

Original Article

Psychology of Sound in Marketing: An Empirical Research on Sonic Branding and Consumer Brand Recognition.

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Abstract

Sonic branding is one of the elements of the current market that marketer incorporates in its strategies that incorporate audio elements such as music, jingles and auditory logos to reinforce brand identity and interaction with consumers. The research is aiming at the psychological impacts of sonic branding on consumer perceptions, emotional reactions and brand awareness among the young consumers. A quantitative research design was adhered to with a structured questionnaire through Google Forms and it was distributed to respondents of college age. The answers of 50 college-aged students were analysed based on descriptive and inferential statistics, i.e., the Chi-square test to observe the connection between the gender and the awareness of sonic branding. The findings indicate that audio clues significantly increase the capacity of consumers to remember brands and be emotionally involved to the brands; almost all the respondents identified sound as a way of recognizing and remembering brands. No significant relationship between gender and the perception of sonic branding however occurred statistically. The findings indicate the growing need to integrate audio components with the existing visual branding systems to enable the creation of a long-term memory and association with the consumers in the contemporary marketing environment.

Keywords: Brand recall, consumer psychology, Sonic branding, auditory marketing, consumer perception.

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Introduction

1.1 The Increasing Significance of sound in Modern Marketing.

In the environment where the brands are in a constant struggle to capture the interest of consumers, marketers are exploring alternatives to establish meaningful emotional relationships with their audiences. Visual element of branding, denoting logos, colours, typography and design, has long been given the front and centre position in the marketing toolbox. Nonetheless, due to technological developments and the transformation of the digital media into multi-sensory experiences, sound has rapidly become an essential connection with brand identity which is simply overlooked. Sound, is not a simple marketing gimmick, but a strong means of communication, which may influence the emotion, perception and behaviour of the consumer in the sense that it may influence the way the consumer understands the brand personality, promote the concept of time passing and trigger brand memory and information retention. In the modern fast-paced, digitally-interconnected, consumers experience the marketing messages (ex: television commercials, radio commercials, mobile apps, social media videos) in a plethora of channels of their own, all of which of them is founded on sound to attract the attention of the consumers.

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Sound has provided an opportunity to have a niche marketing communication environment, known as sonic branding, by the fact that the sound has the ability to capture human feelings in a more immediate and intimate way than pictures. The intangible qualities of warmth, innovation, luxury, or excitement can be conveyed by the design of certain audio elements by brands. More than ever, it is more relevant in an era of small attention span, as graphics would cause more clutter to the consumer. A unique sound/jingle, in this situation, can be used as a short mental highway to help an individual associate with the identity of a brand in a more significant manner.

1.2 Sound Psychology as a Study.

The science of sound psychology refers to the scientific study of the effects of auditory stimuli on human thought, emotion and behaviour. The interpretation of sound by the brain can bring a strong emotional reaction on the part of the sound originator. Neuroscience research studies have also concluded that individuals process auditory information almost immediately and has direct access to the brain region (limbic) which deals with emotion and memory. Basically, one can feel or remember before he or she can even think at a high level.

There are also different sounds that stimulate different emotions. The music or sounds of a high amplitude and fast tempo are more likely to cause excitement, urgency, and call to action, whereas the music or sounds of a low amplitude and slow-tempo are likely to be associated with the feeling of calmness, trust, and rest. Marketers or advertising agencies commonly use these studies in psychology, neuroscience and behavioural economics to induce a specific reaction among the consumers. The background music played at a store may attract shoppers to shop at a specific rate, or it may encourage the time that the consumers of that store will take to shop or how much money they will spend during shopping.

There is also a high level of association and association with the sound after the brain associates a sound with an experience, the same feeling can be triggered as a result of hearing the same sound in other instances. This is also termed as auditory conditioning and hence why the familiar songs or jingles would invoke the nostalgia of an experience within the listener in a second. This can be applied in branding whereby a stable and well-organized sound identity can tie an emotional association to the consumer.

1.3 The Idea of Sonic Branding.

Sonic branding or audio branding or sound branding is a method of intentionally employing sound to determine and pin strengthen a brand identity. This may require the development and application of certain audible features such as jingles, sound logos, voice tone, background music, and in-product sounds that add together to form an audio logo that is familiar even without graphics.

