain product or service and is strongly influenced by the brand image (Engel et al., 1978; Chin et al., 2018). The latter can be described as the overall image a consumer has of a brand and its products and services (Lee et al., 2014). Emotions evoked by the advertisement play a crucial part in forming the brand image (Wijaya, 2013). Research conducted by Bagozzi et al. (1999) suggests that when a specific emotion is conveyed through advertising, this emotion subsequently is associated with the brand and its service by the consumer (Bagozzi et al., 1999). Furthermore, the emotions evoked through advertising can cause and reinforce behavioural reactions towards the brand (Mizerski & White, 1986). The emotion of anger specifically can create various reactions depending on the level of anger and the level of efficacy felt by the consumer (Turner, 2006). Anger can be triggered through internal factors such as perceived unfair treatment, labelling of people, a low frustration tolerance level or when reality does not correspond to unrealistic expectations. Furthermore, anger can arise through external triggers such as confrontation or abuse (Yadav et al, 2017). The thesis considers an advertisement as external trigger. More specifically, the thesis reviews different kinds of audio stimuli which can evoke emotional responses among the viewers. When it comes to music there are several determinants of the listening

perception including the listening situation, the musical stimulus, the listener themselves and the musical source (Lantos & Craton, 2012). A specific kind of music are sonic logos which such as visual logos serve as a crucial element of the brand identity (Scott et al., 2022). Advertisers make use of foreground- and background music as well as silence as a measure to highlight information or generate a contrast to other advertisements and, therefore, increase the attention of the viewer (Ang et al., 1999; Breves et al., 2020).

In academic literature, a lot of research has been done regarding emotions in advertising and the determinants of the brand image and purchase intention. However, there is a literature gap when it comes to the specific influence the triggered emotion of anger through the sound of advertisements has on the brand image and purchase intention.

The overall aim of this thesis is to measure the effect of the sound in audiovisual advertising when prompting the emotion of anger on brand image and purchase intention.

Therefore, the research questions are:

- In which ways does the consumers perception of the overall perceived brand image change after experiencing emotions of anger through emotional marketing?
- How can audiovisual media in form of an advertisement trigger anger?
- To what extent does an advertisement influence the overall perceived brand image?
- How does a brand image influenced by emotional marketing with a focus on anger impact the purchase intention?

These insights can be significant for marketing campaign planning by providing a better understanding of the influence of the emotion on the perception of the brand as well as the purchase intention.

The introduction is followed by a critical literature review which defines all the relevant terms and provides a basis of knowledge on emotions in advertising as well as the variables of purchase intention and brand image. Furthermore, the impact of audio on the perception of audiovisual media is analysed and different kinds of audio stimuli are introduced. Subsequently, the methodology of the quantitative survey on the impact of anger on brand image and purchase intentions is elaborated. This part is followed by a summary and analysis of the collected data leading to a conclusion.

# 2 Literature Review

The literature review elaborates on the impact of the triggered emotion of anger though auditory stimulation in advertisements on the brand image and the purchase intention. To understand the impact of the use of anger in advertising, this part of the paper discusses emotions, their general use and importance as well as the specific emotion of anger and its use in marketing. Subsequently, different audio stimuli in advertisements such as music, sonic logos, background silence and their impact on the perception of the consumer are explained. Lastly, the concepts of the purchase intention and the brand image are analyzed to measure the perception and impact of the auditory stimuli along with the caused emotions.

## 2.1 Emotions in advertising

In this chapter emotions and their use in advertising are discussed. Firstly, emotions are defined followed by a characterization of the emotion of anger. Subsequently, the use of emotions for marketing purposes as well as the emotion of anger in advertising are explained.

### 2.1.1 Conceptualizing Emotions

To analyze the impacts of emotions on the brand image and the purchase intention it is important to define what characterizes an emotion and to get an overview of the spectrum of emotions and moods. Firstly, it is important to distinguish the terms "affect", "mood" and "emotion" from each other since they are often used similar but they are not interchangeable. The term "affect" is used to describe anything in relation to emotion as an umbrella term (Lindquist et al., 2015). The term "emotion" can be described as a consciously perceived feeling which arises as a reaction to a lived emotional experience- for instance an emotion of anger. The term "mood" identifies a less acute emotional state which can last from minutes to days. A mood does not solely obtain to specific emotions such as anger but rather milder nuances such as annoyance or

a feeling of irritation (Payne & Cooper, 2001). The psychologist Paul Ekman classified the basic emotions as sadness, joy, surprise, disgust, fear and anger (Ekman, 1999).
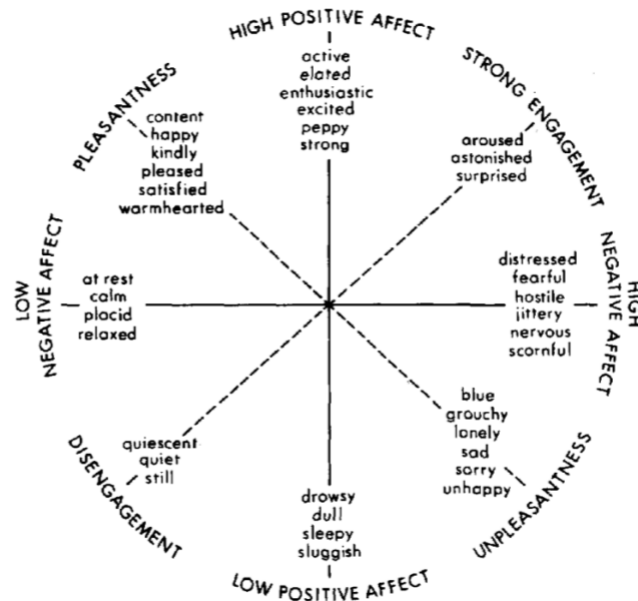


*Figure 1 Consensual Mood Structure, Watson & Tellegen (1985)*

In 1985 Watson and Tellegen released a study introducing the "consensual mood structure" assuming that emotional experiences are not limited to solely positive affects or purely negative emotional experiences. There is a spectrum of the nature, pleasantness and intensity of the affect. Figure 1 shows a visual diagram of the consensual mood structure. The emotional perception can be experienced as purely positive or negative with high or low intensity. However, the emotional experience can also occur on a spectrum between purely positive or negative. This includes a low negative/high positive affect which is perceived as for instance delighted, a high negative/low positive affect which is perceived as for example anxious, a low positive/ low negative affect which is experienced as for instance disinterested or high positive/high negative affect which can cause feelings of nervousness (Watson & Tellegen, 1985). Anger, as one of the latter, subsequently is defined to understand the emotion and further examine its impact on the brand image when induced by marketing.

## 2.1.2 Anger

Anger occurs through the release of the stress hormones noradrenalin and adrenalin (Yadav et al, 2017). According to Berkowitz (2004) who summarized and compared various approaches of the emotion in literature the main determinants of anger are: reactions to a barrier which prevents the person from achieving a goal, an external factor or agent which is blamed by the person for a negative outcome, perceived unfairness of an event and a lack of resilience when it comes to dealing with negative experiences (Berkowitz, 2004). Another perspective of anger is its use as a coping mechanism of possible threats to protect vulnerability (Stasny, 2018). Rubin's (1986) perspective on anger aligns with Stasny's (2018) definition. Rubin arugues that anger is an evocation of one or more aggression plans by a consolidation of coping mechanisms and threat appraisal. The latter includes an evaluation of internal and external occurances for mental and/or physical harm differing in their extent. Coping processes develop coping plans to overcome or minimize threats. When the extent of the threat is high, coping processes often evoke aggression. This might lead to a coexistence of anger and feelings of fear and sorrow. Rothenberg (1971, p. 460), however, describes anger as "an assertive alerted communicative state that arises as an alternative to and defense against anxiety and is not the same as aggression or true destructiveness". Rothenberg argues that anger can not be equalised with hostility since anger does not always involve harm or destruction such as hositility does. He suggests that there is a resemblance of anger and love with the reasoning of similar constructive communication features as well as their connection to involvement and need (Rothenberg, 1971).

Furthermore, several studies, such as the meta-analytic review released by Schum et al. (2003), show a relation between higher blood pressure and an increased pulse through anger (Schum et al., 2003). As a contrast to its' general classification as a negative emotion, however, it can have positive effects as well. The emotion can be beneficial for severely depressed people, for instance,

arising anger can be an indication of improvement of the mental state. Therefore, it is difficult to generally classify the emotion of anger as either positive or negative since it depends on the context (Lazarus, 1991). Since emotions, such as anger, can influence the human behavior they are a crucial aspect in marketing.

### 2.1.3    The use of Emotions in Advertising

Emotions play a crucial role in advertising since emotional experiences created through advertisements are, consequently, associated with the product and the brand. Therefore, emotions can be used as a measure to create attitudes towards the brand and teaching the consumer a behavioral reaction. Furthermore, creating an emotion within the consumer that matches the already existing brand image can lead to a reinforcement or expansion of behavior towards the brand (Mizerski & White, 1986).

Advertisements can convey emotions within the customer which influence the brand image and buying behavior. Bagozzi et al. (1999) defined two different types of advertisements: Thinking advertisements which aim to deliver information about the product or service and feeling advertisements which aim to deliver a specific feeling that can be associated with the product or service and brand. Hill and Mazis (1986), however, support the point of view against the separation of affective and cognitive components such as suggested by Bagozzi. Their paper suggests that marketers should focus on measuring the emotional responses of customers rather than sticking only to the traditional approach of measuring memorability. Hill & Mazis (1986) identified that measures which focus more on the affective brand- and advertisement evaluation than on the traditional approach solely function as a more sensitive tool to distinguish between the impacts of emotion-based and fact-based commercials (Hill & Mazis, 1986). There are several concepts to measure the involvement of consumers' feelings towards an advertisement, the brand or the actual purchase.

One on these concepts, the Foote, Cone and Belding model (FCB) expresses the extent of the consumers' feelings' engagement in the purchase with the product or service (Vaugh, 1986). The model was created with the purpose of evaluating the customers involvement in the purchase decision, illustrating the products in every category, determining the appropriate advertising strategy for every category and analyzing whether purchase decisions are made based on emotional or rational reasons (Yssel, 1995). The variables of the model include the involvement of the consumer expressed from "low" to "high" and the type of motivation expressed from "think" (left brain) to "feel" (right brain). Products and services with high involvement and usage of the left brain (think) bring a higher risk with it due to their significance and high price (for instance high-end cars) whereas products and services with high involvement and use of the right brain (feel) bring a higher level of emotional importance with it (for instance due to their impact on the customers' confidence such as makeup products) (Matusinska & Stoklasa, 2021). The section with low involvement and use of the left brain (think) describes the buying behavior of products required in the day- to-day life which the consumer instinctively buys without thinking a lot about it (for instance toilet paper) whereas the remaining section- low involvement and use of the right brain (feel) expresses the purchases of small day-to-day products which are not necessarily required but bring the consumer satisfaction (for instance beer) (Weinberger & Campell, 1991).

Choi et al. (2012) conducted an analysis according to the FBC model on TV commercials. They discovered that food products, for instance, mainly show emotional advertising appeals and, therefore, fall into the "feel" product category. Furthermore, sales promotions were used more frequently in high involvement products than low involvement products and more increasingly in think rather than feel advertisements. The research suggests an alignment with the model in form of relations between the messages conveyed and the main product characteristics as well as the choice of focus on emotional or practical advantages (Choi et al., 2012).

| FCB Grid | Think | Feel |
|---|---|---|
| **High-involvement** | Informative (Economic)<br><br>Learn->Feel->Do | Affective (Psychological)<br><br>Feel-> Learn->Do |
| **Low-involvement** | Habitual (Responsive)<br><br>Do->Learn->Feel | Satisfaction (Social)<br><br>Do->Feel->Learn |

*Figure 2 FCB Grid, Vaughn (1986)*

In figure 2 the purchase process of the consumer in the different quadrants is expressed. In every product category the consumer "does", "learns" and "feels". In comparison to the feeling-driven purchases in which, consequently, the action of "feeling" plays a central role, the "think"-based purchases always involve the component "learning" before "feeling" (Huang & Lin, 2022). The FCB model highlights the importance of affective reactions or emotions in the purchase process. Therefore, the use of emotions in marketing can play a crucial role when it comes to the consumers' perception of the brand and product.

It was found that advertisements which triggered emotions in feeling-based marketing were more memorable to consumers. Memory and memorability play a central role in advertising when it comes to the message the brand wants to deliver to the customer (Mehta & Purvis, 2006). There are three main categories in which mood states can impact memory. The first are retrieval effects, which explain that the current mood at the point in time when the memory is being retrieved determines the type of memory retrieved. Therefore, a person in a positive mood is more likely to think of a positive memory. Next are the encoding effects which describe that the current mood when studying specific material determines the contents the person remembers. Consequently, if a person in a good mood studies, they are more likely to remember positive materials whereas a person in a bad mood is more likely to remember negative materials (Bagozzi et al., 1999). Lastly, there are state-dependent learning

effects. These effects describe that the current mood of a person determines how much they recall from the studied materials which depends on the mood at the time the contents were studied. This means that a person who was in a good mood when studying contents remembers a higher percentage of the material when retrieving it again in a good mood than when attempting to recall the material in a bad or neutral mood (Lewis & Williams, 1989).

Due to the increasingly great competition and therefore increasing difficulty to raise customer awareness there has been a development in advertising through which advertisements became increasingly provocative referring to taboo subjects in order to stand out. Therefore, advertisements tended to trigger negative emotions such as offense or embarrassment (Curtis, 2017). An article written by Berger and Milkman (2013) states that sadder content is less likely to be shared than contents which trigger anger or anxiety when it comes to the creation of negative emotions through advertisements. An article which creates emotions of anger within the reader is 34% more likely to make it on the most-emailed list (Berger & Milkman, 2013). A study conducted by Nelson-Field, Riebe & Newstead (2013) supports the theory that a video is more likely to go viral when causing an emotional reaction or arousal of the viewer. They discovered that the intensity of the felt emotion is from greater importance than the need for it to be positive. On the contrary, videos which caused the viewers to feel negative emotions such as anger or disgust gained a wider reach. It was concluded that the focus of marketers should lay on aiming for an intense emotional reaction and, therefore, choose to concentrate on an emotional appeal rather than a creative one when producing audiovisual content (Nelson-Field et. Al., 2013). The intensity of the emotion is crucial when it comes to advertising. Therefore, the different levels of the studied emotion "anger" are determined subsequently.

### 2.1.4 Anger in Advertising

Turner's anger activism model (displayed in table 1) was introduced by Turner (2006) assumes that the reaction of the consumer depends on the level of efficacy and the level of anger. Therefore, there can be distinguished among four groups:

| Anger Activism Model | Low levels of anger | High levels of anger |
|---|---|---|
| **High levels of efficacy** | Empowered | Activist |
| **Low levels of efficacy** | Disinterested | Angry |

*Table 1 Turner's Anger Activism Model (2006)*

- Empowered: There are high levels of efficacy and low levels of anger. Since the levels of anger are low the topic is not sensed as significant and the group is solely prompted to engage in mid-level reactions (Turner, 2006).

- Activist: There are high levels of efficacy and high levels of anger. Through the high levels of efficacy and anger as a reaction to the message the activist group feels prompted to act against the problem. This group, furthermore, was found to have the most positive attitude and intentions towards their activism and was willing to put more intensity and energy into their reactions (Turner, 2006).

- Disinterested: The reaction of the group to the message is characterized by low levels of efficacy as well as low levels of anger. Therefore, the disinterested group engages the least in cognitive processing of the message and does not feel prompted to react actively (Turner, 2006).

- Angry: Lastly, the angry group reacts with low levels of efficacy and high levels of anger. The people are angry about the circumstances but perceive their possible activism as unavailing. Therefore, they are

unlikely to intend to engage in high commitment behaviors (Turner, 2006).

The anger activism model suggests that the higher the intensity of the customers' anger the higher the likability of engagement and high-commitment behaviors (Turner, 2006). To induce anger specifically, however, is a complex matter. In the conducted experiment by Cabral et al (2018) a movie scene was shown to the viewer with an intention of anger-induction through empathy- the scene pictured a young man who is assaulted and bullied. This scene did not just evoke anger but also sadness among the viewers. Furthermore, the study shows that whether anger is induced or not depends on cultural backgrounds as well Cabral et al., 2018).

Furthermore, arousal is an important factor when it comes to the creation of urges to share content among users. Therefore, negative emotions conveyed through advertisements do not necessarily influence the brand image negatively when arousal is created as well. A commercial which evokes high arousal through anxiety or anger is even more likely to be shared and increase virality (Berger & Milkman, 2013). When it comes to virality the sound of an advertising can play an influential role as discussed in the following chapter.

## 2.2   Auditory stimulation advertisements

Since this thesis researches the impact of different types of sound in audiovisual advertisements on the consumers emotions and the brand image the following section describes various types of sounds and their influence on the viewers' perception.

### 2.2.1   Music

The consolidation between sound and image in videos can impact the affect, cognition, and behavior of the viewer. In marketing music is used as a "catalyst of advertising" in order to complement the visual stimuli, add more

entertainment value as well as highlighting and improving the conveyed messages in audiovisual advertisements. Furthermore, it is used as a tool to add a continuity or structure to the advertisement and mediate between images. Through proper use of music the brand memorability can be increased and specific target groups can be reached through the right selection of specific music genres (Breves et al., 2020). A paper by Bhatti et al. (2016) researches the emotional response to audio media through brain signals. The results showed that happy or sad emotions were easier to determine than love or anger for instance. It was found that the participants' reaction was either sad or happy when listening to rock and hiphop in contrast to rap and metal which induces angry or sad feelings (Bhatti et al, 2016).

Music can express messages through an imitation of specific sounds such as traffic noises in order to express literal meanings or through its general flow which has the capability to transfer emotions, thoughts and images (Kellaris et al., 1993). More than 400 Million US-Dollars were spent just for the use of music in advertisements in 2018 including licenses worth up to 750,000 US-Dollars for the music used in advertisements broadcasting during the Super Bowl. Music in advertisements can have a significant influence on the brand image, memorability of the advertisement, conveyed mood and purchase intention of the viewers (Anglada-Tort et al., 2022). Through music in commercials, moods can be created or influenced and it can increase arousal levels. The tone color, pitch, timing and timbre portray influential factors of the latter. Music induces the viewer to form new associations and promotes memorability of already learned schemas and connotations. Through a direction of the consumers' attention, simplification of the information and support in interpretation through music the consumer can be prompted to change their attitude towards the brand of even purchase the product (Campbell, 2018). Therefore, the music used in a commercial can have a great impact on the brand memorability, evaluation of the brand, purchase behavior and intentions as well as attention paid to it by the customer (Breves et al., 2020).

Music can cause different affective reactions of the consumer. These function as determents of the advertisement perception. Affective components include the consumers emotions and moods evoked by the music of the advertisement which are determined by their favorability and intensity. Furthermore, whether there is a hedonic response of the customer or an emotional arousal reaction to the music of the advertisement portray further influential affective factors. Additionally, the connected memories with the music and their favorability of the consumer can have a great impact on the perception of the sound (Lantos & Craton, 2011). Sound can impact the viewers' processing of the information positively when it comes to their occasion, capacity and motivation. The occasion can be influenced positively through repetition of the information whereas the capacity of the consumer to understand an advertisement can be improved through its simplicity. To achieve these objectives information which the consumer has learned previously can be linked with the new message of the advertisement through sound techniques such as analogy, jingles and demonstration (Campbell, 2018).