Sonic branding is one of the methods that have been used to establish a substantial emotional attachment between brands and consumers by some of the most successful brands in the world. Just consider the five-note Intel logo or the McDonalds I'm Lovin It song or even the ta-dum sound of Netflix. The examples are a fantastic illustration of how a couple of seconds of sound can immediately prompt one to identify a brand and have an emotional reaction without any visual explanation. The sound in both of these illustrations is a kind of trigger that has been inculcated in the consumer memory throughout the years - this would only be achievable through continuity and regularity of the brand.

Sonic branding is not exclusive to the entertainment and advertising applications and may also enhance the user experience. Technological firms are incessantly creating sound when associated with notifications (e.g., upon receiving an alert in a social media), using apps (e.g. opening an app) that results in familiarity, and other actions that facilitate a user reaction to action (e.g. completing a transaction in the Paytm app). The same sounds which are in company with the interaction of a user and an app should cause a positive emotional reaction, and with time contribute to the creation of familiarity and trust towards a technology brand.

Therefore, sonic branding cannot be equated with music composition; it is more of a sound identity that is aligned to the brand values, personality and beliefs held by the consumers. An effective sonic identity will work together with a graphic identity and improve the brand perception in general.

1.4 The Psychological Process of Sonic Branding.

The effectiveness of sonic branding can be explained by several psychological and cognitive processes. Classical conditioning is one of them. It was Ivan Pavlov who initially studied classical conditioning. Classical conditioning simply indicates that as a brand is associated or paired with a stimulus, which in this instance is sound, brand association takes place that is brief. In the long run, the consumer will experience the particular emotions or interpret brand expectations merely by being exposed to the sound, regardless of the absence of the graphic representation of the brand.

The other process is emotional contagion whereby the emotional condition portrayed by music or sound is prone to be replicated or mirrored by the audience. An energetic or an energetic musical song can leave consumers happy that can, consequently, be projected to how they feel about the brand. Moreover, a softer sound would elicit a feeling of comfort or trustworthiness, which would be used to depict the brand as in a nurturing or trusting position.

Sound once again appeals to the brand and the memory, cognitively the auditory memory is significantly nearer to the emotional memory. Sound produces visceral responses, that is, the human being feels sounds, at other times, far more than he hears. Even with consistent sound that is reliably repeated, sound still enhances implicit memory and offers

brand recognition despite the fact that the individual consumer is not conscious of the fact that an association had occurred.

This association with emotion, memory, and cognition clarifies the reason as to why sound can be a good branding tool. An ordinary melody or tone, or rhythm can form a lasting mental signature that can influence both conscious and subconscious consumer behaviour.

1.5 The Enhanced Meaning in the Digital World.

The popularity of sonic branding has been increasing at an astronomical rate with the proliferation of digital media and audio-based channels. The current consumer interacts with brands in a broad spectrum of audio formats, such as podcasts, YouTube ads, streaming music applications, and voice assistants, such as Alexa and Google Home. Each of these touchpoints that are based on audio uses sound to help create a vibrant, welcoming and memorable experience.

Unlike the visual advertisements which claim that they demand concentrated attention, sound has the possibility of reaching consumers in passive manner by a person as they listen to the radio and multi-task. Due to its inherent multi-tasking capacities, sound is infinitely useful in communicating brand meaning in a world that is gradually becoming defined by shorter attention spans.

Therefore, the closer technologies such as artificial intelligence and the Internet of Things (IoT) infiltrate the everyday routine, the sound is becoming a mainstream interactive interface. So it can be in intelligent appliances, cars or even a home appliance, sounds are becoming a much more frequent way to convey something or give feedback. Brands that create an audible sonic identity now will ensure audibility (and likely even more) at such moments of interaction later.

To sum up, it is important to note that in the digital era, sound is not merely a creative vessel but it is a strong and demanding broadcast medium to make sure that brands are kept alive and consistent, as well as reachable emotionally, as the communications landscape unfolds and leads to unexplored territories.

1.6 Research Gap and Study Need.

Although major multinational corporations have given sonic branding a fair share of attention, the psychological implication of sonic branding has limited academic literature on its implication with respect to India. The majority of the marketing research is still being conducted concerning the visual identity systems, the role of celebrity endorsements, and the interactions via social media. The sound part of branding the way the consumers respond, interpret, perceive and feel in response to the brand sounds has not been studied or has not been adequately studied.