Lantos and Craton (2012) defined four components of the consumers' attitude towards the music used in a commercial. The first component is the listening situation in which the advertisement is consumed. This can include whether there are any ongoing activities in the listening environment, the social situation of the listener, the content which is consumed before and after the commercial break and whether the viewer consumes the media voluntary or involuntary. The second component is the musical stimulus itself. This includes the genre and style of the music as well as the role of the music in the advertisement- whether it is foreground or background music (Lantos & Craton, 2012). Advertisers also make use of differences in intensity of the music in the advertisement as it can be used foreground, background or even not at all with the method of background silence. Foreground music often includes lyrics, is distinguishing and has a high attention value (Breves et al., 2020). Background music in advertisements strongly influences the conveyed emotions and memorability.

Music which does not match the brand message and the message of the advertisement results in distraction and therefore a lower likability of recall and brand recognition (Olsen, 1995). Furthermore, a main factor of the musical stimulus is the musical source which can be an original creation for the business and advertisement, an already existing song or a modified version of an existing song. The structural characteristics of the sound which consist of the texture of the music, the pitch, the time and the sounds' complexity portray another significant determinant of the musical stimulus. The fourth component revolves around the listener themselves and their characteristics such as their preference in music, demographics, culture and personality. The advertising processing strategy portrays the fourth component which concerns the involvement of the consumer of the advertisement and product, the level of involvement, processing of the customer and consumers' attitude (Lantos & Craton, 2012).

Craton and Lantos (2011) divide factors which influence the consumers response to music used in commercials between cognitive factors which are oriented on the seven cognitive effects and concern the customers cognitive involvement and affective factors which focus on the customers cognitive responses. The cognitive factors include the consumers perceived accordance of music and images, the perceived distinctiveness of the music, the ability of the sound to catch and maintain the consumers' attention, the conveyed image by the music, the level of depth of the consumers' processing of the music and perceived or remembered features of the sound in connection with their associations (Craton & Lantos, 2011).

When it comes to the customers' message reception and processing of the music the "attention-gaining value" and "music-message congruency" have high importance. The attention-gaining value describes the ability of musical sounds to stimulate or activate arousal. It can be influenced by the volume or speed of the sound as well as through subjective traits like interestingness or surprisingness. A high attention-gaining value improves the message reception. However, depending on the consistency of meaning transported by the verbal

message and the music it can also be distracting to the listener and, therefore, prevent message reception and processing. "Music-message congruency" describes the accordance of the music with the product and advertisement (Kellaris et al., 1993). "The musical fit" is defined as the congruency of the music in a commercial with other stimuli such as the advertised product, the overall advertisement or emotions which are conveyed through the advertisement. Based on the three variables "product", "target group" and "narration" a model to determine the congruency of the music with the advertisement was designed. In case there is no congruency of the music and either of the three variables it is categorized as "No Fit". If the music is congruent with one of the three variables it is defined as a "single musical fit". If two of the three criteria are met it is a "double musical fit" and if the music matches the narration, product, and target group it is considered a perfect musical fit (Herget et. al., 2017).

The genre of the music is often adapted to the product category. Therefore, classical music is used for luxury products such as wine in order to appear more sophisticated. Products which aim to portray confidence such as beer, on the other hand, tend to use rock music. The genre used in an advertisement can play a significant role in forming the brand image. Therefore, if the music matches the brand image the customer connects the product with e.g. sophistication and the perceived brand value as well as the brand memorability increases which brings the customers willingness to pay more for the product with it. If the music does not match with the content and product of the commercial, however, it can be distracting to the viewer. Congruent music can improve the brand image and increase purchase intentions in high- and low involvement situations (Breves et al., 2020).

Kellaris, Cox & Cox (1993) found that high music-message congruency positively influences its attention-gaining value when it comes to the memorability and recognition of the commercial. A study conducted by Anglada-Tort, Schofield, Trahan, & Müllensiefen (2022) shows that music

familiarity in advertisements increases the likelihood of the consumers' purchase decision for that brand over another brand. Already popular music can have a positive effect on the involvement of the consumer as well as the brand memorability and creation of an association of the song with the brand. Furthermore, the use of a familiar song positively impacts the brand differentiation. However, there can also occur the consequence of distraction, a decreased memorability or a focus on the music rather than the conveyed message when using extremely popular songs (Anglada-Tort et al., 2020). Sonic logos such as jingles and commercial songs are kinds of music which were produced for the commercial or brand specifically. They are often short and distinctive which increases the memorability of the commercial (Breves et al., 2020).

### 2.2.2   Sonic logos

Sonic logos are brief musical logos which similarly to visual logos are a component of the brand identity that is used over longer periods of time in advertisements to create brand recognition. Sonic logos play part in brand differentiation and the creation of brand beliefs. Through sonic logos brand memorability, brand recognition and brand familiarity can be induced (Scott et al., 2022). Wazir & Wazir's research (2015) confirms that increased familiarity of sonic logos increases the recognition as well. Therefore, they conclude that brands with greater advertising presence have greater recognition. According to a study conducted by Krishnan et al. (2012) there is a direct relationship between sonic logos and the willingness-to-pay of the customer. Familiarity portrays an influential factor of the willingness-to-pay. This familiarity can be simulated through variations of the "sogo" fluency which includes but is not limited to the amount of tones (Krishnan et al., 2012). Scott et al. (2022) found that emotion is a crucial factor when it comes to sonic logos as well. Emotion conveyed through the sonic logo determines the attitude toward the brand. Sonic logos have the ability to transfer a brand message that does not correspond to the core brand image of the business (Scott et al., 2022). Another measure to highlight

the message aimed to be conveyed in an advertisement is the use of silence which is discussed subsequently.

### 2.2.3 Silence

In printed media, wide spacing is used as a method to gain attention of the reader and add structure. Consequently, it can be assumed that in audio media silence functions similarly and serves as a contrast to other "noise" around it. Communication silence is often used as a mean to push people into decision-making or a contemplation of information as well as an application of control (Olsen, 1994). Therefore, when used in marketing this void created through silence induces the customer to take an action such as an agreement with the salesperson. In advertising the silence while watching a commercial provides a specific period without distraction in which the viewer can reflect on the information. With an increase of duration of the silence the retention of the information increases as well (Olsen, 1994). Research of Breves, Herget and Schramm (2020) suggests that only 12% of the sample of commercials broadcasted during prime time on the two major German TV stations in 2015 included silent elements (Breves et. Al., 2020). A study conducted by Ang, Leong and Yeo (1999) found that silent segments in television advertisements had a positive effect on the recall and attention of the viewer. The brand image and attribute evaluation, however, were not impacted positively by this method (Ang et. al., 1999).

When there is no sound audiovisual media relies solely on the images to convey an impression. Since the absence of sound in an advertisement makes it more difficult to process it is advisable to make use of a simple storyline and message (Campbell, 2018). The message of an advertisement is competing with several other stimuli. Silence in advertisements works as a contrast to the majority of commercials nowadays which are created by using rather loud and overwhelming sounds. Therefore, the method of silent advertising is especially beneficial when it comes to an increase in memorability and attention when used

as a contrast in a commercial with high volume (Ang et. Al., 1999). Through an increase of attention, the involvement of the viewer with the commercial as well as the focus on the message improves. In case the viewer is already paying attention to the advertisement a placement of silence after the communication of the message sustains this attention through repeated processing of the communicated information (Olsen, 1994). Consequently, this contrast to any other potential distraction around it through silence in advertising is used as a measure to catch the attention of the viewer. Previous studies have shown better results in recall and recognition with the use of silent advertising. However, the conspicuousness of the advertisement through silence advertising strongly depends on the level of contrast to it determined by the sound of the previous and the following advertisement (Olsen, 1995). When used in videography, silence symbolizes undifferentiated time, disjointness, abstraction, dislocation and limitlessness (Campbell, 2018). This can be prevented by using noise at the beginning of the advertisement then cutting to silence and communicating the intended message followed by noise again. The highlighting of this specific information occurs through louder noise followed by silence when the main massage is communicated. Through this strong contrast the consequence is a perception of the viewer that the information holds higher importance and vividness. In solely audio based advertisements, however, this method can also seem rather disturbing and distracting than turning the spotlight on the delivered message when placed in the wrong way. To prevent this case the switch to the background silence can be created right before the last part of the message possibly mid-sentence while using a connecting word such as "and". (Olsen, 1995)

Nowadays, silence in advertising is often used unintentionally because on many social media platforms the sound of audiovisual media does not play automatically but through an additional activation through the user. This portrays a challenge for online marketing. An estimation of advertising agencies states that up to 94 per cent of the viewers consume audiovisual media without

sound due to consumption in circumstances in which sound would not be appropriate such as in public transport or at the workplace (Campbell, 2018). Since, according to Campbell (2018) the sound often plays a significant role in a commercial a great part of the advertisement is missing and remains unobserved by the viewer. Consequently, a commercial which was designed to be consumed with its sound performs badly when this component which has the ability to generate attention and highlight the storyline or message is missing. To prevent this case advertisements should be created to be watched soundlessly. A study conducted by Octavis et al. (2021) supports these findings by showing no difference in effectiveness of videos consumed with and without sound when it comes to product advertisements, talent ads and horror trailers. The only exception is a comedy trailer in which the humor cannot be delivered soundlessly since it relies heavily on the occurring voices. Furthermore, the soundlessness of the advertisements shows positive effects on the motivation of the viewer to gain more information about the product. When watching an advertisement with sound the viewer occurs to be less motivated process the consumed information which has the effect of quicker judgements. Additionally, it was found that longer soundless commercials are more successful than short ones when it comes to the viewers purchase intentions (Octavis et al., 2021).

When used in the correct way silence can arouse emotions or increase their intensity. When the silence is combined with visuals of a sunset for instance it might arouse peaceful feelings whereas a sudden cut to a blank screen combined with abrupt silence can create tense feelings. The use of silence to trigger or intensify emotions has been found to be more effective than sound when it comes to calmness and intrigue (Olsen, 1994). However, when a commercial which is aimed to be watched with sound is consumed soundlessly it can also lack intensity. In order to compensate the missing components such as this additional intensity several techniques can be used to increase the energy such as a variety and of camera shots such as close-ups, tilts or zooms as well as

continuous camera motion. Furthermore, intensified gesturing and mining of the actors can be applied to convey emotions. Additionally, advertisements are easier for the viewer to process if they portray universal human narratives such as embarrassment, sadness, joy or birthdays which are familiar and relatable to almost everyone. When subtitles are used to replace speech and sound they should be precise and clear and the focus should be laid on essential information. Otherwise, subtitles can serve as a distraction or create a conflict for the viewer whether to be attentive to the visuals or to the subtitles and consume more energy (Campbell, 2018).

Research conducted by G.D. Olsen in 1995 suggests a positive influence of silent advertising on the viewers perceived importance of specific information through highlighting by background silence conveyed by the advertisement. According to Craton and Lantos (2011) whether to choose to make use of music and advertisements or nor or which music should be tested since the consumers' response to advertising music is unpredictable (Craton & Lantos, 2011).

## 2.3  Definitions

In the following section the marketing concepts of "purchase intention" and "brand image" are defined. These concepts are crucial for this thesis since they are used as indicators of the impact of sound in advertisements.

### 2.3.1  Purchase Intention

Fishbein and Ajzen (1975) suggest that intentions are determined by two main factors: a factor concerning the attitude towards the action and a normative factor which describes the beliefs of the party of significant referents opinions on the matter and their personal intention to comply with them. Intentions serve as predictor for the behavior of a person regardless of the character of behavior. The particularity of the intention which consists of the consumers' behavior, the purchase situation, the product, the time and situation serves a main measure to predict following behavior. According to Howard and Seth (1969) purchase

intention can be defined as a forecast of the customers' choice of brand and response without the actual purchase behavior. The purchase intention is used to make predictions about the acquisition of products (Howard & Seth, 1969). Engel et al. (1978) define purchase intentions similarly to Howard and Seth, as a statement of subjective likelihood of a purchase to be executed by the customer. These intentions are a result of the socio-economic status of the consumer, their general attitude towards the product and brand and the perceived social influence surrounding them as well as well as their handling of the latter. The purchase intention is formed after the problem recognition, search of fitting products and services and evaluation of the alternatives (Engel et al., 1978). It is formed based on a subjective evaluation of the customers' standards and their beliefs which are a composition of their personal evaluation criteria and information about the product or service. These beliefs directly affect the attitudes of the customer. Therefore, a change in beliefs can modify the attitude which consequently impacts the purchase intentions (Engel et al., 1978). Furthermore, purchase intentions are strongly impacted by anticipated emotions through the purchase made. Therefore, a great influential factor of the purchase intention and -decision is the consideration of affective reactions within the consumer (Bagozzi et al., 2016). Chin et al. (2018) highlight another impactful factor of the brand image. They argue that the intention to buy increases with increased brand image (Chin et al, 2018).

### 2.3.2 Brand image

There have been various definitions of the term "brand image". Lee et al. (2014) provide an overview of the main definitions in literature from the 1950s until 2014 (Lee et al., 2014). Hendon & Williams (1985), on the one hand, define the term as a characterization of the product or service similar to a human being. Dichter (1985), on the other hand, describes it as configuration of the entirety of the field of the product including the advertising of the product, the attitudinal observation as well as the personal temperament and propensity of the consumer. When analyzing the commonalities of the definitions the

quintessence of the "brand image" can be identified as a potential customers' overall perception of the business and its product or service (Lee et al., 2014). The brand image consists of the consumers' experience with the brand in combination with the image created by the business itself including its advertising. There are various components which impact the formation of the brand image of the customer. The brand image is formed by physical attributes of the product, emotions connected with the brand as well as attitudes and associations with the brand. Therefore, main determents of the brand image are the attitude towards the brand, the personality of the brand, brand identity, brand associations as well as the unique advantages and expertise of the business (Wijaya, 2013). The brand image is significant for a business since it influences its stock price, competitive advantage, general brand equity, the long-term cashflow and its internal decisions (Chin et al., 2018). Research from Alhaddad (2015) shows that the brand image impacts the brand loyalty and brand trust positively (Alhaddad, 2015). The term "brand loyalty" describes the deliberate decision of a customer to re-purchase a product or service from the same brand repeatedly without any consideration to buy a different one (Oliver, 1999). Furthermore, the brand image is determined by advertising awareness, price awareness and brand awareness (Alhaddad, 2015). Emotions can be a crucial determinant of the brand image whereas the brand image can strongly impact the purchase intention (Wijaya, 2013; Craton & Lantos, 2012). Therefore, the brand image portrays a significant variable of the hypotheses which are introduced in the following section.

## 2.4   Hypotheses

Based on the literature review three hypotheses were created to examine the relationships between auditory stimulation, induced anger, the brand image and the purchase intention.

As Craton & Lantos (2012) suggest that the use of music in advertisements as stimulus is a crucial determinant when it comes to the formation of the brand

image and advertisement perception (Craton & Lantos, 2012). There are several kinds of audio stimuli which can evoke different affective reactions. When it comes to music, on the one hand, rap or metal can induce angry feelings whereas rock or hiphop can cause happy or sad feelings (Bhatti et al., 2016). Silence, on the other hand, can create tense or peaceful feelings as well as arousal (Olsen, 1994). For this thesis the focus was set on the emotion of anger. Therefore, based on the literature review the following first hypothesis was formed:

**H1: Audio stimuli in video advertisements have a significant influence on evoking anger.**

Emotions connected and associated with the brand are a crucial determinant of the brand image. An emotional response and feeling towards a brand are induced by a stimulus. The stimulus can be physical or psychological such as the advertising. Psychological stimuli such as the advertising of a product have a greater impact than physical stimuli (Wijaya, 2013). As the anger activism model by Turner (2006) suggests there are different levels of anger which in combination with different levels of efficacy create a variety of attitudes and reactions (Turner, 2006). Consequently, the second hypothesis uses anger as an independent variable to measure its influence on the dependent variable of the brand image:

**H2: Anger towards an advertisement has a significant impact on the brand image.**

Subsequently, the brand image is used as independent variable of the last hypothesis to measure its impact on the purchase intention. According to Zhang (2015) the purchase decision of the customer is mainly based on the brand image (Zhang, 2015). Chin et al. (2018) suggest a positive relationship of the brand image and the purchase intention. Consequently, increased brand image leads to an increase of the purchase intention (Chin et al., 2018).

Therefore, the purchase intention is used as dependent variable to measure the overall impact and possible change of consumption:

**H3: The brand image has a significant effect on purchase intention.**

auditory stimulation → H1 → emotion of anger → H2 → brand image → H3 → purchase intention
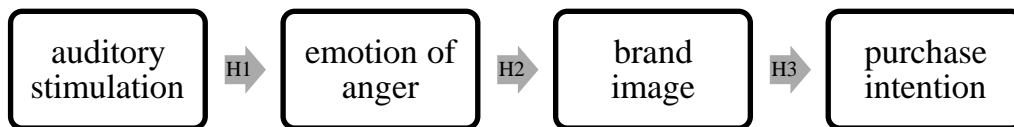
*Figure 3 Research Model*

Figure 3 provides an overview of the inclusion of the variables in the research model and the hypotheses formation.

# 3    Methodology

## 3.1    Study design

In general, research designs can be categorized into three groups: qualitative research, quantitative research and mixed methods. When making use of qualitative research the main objective is to study the meaning the particular party assign to source to the research problem. The quantitative method, however, aims to analyze the relation among variables in order to examine objective theories. Both research approaches can be combined to a mixed methods research approach. The choice of the research approach is mostly based on the character of the research problem as well as the population and researchers' subjective understanding (Creswell, 2014).

For this study a quantitative method was chosen since it allows to measure the relationship between the variables of interest. Therefore, the strategy of a causal research design of an online survey was considered as the most promising research design. Through a collection of the quantitative results of the sample the researcher aims to collect data from the target group (Creswell, 2014).

The aim of the study was to measure the impact of the emotion anger through audio stimuli in advertisements on brand attitude and purchase intention justified an experimental study design. An experimental study design is characterized by a manipulation of an independent variable. Therefore, two groups were created: an experimental group and a control group. A randomizer was used to allot every participant to either a control or an experimental group. Consequently, there was an equal probability for every individual taking part on the survey on being assigned to either group. Through this measure the participants were distributed relatively evenly into the groups and selection bias of the participants was prevented which in turn represents a real experiment (Drummond & Murphy-Reyes, 2018).

The survey was available from the 10<sup>th</sup> of January 2024 to the 17<sup>th</sup> of January 2024.

## 3.2   Survey development

The aim of this research was to determine the impact of anger evoked through audio stimuli in commercials on the brand image and the purchase intention. Therefore, an online survey on the platform SoSciSurvey was developed and conducted in order to collect primary data and insights to answer the research questions and test the hypothesis. The survey contained measures on the previously in the literature review defined constructs: perception of the advertisement, attitude towards the brand, purchase intention and uniqueness of the advertisement.

Since an experimental design was chosen the independent variable of sound in the advertisement was manipulated. The experimental group was instructed to watch the commercial with sound whereas the control group was told to watch the video without sound.

The survey included 36 close-ended questions. It entailed demographic measures and a yes/no question checking the correct division to the experimental- and control group. Furthermore, to measure the relevant constructs polarity scales ranging from -3 to +3 as well as well as Likert scales ranging from 1 (strongly disagree) to 7 (strongly agree) were included.

The survey started with a message to the participants introducing them to the researcher and informing them about ethical implications such as anonymity of their answers and the need of the participants' answers to reflect on their personal perception exclusively without right or wrong answers. The participants were informed to agree with the terms and conditions of the survey as they proceeded. On the next page they were instructed to either watch the upcoming advertisement with sound or without sound depending on the group

they were assigned to. Subsequently, an advertisement of the Austrian brand "mjam" was shown.