India provides a distinct example on which the psychological impacts of sound on the various groups of consumers can be analyzed as it is one of the largest market consumers of media worldwide. Indian audiences respond to sound in a multiculturally specific and profound manner in the context of the Indian rich musical culture and multilingual situation. Marketers should first comprehend how they react to sound before they can embark on having a sound branded audio strategy which is emotively effective and culturally relevant.

The study is, therefore, seeking to fill this gap by a psychological relationship of sound and brand perception on Indian consumers. This research will attempt to learn what kind of sounds will be effective in emotional reaction, branded recall, and preference of the consumer. Lastly, demographic factors that include age, gender and exposure to the media will be factored in the study whether they affect the response of people to sonic branding.

Research questions:

1. How do sound influence emotional and psychological responses of consumers towards a brand?
2. What is the effect of sonic branding in enhancing brand recall and recognition?
3. What kinds of sounds (music, jingles, tunes, or voices) result in the most connection/association with a brand?
4. Do various demographic segments (e.g. age or gender) respond to sonic branding elements differently?
5. In comparison to visual branding and brand position with a brand, how sonic branding is in comparison with these two in regard of consumer preference and or loyalty?

Research Objectives:

1. To learn about the psychological implications of auditory influence on consumer perception and consumer behaviour.
2. To investigate the place of sonic branding in the development of brand image and consumer memory.
3. To determine emotional connotations that consumers have towards particular sounds or jingles of a brand.
4. To identify the success of sonic branding over the visual branding aspects.
5. To examine how demographic factors of age and gender influence perceptions of sonic branding.
6. To evaluate the effects of sonic branding in terms of the marketing communication strategies.

2. Review Of Literature

2.1. The Introduction to Sound and Emotion.

2.1.1 The first fact which is quoted is that the sound is one of the primary sources of the human emotional processing, perception and memory. The auditory elements are special in that it takes the shortest time to go to the brain with limited conscious filtering as compared to other sensory messages and offers an unparalleled level of control in the formation of emotional states (Juslin and Sloboda, 2010). Such a fast reaction is partly caused by the special connection in the auditory system that has head-start access to the limbic system with the specific structures that are used to assess emotions (the amygdala and hippocampus) and the long-term memory (Zatorre and Salimpoor, 2013; Spence, 2024).

The specific neural pathway enables the sound to elicit emotional responses sooner than the rational brain can process the signal to form meaning of the stimulus.

It has been shown that certain sound characteristics are able to change emotional states in predictable fashion. As an illustration, tempo and rhythm may influence physiological arousal, whereby faster tempos raise heart rates, alertness and slower tempos slow heart rates, breathing, and are used in relaxation (North and Hargreaves, 2008; Juslin, 2019). Emotional signalling is also helped by pitch and timbre. As an example, high and bright sounds tend to arouse excitement or tension, whereas low and warmer timbre tend to induce calmness, seriousness, or trust (e.g., Koelsch, 2014; Panksepp, 1995). In addition, a tiny variation in the tone of voice can make the difference between how sincere, authoritative, friendly, or urgent a speaker is, which shows the discretionary emotionality of sound (Banbury and Berry, 2009).

These are the principles of employing sound and based communication strategies in branding. These emotional processes are intentionally employed by sonic branding to provide auditory signals that symbolize values, behaviours and personality of a brand (Krishna, 2012). Song selections, rhythms, frequencies, and vocal types are selected strategically by brands in line with what they wish to be known as (e.g., warm, trustworthy, luxury, or dynamic), as sound will trigger emotional connotation as well as strongly anchored memory (Keller, 2013; Hulten, 2015). Sound is used as a short cut in this process, arousing built in emotional systems to create consumer perceptions without consumers processing images or words of a brand.

2.1.2. Consumer Behaviour (Purchase, Preference, Attention): Sound Effects.

The influence of sound on consumer behaviour is well elaborated in the context of attention, preference, decision making as well as purchasing behaviour. Multisensory marketing research has revealed that sound has the ability of even triggering consumers to some behaviours without them realizing it. As an illustration, congruent background music, in turn, may increase the attention of consumers towards the product, their recall, and incongruent background music, in its turn, may lead to worse information processing and a lower purchasing probability (Spence, Puccinelli, Grewal, and Roggeveen, 2014).

The influence of sound on consumer preferences can also occur in altering the feel of products or the environment. The classical music in the retail environment has been perceived to create the sense of luxury, which consequently encourages the customers to purchase more expensive goods (North, Hargreaves, and McKendrick, 1997). Conversely, fast-food setting has the opposite effect with upbeat music motivating consumers to make decisions faster and accelerates the turnover, which is per the business model philosophy of reducing the length of consumer visits (Milliman, 1986).

Implicit bias of consumer behaviour can also be made by music cues that appear irrelevant to them. As an example, in a survey that had been extensively referred to, it was reported that when the menus had both the French and the German wines, when the French music was played the French wines sold far more compared to the German wines and vice versa even after respondents denied that the music had any influence on their choice of wine (North, Hargreaves and McKendrick, 1999). This proves that sound has the capacity to condition certain cultural or emotional links in the brain to aid in the formation of consumer preference.

Auditory signals also influence significantly attention. Auditory messages, including sonic logos, notification sounds, and branded stingers are far more attenuative than the visual ones since the human auditory system is evolved to quickly perceive changes in the environment (Spence and Ho, 2012). Such attentional distinction can be helpful in part since with the help of such short auditory cues it is possible to cut through the noise of other visual cues, to break the habituation to some former signals, and to refocus attention to the brand.

2.2. Mental processing and memory retrieval.

Besides being influential in feelings to a great extent, sound is also influential on the memory systems and cognition. What is peculiar about auditory stimuli is how people are able to encode sounds fast, process them automatically and connect them to both short and long-term memory systems more effectively than most visual perceptions (Zatorre, 2015; Koelsch, 2014). The fact that human brain is capable of mapping auditory stimuli to memorized information enables people with capabilities not only to remember information correctly but also to do it with certain speed. Such quick encoding of sound to memory would not only help in the process of recognition, but in strengthening associative associations to stimuli such as personal experiences, environments and brands.

The recent empirical studies on Behavioural Sciences (2023) can be largely relevant to this effect, as they discovered that the subjects in the studies remembered sound cues much better than they remembered similar visual cues. This implies that audio memories, especially those that bear some emotive value or are contextually relevant are much more likely to prove resistant, full and available compared to visual ones. These results are also congruent and supported by the established work in cognitive psychology. Studies point to the fact that aural information has a low probability of interference with other information and may tend to produce involuntary memory recall; this is the effect of the so-called Proust effect that is widespread in somatic and autobiographical studies (Herz, 2016; Janata, 2009).

Repetition is a very important aspect of the sound cognitive effect. Perhaps the most intuitive point, constant exposure to a particular cue of sound would suit perfectly into the classical conditioning paradigms. As an example, Bruner (1990) states that as the consumer keeps hearing the same sound at the same time that a brand/product is mentioned, or

any stimulus, the auditory stimulus is converted to a conditioned stimulus that will trigger a previously developed emotional/cognitive reaction. The advantage of this type of associative learning exists, too, when consumers are not actively attending learning process and that is why iconic jingles or tones or sound are automatic effects of recognition. The sound of a sonic logo or jingle of a brand would be an example of such a process. The consumer subconsciously develops an implicit memory trace which becomes more powerful with every encounter. The more the re-enforcement, the stronger the association of the auditory cue and the brand with the consumer in the brain resulting in increased familiarity, reduced recognition time and an increased accurate recall time (Yalch and Spangenberg, 2000). On a neuroscience level, it has been shown that auditory repetition makes synapses in the hippocampus, the memory consolidation center, more efficient and results in a recall of the brand as a feeling that is familiar and reliable (Kumar et al., 2012; Hargreaves and North, 2010).

2.3. The Idea and the Development of Sonic Branding.

Sonic branding also known as audio branding or sound branding has evolved as a professional field that is strategic in its use of sound to communicate, enrich and distinguish the identity of a brand (Jackson, 2003). Sonic and branding the concept of intentional design of subjective sound elements, such as musical phrases, jingles, harmonic frameworks, vocal qualities of the spoken voice, and the material of soundscapes in the environment, forms the basis of sonic branding. Sound elements are not chosen due to their subjective aesthetic value but due to their capacity to produce emotional response, mental imagery, and associative meanings in line with the desired personality and value propositions of a brand.