*Figure 4 Mjam Youtube Advertisment*

The brand "Mjam" was founded in 2008 in Vienna. In 2012 Mjam was bought by the German food delivery company "Delivery Hero". "Delivery Hero" sold their German market including the business "foodora" to the Dutch business "Takeaway.com" (Horizont.at, 2023). In April 2023 the brand "mjam" was merged with "foodora" and got a new brand image, presenting itself in bright pink and with a set of new features on the app. Foodora delivers food in Sweden, Norway, Finland, Denmark, Hungary, Slowakia and the Czech Republic (foodora.at, 2023). The brand is famous for its bike delivery employing over 2600 workers in Austria (Kainrath, 2023).

The commercial shown in the survey was published in 2019 as the first part of the three episodes "Mjam Karaoke", "Mjam Moments" and the music video "MjamMjam Style". The commercials show similarities to the repetitive boomerang-like "mjam" advertisements from the "Burger, Burger, mjam mjam mjam" campaign in 2015 (Fiala, 2019).

The clip which is portrayed in Figure 4 shows a man dressed in vintage clothes holding a sushi singing "mjam" more than 30 times. Due to this boomerang-like

repetitiveness of the voice singing "mjam mjam mjam mjam" in the same pitch the clip was chosen as a potential trigger for the emotion of anger. Another reason for the advertisement selection was the product category. As Choi et al. (2012) suggest in their research based on the FCB model created by Vaugh (1986) food categories mainly use affective advertising appeals (Choi, 2012).

Additionally, the comments below the videos of the video of the "Mjam Karaoke" campaign which are displayed in figure 5 confirmed this assumption as a German speaking user stated: "This is by far the most insane and annoying advertising construct that has flickered across the screen in years. In comparison even the Putz family is a blessing. In any case, it is thanks to your advertising that I will refuse Mjam as a supplier in the future." Figure 5 reports other users comments that guided the selection of this ad as trigger for the emotion anger: "Please remove the advertisement otherwise I won't order anything from you anymore…". In a third example which is shown below a user wrote: "What idiot comes up with such an annoying advertisement? I never order anything through Mjam because your advertising is always so annoying."



*Figure 5 Mjam Advertisement Comments*

The comment section was dominated by similar statements including the most liked comments. Therefore, the advertising was chosen to analyze impact the sound has on the viewer as well as the influence of the latter on the brand image and the purchase intention. The participants were able to skip to the next page after watching the full 15 seconds advertisement. Subsequently, they were asked to answer whether they heard anything when watching the commercial with a yes/no question to confirm that they acted as instructed depending on their group before watching the advertisement.

Afterwards, the participants were asked to express their perception of the advertisement and its fit with the brand as well as their favorability of the advertisement through a likert scale. Furthermore, they were instructed to indicate their perception of uniqueness of the advertisement in a polarity scale. Additionally, they were asked to indicate their perception of the brand in a polarity scale and their emotions while watching the commercial in a likert scale. In addition, they were asked to disclose their future purchase intentions in a polarity scale.

Finally, demographic questions were asked such as their age, their educational background and gender as well as whether they have previously consumed the services of "Mjam" or not.

## 3.3  Measures

In this section the measurement items used in the survey are listed including their sources and scaling. The items along with their sources are described in Table 2.

The questionnaire consisted of five sections measuring the overall perception of the advertisement and the brand as well as future purchase intentions. 7-point likert scales from 1 (strongly disagree) to 7 (strongly agree) as well as 7-point polarity scales from -3 to +3 were used.

Subsequently, the viewers perception of the advertisement was measured using the measurement items constructed by Foroudi et al. (2014) as well as Hyun et al. (2011). In this section the favorability and entertainment of the viewer along with the perceived fit of the advertisement and the brand was measured. Statements were used in a 7-point likert scale for the participants to express their agreements or disagreements.

In the second section the perceived uniqueness of the commercial was assessed based on measurement items developed by Batra (1991). The section focused on the differentiation of the advertisement from other brands perceived by the viewer. For this section a polarity scale was used ranging from e.g. -3 ordinary to +3 peculiar using different adjectives describing uniqueness.

Furthermore, items constructed by Spears & Singh (2004) were adopted to evaluate the perceived brand image of the viewers. This section made use of a polarity scale as well assessing the conveyed brand image in the advertisement utilizing adjectives in a ranges such as -3 negative to +3 positive.

Since the purpose of this thesis was to measure the impact of emotions evoked by sound in advertisements the focus was laid on the emotions felt while watching the advertisement in the fourth section. The 7-point likert scale measurement items developed by Hyun et al. (2011) consisted of adjectives from which the majority aimed to measure different nuances of the emotion of anger.

Lastly, the future purchase intentions were evaluated using Spears & Singh's (2004) measures in form of a 7-point likert scale. The section measured the future intentions and interests of the viewer of the commercial to consume the products and services offered by the advertised brand.

| Construct | Measures | Source |
|---|---|---|
| **Control** | **Did you hear anything when watching the advertisement?**<br><br>Yes/No | |
| **Advertisement perception** | **Indicate how strong you agree or disagree with the following statements:**<br><br>• The company's advertisement is favorable<br>• The company's advertisement holds my attention<br>• The company's advertisement is convincing<br>• The company's advertisement communicates what the company stands for<br>• The company's advertisement makes me have positive feelings toward the company The advertising was lots of fun to watch and listen to.<br>• The enthusiasm of the advertising is catchy – it picks me up.<br>• The advertising was playful.<br>• The characters or people in the advertising captured my attention.<br>• The advertising was exciting.<br><br>**7-point likert scale** | Foroudi et al., 2014<br><br><br>Hyun et al., 2011 |
| **Advertisement Uniquieness** | **Please indicate how you evaluate the advertisement:**<br><br>• Ordinary-peculiar<br>• Normal- weird<br>• Nothing special- outstanding<br>• Just like any other ad- different from any other ad<br>• Average- special<br><br>**7-point polarity scale** | Batra (1991) |

| | Please describe your overall feelings about the brand MJAM decribed in the ad you just watched.<br><br>• Unpleasant-plesant<br>• Unlikable-likable<br>• Bad-good<br>• Unappealing-appealing<br>• Unfavorable- favorable<br>• Negative- positive<br><br>**7-point polarity scale** | Spears & Singh, 2004 |
|---|---|---|
| **Brand Image** | | |
| **Emotions felt while watching the advertisement** | Please tell us how much you felt of each of these feelings while you were watching this commercial:<br><br>• Upset<br>• Angry<br>• Interested<br>• Annoyed<br>• Good<br><br>**7-point likert scale** | Hyun et al., 2011 |
| **Purchase Intentions** | Please describe the likelihood of your considering the consumption of this service in the future:<br><br>• Definitely not consume it- definitely consume it<br>• Very low consumption interest- very high consumption interest<br>• Definitely do not intend to consume- definitely intend to consume<br>• Probably not consume it- probabaly consume it<br>• Never- definitely<br><br>**7-point polarity scale** | Spears & Singh, 2004 |

*Table 2 Measurement Items of the Survey*

## 3.4 Ethical considerations

When conducting empirical research it is crucial to address ethical considerations. These concerns are important when it comes to the protection and mitigation of detriment of the participants. Furthermore, through ethical

behavior trust of the participants is built for the researcher to understand their needs and sensitivities which causes their willingness to answer the questions asked openly (Israel & Hay, 2006).

Therefore, the survey was constructed considering the ethical concerns of informed consent, voluntary participation, potential for detriment and confidentiality.

Informed consent can be defined as action of informed approval of a researcher to include the participant in research. Voluntary participation is an important matter since the researcher intrudes into the lives of individuals through a survey which requires them to voluntarily put in time and energy as well as a disclosure of personal information such as attitudes. Anonymity in research describes the inability of the researcher to identify an answer with a given participant. When the researcher has the ability to do the latter, however, confidentiality promises disuse of it. When it comes to potential for detriment the researcher prevents misusage of information given by the participants which could embarrass or harm them (Israel & Hay, 2006; Babbie, 1973).

To include these ethical considerations into the survey the participants received the following information in the introductory text of the survey: Firstly, the researcher, the research topic and the aim of the survey were introduced. The participants were provided with contact information of the researcher in case of any concerns or questions. Furthermore, confidentiality/anonymity was assured as well as an encouragement of the reflection of the participants' own personal opinions without any wrong or right answers. Subsequently, an automatic agreement of voluntary participation by continuing the survey as well as the ability to disrupt the survey at any given time was asserted. Finally, no personal questions from which participants can be identified were asked.

Furthermore, the survey was approved by the institutional review board of Modul University Vienna. It is a requirement for research conducted in the name of the university to be checked by the ethics committee beforehand. The board

revises the questionnaire including the introductory text and the devise used to collect and save the empirical data based on the Belmont Report as well as the Austrian- and EU law. According to the evaluation criteria of the committee the questionnaire must entail contact details of the researcher, the possibility to interrupt the questionnaire at any point, consent of the participants to their participation and store of their data provided. Moreover, the participants must be educated about the topic of the research, the usage of the information they provide as well as the risks and advantages of their participation (Modul.ac.at, n.d.). The representative David Leonard approved this survey in the name of the institutional review board of the MODUL university Vienna.

## 3.5 Data Collection

The data was collected with the online-survey software "SoSci Survey". A personal link was created which was distributed to family members, friends and university groups via Whatsapp. Furthermore, the link was shared in Instagram stories. Therefore, the sampling method of a convenience sample was used. In this non-probability method the researcher approaches already existing contacts. This method was chosen since there is no precise representativeness of a population required. Furthermore, it is the most accessible, efficient and inexpensive way for the researcher to approach large numbers of participants (Babbie, 1973).

# 4 Results

## 4.1 Manipulation test and data cleaning

In total 134 people participated at the survey. When cleaning the data from straight-lining cases as well as formality issues one questionnaire including an invalid indication of age is detected. Therefore, a contingency table is created to remove the questionnaires which were completed by participants who failed the manipulation check. As portrayed in Table 3, 67 participants were assigned to the experimental group which was instructed to watch the commercial with sound. Three participants, however, indicated to have viewed the video without sound. Additionally, 24 out of the 67 people who were allotted to the control group expressed to have watched the advertisement without the audio stimulus. Therefore, 29 out of 134 questionnaires are detected as invalid.

| Contingency table | Experimental Group | Control Group | Total |
|---|---|---|---|
| **Control question: yes** | 64 | 25 | 89 |
| **Control question: no** | 3 | 42 | 45 |
| **Total** | 67 | 67 | 134 |

*Table 3 Contingency Table*

Furthermore, a manipulation check is implemented to analyze the statistical relation between the assigned group of the questionnaire and the answer of the control question. A detailed breakdown is described in Table 4.

The chi-square is used to analyze the relationship between ordinal or nominal data. It is used to analyze whether answers of a questionnaire were given in the expected pattern (Hair et al., 2021). The Chi-Square equals 324 with a

significance level of <0.001. The p-value of <0.001 is lower than the standard criterion of 0.05. Therefore, the null-hypothesis is rejected and the association between the two variables is confirmed. Consequently, the conclusion can be drawn that there is a meaningful relationship between the groups and the answers given at the control question.

| $X^2$ Tests | Value | p |
|---|---|---|
| $X^2$ | 324 | <0.001 |

*Table 4 Manipulation Check*

## 4.2 Sample Description: Demographics

The age of the participants of the 105 valid questionnaires ranges from 18 to 67. Table 5 shows the exact age distribution in numbers of people taking part in the survey as well as the percentage the age group made up to the total number of participants. In order to gain a better overview the age groups are split into the seven groups: 18-20, 21-25, 26-35, 36-45,46-55, 56-65, 66-67.

The group between 21 and 25 makes up the majority of participants with a percentage of 58%. The remaining participants are distributed relatively evenly when it comes to their age in the groups of 18-20, 26-35, 36-45 and 46-55 with approximately ten percent per group. Furthermore, three participants are older than 56. The great percentage of the group from 21 to 25 probably has its source in the distribution of the survey through university groups and via Instagram stories.

| Age group | Participants | Percentage |
|---|---|---|
| 18-20 | 12 | 11% |
| 21-25 | 61 | 58% |
| 26-35 | 11 | 10% |

| | | |
|---|---|---|
| **36-45** | 9 | 8% |
| **46-55** | 10 | 9% |
| **56-65** | 2 | 2% |
| **66-67** | 1 | 1% |
| **SUM** | 106 | 100% |

*Table 5 Age Distribution*

The distribution of gender identity of the participants is displayed in Table 6. The majority identifies themselves as female with an amount of 65 people which makes up 61% of all participants. 35% choose "male" as their gender identity whereas one non-binary person takes part in the survey. Moreover, one participant cannot identify themselves with any option listed and two people prefer not to disclose their gender identity.

| Gender | Participants | Percentage |
|---|---|---|
| **Non-binary** | 1 | 1% |
| **Male** | 37 | 35% |
| **Female** | 65 | 61% |
| **None of these** | 1 | 1% |
| **Prefer not to say** | 2 | 2% |
| **SUM** | 106 | 100% |

*Table 6 Gender Identity Distribution*

The dispersion of the level of education which is displayed in Table 7 of the participants is more widespread than the other demographic categories. "High school completion" makes up the greatest part with a percentage of 41%. The second greatest part portrays "Bachelors degree" with an amount of 35

participants or 33%. The rest of the participants are divided into the groups of "some college or associate's degree" with 13%, "Advanced degree" with 10% and "Less than high school" with 3% of the sample.

| Education | Participants | Percentage |
|---|---|---|
| Advanced degree | 11 | 10% |
| Bachelors degree | 35 | 33% |
| Some college or associate's degree | 14 | 13% |
| High school completion | 43 | 41% |
| Less than high school | 3 | 3% |
| SUM | 106 | 100% |

*Table 7 Level of Education Distribution*

Lastly, the participants are asked if they had ever consumed products or services by the brand "Mjam" before taking part in the survey. As illustrated in table 8 more than half of the sample indicate that they had ordered from "Mjam" before with 55%. 44 individuals state that they had never made use of "Mjam's" services before whereas 4% argue not to remember whether they had purchased any products through the app.

| Experience with MJAM | Participants | Percentage |
|---|---|---|
| Yes | 58 | 55% |
| No | 44 | 41% |
| Can't remember | 4 | 4% |

| SUM | 106 | 100% |
|-----|-----|------|

*Table 8 Previous Experience with MJAM*

## 4.3 Scale reliability

To measure the reliability the internal consistency is assessed with Cronbach's alpha. Through Cronbach's alpha the mean of all attainable split-half measures which arise from different ways of dividing the scale questions are calculated. It is a value between 0 and 1. A value less than 0.7 indicates an unsatisfactory and, therefore, too low internal consistency (Hair et al., 2021). In the survey the coefficient alpha ranges from 0.78 to 0.96. This indicates internal consistency and, consequently, strong reliability of the constructs. The exact values are displayed in Table 9.

| Constuct | Cronbach's Alpha |
|----------|------------------|
| **Purchase Intention** | 0.95 |
| **Ad Simulation** | 0.85 |
| **Brand Perception** | 0.96 |
| **Ad Perception** | 0.78 |
| **Uniqueness** | 0.82 |
| **Anger** | 0.83 |

*Table 9 Cronbach's Alpha*

## 4.4 Descriptives

In this section the descriptive statistics of the researched constructs are analyzed for the experimental group as well as the control group. Therefore, the mean value, the standard deviation, the skewness, the kurtosis and the Shapiro-Wilk p-value for each of the constructs are calculated. The constructs measured are "Purchase intention", "Ad Simulation", "Brand Perception", "Ad Perception", "Uniqueness" and "Anger".

### 4.4.1 Experimental Group: with sound

The descriptive statistics of the experimental group which was instructed to watch the advertisement with sound are displayed in Table 10.

The construct "Purchase intention" has a mean value of 3.79 which indicates a relatively neutral stance of the participants when it comes to their intention to buy products of the brand in the future. The standard deviation of 1.44 displays a variance of 38% of the mean value. The construct is slightly left-skewed with -0.13 which indicates a tendency of higher values. The Shapiro-Wilk p-value of 0.24 signifies a normal distribution of the data.

"Ad simulation" shows an average of 3.68 which indicates low enjoyment of the participants watching the advertisement with sound with a standard deviation of 1.29. The slightly left-skewed distribution of -0.3 shows a presence of some higher values. The kurtosis of -0.89 indicates slightly less extreme values than a normal distribution. The p-value of the Shapiro-Wilk test of 0.03 shows that the data is not normally distributed.

The average of "Brand perception" equals 3.94 which indicates neither a positive- nor a negative attitude towards the brand. A moderate standard deviation of 1.31 suggests more higher values. The skewness of -0.41 suggests a left-skewed distribution and the kurtosis of -0.52 indicates fewer extreme values than a normal distribution. The p-value of the Shapiro-Wilk test of 0.05 signifies no meaningful difference from a normal distribution of the data.

The construct "Ad Perception" showes low favorability and neutral stance of the participants towards the commercial illustrated by a mean value of 3.57. The standard deviation from the average value is 1.22. The data of the construct is rightward skewed with a skewness value of 0.15 which indicates that there occur a few lower values. With a kurtosis of -0.66 the data appears to have fewer extreme values than a normal distribution. The Shapiro-Wilk test shows no meaningful difference from a normal distribution.

The average value of 4.6 of the construct "Uniqueness" shows that the advertisement is perceived as slightly different from other advertisements with a standard deviation of 1.1 from the mean value. The data is slightly right-skewed indicating that there are a few lower values. The kurtosis of -0.68 shows that there appear to be fewer extreme values than in the case of normally distributed data. The Shapiro-Wilk p-value of 0.28 indicates that there is a high likeliness of the data to be distributed normally.

The construct "Anger" has a mean value of 3.79 which indicates that the participants did not necessarily feel angry when watching the advertisement with sound. The standard deviation from the mean value equals 1.67. The skewness of -0.16 indicates that the data is slightly left-skewed meaning that there may be few higher values. The data includes fewer extreme values than a normal distribution which is displayed by the kurtosis of -0.99. The Shapiro-Wilk test shows that the data is not normally distributed with a p-value of 0.01.

| Measures | Mean | Std Dev | Skewness | Kurtosis | ShapiroW p.-value |
|---|---|---|---|---|---|
| **Purchase Intention** | 3.79 | 1.44 | -0.13 | -0.33 | 0.25 |
| **Ad Simulation** | 3.68 | 1.29 | -0.30 | -0.89 | 0.03 |
| **Brand Perception** | 3.94 | 1.31 | -0.41 | -0.52 | 0.05 |
| **Ad Perception** | 3.57 | 1.22 | 0.15 | -0.66 | 0.47 |
| **Uniqueness** | 4.60 | 1.10 | 0.082 | -0.68 | 0.29 |
| **Anger** | 3.79 | 1.67 | -0.16 | -0.99 | 0.01 |

*Table 10 Descriptives experimental group (with sound)*

### 4.4.2 Control Group: Without Sound

To compare the different perceptions of the advertisements and their impacts the descriptive statistics of the control group which watched the commercial without sound are examined in Table 11.

The construct "Purchase intention" has a mean value of 4.06 which indicates that the participants do not necessarily intend to consume products from the given brand in the future. The standard deviation which describes the variability of the data equals 1.32. The data is slightly left-skewed suggesting a few higher values with a skewness value -0.27. The kurtosis of 0.02 indicates that there are no meaningful extreme values or outliers. The Shapiro-Wilk p-value of 0.56 indicates that the data is likely to be normally distributed.

When analyzing the construct "Ad Simulation" the average of 3.34 indicates that the participants did not necessarily enjoy the experience of watching the advertisement. There is a standard deviation from the mean of 1.16. The skewness of 0.23 illustrates a rightward skew of the data which indicates the presence of a few lower values. There are less extreme values than in normally distributed data which is expressed through the kurtosis value of -0.99. The p-value of 0.07 which is the result of the Shapiro-Wilk test describes a high probability for the data to be normally distributed.

The mean value of the "Brand Perception" of the participants equals 3.93 which indicates that the participants' attitude towards the brand is not necessarily favorable or negative. The standard deviation of the average is 1.28. The skewness of -0.31 shows that the data is left-skewed suggesting that there might be more higher values. The kurtosis of 0.32 suggests that there are more extreme values or outliers than in a normal distribution. However, the data is likely to be normally distributed which can be derived from the p-value of the Shapiro-Wilk test which equals 0.53.

An analysis of the data suggests that the participants do not particularly like or dislike the advertisement which can be deduced from the mean value of 3.36 of

the construct "Ad Perception". There is a standard deviation of 1.1 from the average of the data. The analysis suggests more lower values because it is slightly right-skewed with a skewness of 0.3. The kurtosis of the construct is -0.61 which shows fewer extreme values or outliers than in a normal distribution. The Shapiro-Wilk test suggests a high likeliness for the data to be normally distributed with a p-value of 0.39.

The mean of 4.33 of the construct "Uniqueness" displays that the participants perceived the advertisement to be a little bit out of the ordinary with a standard deviation of 1.22. A slight left skewness of the data of -0.24 suggests that there are higher values. The kurtosis of 0.10 shows slightly more outliers and extreme values than in a normal distribution. On basis of the Shapiro-Wilk test with a p-value of 0.39 a normal distribution can be assumed.

The average of 3.72 of the construct "Anger" shows that the participants do not necessarily feel the emotion of anger when watching the advertisement. The analysis showed a standard deviation of 1.51. The data is slightly right-skewed suggesting more lower values. The kurtosis of -0.87 indicates that there are fewer extreme values or outliers than in a normal distribution. There is a high probability for the data to be normally distributed which can be derived from the p-value of the Shapiro-Wilk test of 0,15.

| Measures | Mean | Std Dev | Skewness | Kurtosis | ShapiroW p.-value |
|---|---|---|---|---|---|
| **Purchase Intention** | 4.06 | 1.32 | -0.27 | 0.02 | 0.56 |
| **Ad Simulation** | 3.34 | 1.16 | 0.23 | -0.99 | 0.07 |
| **Brand Perception** | 3.93 | 1.28 | -0.31 | 0.32 | 0.53 |
| **Ad Perception** | 3.36 | 1.10 | 0.30 | -0.61 | 0.39 |

| | | | | | |
|---|---|---|---|---|---|
| **Uniqueness** | 4.33 | 1.22 | -0.24 | 0.10 | 0.75 |
| **Anger** | 3.72 | 1.51 | 0.19 | -0.87 | 0.15 |

*Table 11 Descriptives experimental group (without sound)*

## 4.5 Hypothesis testing

In this section the relationships between auditory stimulation and purchase intention are analyzed as captured in Figure 6. Firstly, hypothesis 1 states that there is a significant relationship between the auditory stimulation of an advertisement and the evoked emotion of anger is examined through an ANOVA test. Subsequently, hypothesis 2 states the effect of the emotion of anger on the brand image is measured through an ANOVA analysis. Lastly, hypothesis 3 shows the established relation between brand image and purchase intention by using a regression analysis.
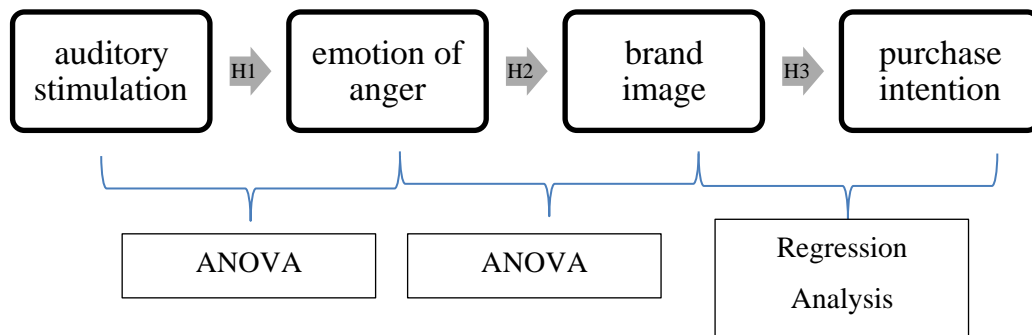


*Figure 6 Research Model*

### 4.5.1 Hypothesis 1

As displayed in table 12 an ANOVA analysis is conducted to test the relationship between the different groups and the emotion of anger. Consequently, the groups the participants were assigned to portray the factor variable whereas anger functions as the dependent variable. The mean values of the experimental group of 3.79 and the control group of 3.72 do not differ substantially and are relatively close to each other. Furthermore, the F-value of 0.041 is relatively low which indicates a small variance within the results of the

groups. The p-value of 0.84 supports that there is no meaningful difference between the experimental- and the control group in feeling the emotion of anger.

| Anova | Mean WITH | Mean WITHOUT | df | F | p |
|---|---|---|---|---|---|
| Group | 3.79 | 3.72 | 1 | 0.041 | 0.84 |

*Table 12 ANOVA Analysis of Anger*

### 4.5.2 Hypothesis 2

As shown in table 13 an ANOVA test is utilized to examine the relation between the two groups the participants of the survey were allotted to and their perceived brand image. The mean value of the experimental group of 3.94 barely differs from the mean value of the control group of 3.93. Therefore, the F-value shows a slight variance of 0.002 with a p-value of 0.96. Consequently, there can be concluded that there is no significant difference of the effect of the induced emotion of anger on the brand image between the two groups.

| Anova | Mean WITH | Mean WITHOUT | df | F | p |
|---|---|---|---|---|---|
| Group | 3.94 | 3.93 | 1 | 0.002 | 0.96 |

*Table 13 ANOVA Analysis Brand Image*

### 4.5.3 Hypothesis 3

Table 14 illustrates a regression analysis which describes the probability of a future purchase of products of the brand based on the brand image. The relationship between the independent variable the perceived brand image on the dependent variable of the purchase intention is examined. The multiple correlation coefficient R equals 0.41 which indicates a moderate positive correlation between the brand image and the purchase intention. The adjusted coefficient of determination $R^2$ of 0.16 suggests approximately 16% of variability in the purchase intention. The F value of 20.9 indicates that the

relation is statistically significant with a p-value of <0.001 which confirms that the brand image significantly influences the purchase intention.

| Model | R | $R^2$ | Adjusted $R^2$ | F | p |
|---|---|---|---|---|---|
| 1 | 0.41 | 0.17 | 0,16 | 20.9 | <0.001 |

Table 14 Regression Analysis Purchase Intention

# 5 Conclusion

## 5.1 Result Discussion

This section provides an overview of the results of the survey. A detailed breakdown of the accepted and rejected hypotheses is displayed in table 15.

Hypothesis 1 states that there is a meaningful relationship between the audio stimuli of an advertisement and the induced emotion of anger. However, the results show no significant difference of the perceptions of the advertisement with and without sound when it comes to the emotion of anger. Cabral et al. (2018)'s findings support this outcome since they mention that the evocation of the emotion of anger specifically is extremely complex. The inducement of anger depends on a variety of variables such as the cultural backgrounds of the participants. Furthermore, as Lantos & Craton (2012) described, there are several determinants of the listeners' perception. These factors include the listening situation, the audio stimulus itself, the musical source and the individual processing strategy of the consumer (Lantos & Craton, 2012). Since the survey was distributed through a link the listening circumstances of the participants varied. Furthermore, the stimulus was consumed through mobile devices and computers of which the sound quality could not be predicted as well. Therefore, there is a high probability of the presence of external factors which impacted the attentiveness of the viewer as well as the perception of the audio stimulus. Accordingly, a rejection of the first hypothesis does not necessarily suggest that there is no general connection between the variables. The result highlights the complexity of the emotion of anger and its exigency of further research on the emotion and its audio triggers.

The second hypothesis states a connection of the evoked emotion of anger through an advertisement and the perceived brand image. The results, however, show no meaningful difference between the experimental- and the control group when it comes to the brand image. Therefore, there can be concluded that even if anger is evoked through advertising it does not necessarily impact the brand

image. As previously mentioned, however, factors such as the listening situation and the musical source can significantly impact the consumers' overall- as well as emotional perception which also portray influential factors in this hypothesis (Lantos & Craton). As Mizerski & White (1986) suggest the emotions of a customer in connection with a brand play a crucial part in forming and expanding an attitude and brand image (Mizerski & White, 1986). The repudiation of the hypothesis shows that the perceived brand image based on induced emotions is a more complex matter than originally presumed. Therefore, the topic requires further research to determine the impact of anger on the overall attitude towards a brand.

Lastly, hypothesis 3 postulated an impact of the perceived brand image on the purchase intention of the customer. This hypothesis was accepted. The results support prior research by Chin et al. (2018), for instance, who confirmed a crucial influence of the perceived brand image on the purchase intention in their findings (Chin et al., 2018). The results provide a basis for marketers to lay emphasis on creating a positive perceived brand image of the customer to succeed in selling their products and services.

| Hypothesis | Testing method | Result |
| --- | --- | --- |
| **H1: Audio stimuli in video advertisements have a significant influence on evoking anger.** | ANOVA | No significant relationship<br><br>→ H1 rejected |
| **H2: Anger towards an advertisement has a significant impact on the perception of the brand.** | ANOVA | No significant relationship<br><br>→H2 rejected |
| **H3: The brand perception has a significant effect on purchase intention.** | Regression Analysis | A significant relationship<br><br>→H3 accepted |

*Table 15 Results*

## 5.2  Managerial Implications

The results of the first hypothesis suggest that there is no meaningful connection of audio stimuli in advertisements and the induced emotion of anger. As the findings of Cabret et al. (2017) suggest, triggering the emotion of anger specifically is particularly difficult since the emotion usually arises in combination with other affects and its inducement depends on various factors. The findings of the survey show that aggravating audio stimuli which are often used by marketers with the intent of generating attention do not necessarily evoke emotional reactions to the extent of anger within the consumer. Therefore, marketers can seize the opportunity of creating advertisements which include irritating sounds with the aim to attract attention and differentiate themselves from other brands without inevitably causing strong emotions of anger within the customer. However, the author of this thesis recommends analyzing the target group including their emotional triggers before implementing these advertising strategies and consider possible advantages and risks.

The result of the second hypothesis shows no meaningful impact of induced anger on the brand image. Consequently, even when the emotion of anger is induced it does not necessarily influence the brand image perceived by the consumer. These findings contradict previous research of Bagozzi et al. (1999), Hill & Mazis (1986), Mizerski & White (1986) and Vaugh (1986) which confirmed a significant influence of emotions on the brand image or buying behavior. However, the results of the survey indicate that marketers can potentially make use of marketing strategies which evoke anger within the consumer without necessarily influencing their perceived image of the brand. These strategies can serve as a measure to generate attention and set the brand apart from its competitors. Due to the contradiction with previous research as well as emotions being a complex matter, however, the author of this thesis suggests a detailed analysis of the target group before realizing marketing strategies which might prompt anger within the consumers.

The result of the third hypothesis confirmed that the perceived brand image has a significant effect on the purchase intention of the consumer. Therefore, the findings align with previously conducted research by Chin et al. (2018). Consequently, it is advisable for marketers to focus on the perceived brand image of the consumer. Accordingly, it is advisable for businesses to work on the by Wijaya (2013) summarized determents of the brand image which include the brand personality, brand attitude, brand identity, brand associations and unique advantages and expertise of the business. Therefore, the author of this thesis recommends for businesses to include their mission, vision and core values in all of their actions when it comes to their public appearance to create a clear image of what the brand stands for. Furthermore, the researcher advises to consistently further develop the brand image and include the consumers' feedback when implementing enhancements of marketing campaigns of the brand or the products. It is crucial for the brand to know the target market and adapt its marketing strategy adequately. Through such measures the brand image can be enhanced and, consequently, the purchase intention can be increased.

## 5.3   Limitations & Future Research

Since the number of the participants was relatively low the results cannot be generalized to an entire population. Furthermore, due to the sampling method being a convenience sample, the majority with over half of all participants were between 21 and 25 years old. Therefore, the research is not representative for different age groups. Furthermore, more than half of all the participants identified themselves as female . Therefore, male and non-binary individuals as well as people who cannot identify themselves with either of the provided gender identities are underrepresented in the survey. This portrays another obstacle of a generalization of the results of this thesis. Additionally, due to a distribution of the survey using a link there can be a variety of listening situations of the participants. There is a high probability that the participants have consumed the stimuli in loud surroundings or that they were inattentive.

Additionally, due to an average answering period of only 7,7 minutes there is a higher likeliness that the participants did not think their answers through or answered randomly. Furthermore, emotions are a complex matter to conduct research on due to an individuality in the regulation of affects as well as subjective emotional experiences.

Additionally, an advertisement of the brand "Mjam" was chosen as a stimulus. Consequently, by solely concentrating on one advertisement there cannot be generalized on the entirety of advertisement stimuli and their impact on the viewers. Furthermore, the results of this thesis might be influenced by the fact that more than half of the participants indicated to have previously consumed the brands' services. Additionally, the brand MJAM is very popular in Austria. Hence, the participants are likely to be biased when it comes to their perceived brand image through familiarity with the brand as well as previous experiences. Consequently, the author suggests further research on the influence of the emotion of anger specifically on the perceived brand image as well as the consideration of the influential variable of brand familiarity.

Based on these factors and further limitations concerning external variables and influences when the stimulus was consumed and answering the questions as well as the sampling method the researcher recommends conducting further research on the matter. Since there is a research gap when it comes to the complex emotion of anger through audio stimuli in advertising specifically it is advisable to conduct further experiments exposing participants to a variation of audio stimuli. Since the listening situation portrays an influential factor of the subjective emotional perception of the participants the researcher recommends implementing the exposure in a neutral setting in which the main focus of the participants can be laid on the advertisement solely.

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# Appendices

## Appendix 1

**soSci**
oFb - der onlineFragebogen

Dear prospective participant,

Thank you for your interest in participating in my survey on the impact of the sound in advertisements on brand perception. My name is Kathrin Zeller and the survey is part of my bachelor thesis for my Bsc in International Management with a specialization in International Marketing at Modul University Vienna.

The questionnaire will only take you a few minutes.

All personal information you provide will remain confidential and anonymous. There are no right or wrong answers. Your answers should solely reflect your honest personal opinion.

By clicking the "next" button you voluntarily agree to participate in the survey. You can withdraw from the survey at any time without consequences.

Thank you for your participation!

Kathrin Zeller 61904219@modul.ac.at

Please watch the video on the next page **WITH** sound!

mjam Karaoke 🍜
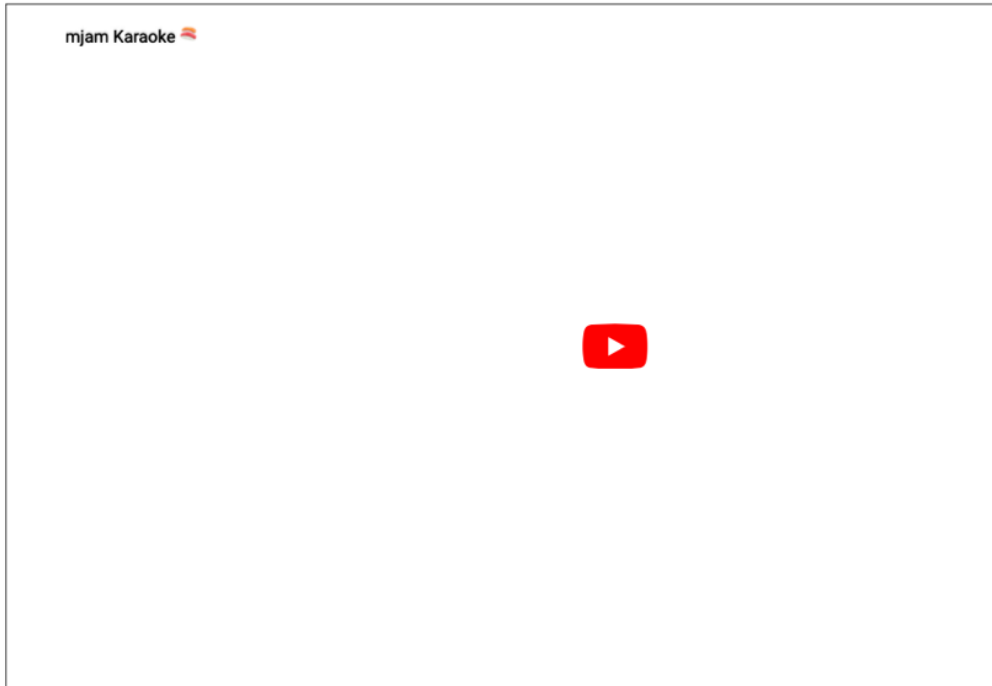


Please note that the "Next" button will appear after 15 seconds

**1. Did you hear anything when watching the advertisement?**
M101

◯ Yes
◯ No

Indicate how strongly you agree or disagree with the following statements.
AP02

|  | strongly disagree | | | | | strongly agree | |
|---|---|---|---|---|---|---|---|
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The company's advertisement is favorable. | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |
| The company's advertisement holds my attention. | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |
| THe company's advertisement is convincing. | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |
| The company's advertisement communicates what the company stands for. | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |
| The company's advertisement makes me have positive feelings toward the company. | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ | ◯ |

Indicate how strongly you agree or disagree with the following statements.

SP01

|  | strongly disagree | | | | | | strongly agree |
|---|---|---|---|---|---|---|---|
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The advertising was lots of fun to watch and listen to. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| The enthusiasm of the advertising is catchy – it picks me up. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| The advertising was playful. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| The characters or people in the advertising captured my attention. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| The advertising was exciting. | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**2. Please indicate how you evaluate the advertisement:**

UQ01

| ordinary | | | | | | peculiar |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| normal | | | | | | weird |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| Nothing special | | | | | | outstanding |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| just like any other ad | | | | | | different from any other ad |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| average | | | | | | special |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

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AT01

**3. Please describe your overall feelings about the brand MJAM described in the ad you just watched.**

Unpleasant   |   Pleasant
-3  -2  -1  0  +1  +2  +3
○  ○  ○  ○  ○  ○  ○

Unlikable   |   Likable
-3  -2  -1  0  +1  +2  +3
○  ○  ○  ○  ○  ○  ○

Bad   |   Good
-3  -2  -1  0  +1  +2  +3
○  ○  ○  ○  ○  ○  ○

Unappealing   |   Appealing
-3  -2  -1  0  +1  +2  +3
○  ○  ○  ○  ○  ○  ○

Unfavorable   |   Favorable
-3  -2  -1  0  +1  +2  +3
○  ○  ○  ○  ○  ○  ○

Negative   |   Positive
-3  -2  -1  0  +1  +2  +3
○  ○  ○  ○  ○  ○  ○

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EM01

**4. Please tell us how much you felt each of these feelings while you were watching this commercial:**

| | Strongly disagree | | | | | | Strongly agree |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Upset | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Angry | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Interested | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Annoyed | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Good | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**5. Please describe the likelihood of your considering the consumption of this service in the future:**

| definitely not consume it | | | | | | definitely consume it |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| very low consumption interest | | | | | | very high consumption interest |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| definetely do not intend to consume | | | | | | definitely intend to consume |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| probably not consume it | | | | | | probably consume it |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| never | | | | | | definitely |
|---|---|---|---|---|---|---|
| -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Age     [ ] years

**6. Educational attainment**

[Please choose] ▽

**7. Gender**

[Please choose] ▽

**8. Have you ever ordered food through the MJAM website/app?**

[Please choose] ▽

# Thank you for completing this questionnaire!

I would like to thank you very much for helping me.

Your answers were transmitted, you may close the browser window or tab now.

Kathrin Zeller, Modul University Vienna – 2023