The initial sensory marketing study determined the disproportional impact of sound on emotional perception, grounded on quick processing in the brain, and determined connections with memories (Juslin and Sloboda 2010; Spence 2024). As sensory marketing tipped the scale of branding towards experience-based practices, which started in the late 20 th and early 21 st century, brands came to recognize the significance of sound as a strategic brand-building instrument, helping consumers make interpretations and brand narratives. This preconditioned modern sonic branding, when sound was no longer in the background of the brand but its main symbol.

This is the way of thought that contemporary scholarship is endorsing. The more recent article of the China Journal of International Economic Review (2025) provides information on how auditory stimuli (also known as brand-consonant auditory stimuli) that align with a brand can leverage positive perceived credibility, emotional trust, and, in the general, brand credibility. The literature review of multisensory processing explains that congruence of sensory processing is useful in cognitive fluency and emotional resonance in a way that the brand can be perceived as a more holistic and meaningful experience (Krishna, 2012; Spence and Wang, 2020).

The change to sonic branding is also witnessed in the way popular culture has adopted it. The most famous such as the Intel five-note mnemonic (Bum... Bum... Bum...), The jingle used by McDonalds (I am Lovin It), and Netflix (Ta-Dum) implies that even a brief emotionally loaded auditory logo can make a global brand. All these are a shorthand sonic adaptation of the audio logo a sound source that not only is short and memorable simultaneously but also describes the identity of the brand to the added flexibility of simple shifting it across multiple formats, e.g., television, digital, mobile, in-store, etc. (Spence, 2024). These instances further support the idea that the most basic sounding of cues can be absorbed by the consumers and framed in the memory to enhance brand-salience and make a branded experience more memorable over a long period of time.

2.4. Cross modal Correspondence: Sound and Vision Interaction.

Auditory/visual signal correlation has received extensive research in sensory marketing and cognitive psychology, as well as brand research. Scholars consistently insist that sound and visual cannot be used separately; instead, the sounds and visuals are a unified perception that influences the way the consumers process information and emotional attachment towards a brand (Spence, 2011; Hulten, 2015).

In encasing the visual and auditory elements to be compatible, to the point of having the same emotional tone, the same pacing, the same textual feel or symbolism, research hypothesis will hold that the sum of the message is more visible and intuitively felt by the viewer. Such congruency enhances the perceptual fluency, emotional joining and end-of-day satisfaction in the brand experience (Spence et al. (2014)). Indicatively, Treasure (2012) implies that when it comes to shooting a commercial, a more instinctive processing of brand messages is experienced when the visual style relates to an auditory component in mood or tempo or tonal quality and the attendant effect is a more authentic association with the desired brand identity.

Also, other than emotional congruent, cognitive studies confirm that congruent audiovisual combinations reduce cognitive effort. When the senses complement one another, they need fewer resources to decode the message by the brain. This way, recall will be enhanced, preference will be increased, and subsequent decisions will be made more conveniently (Shams and Seitz, 2008; Spence and Deroy, 2013). This is especially significant in the field of branding where one has to focus on a limited attention and impressions should be made in a short period of time.

In the case of contrast between audio and visual elements, say with happy music and somber images or elegant images and hard sound or sound that is incongruent to the images, the participants will experience perceptual incongruence. In case of inconstancy, there is a potential of cognitive dissonance that disrupts involvement of emotions, erodes clarity of the message and eventually lowers persuasive ability of the brand communication (Krishna, 2012; Ludden and

Schifferstein, 2009). The relationship can be confusing to the consumers and they might not like the experience that results in a lower trust and relationship between the brand and consumer.

The overall idea of such findings is the cross-modal correspondence the inclination of the brain to correlate data in one of the sensory modalities with one of the similarities in their characteristics, such as brightness and pitch, weight and loudness, or shape and timbre (Spence, 2011). It is through this correspondence that the manner in which individuals unconsciously match particular sounds with particular images is guided. Demonstratively, bright, light, or delicate visuals are likely to be consistent with higher tones, and dark, heavier, or strong visuals would tend to be consistent with lower frequencies.

2.5. Recognition, Familiarity and Consumer Choice.

The concept of familiarity and recognition is very influential determinant of consumer behaviour particularly where sound is involved. The study, I've Heard That Brand Before (2015), proved that the decisions consumers took regarding a brand were much greater in cases when they came across a piece of familiar music that was connected to a brand. This means that recognition that is auditory is able to generate comfort, trust, and cognitive lightness, which drive consumers to a favorable choice due to pre-experience with the brand. Concurrently, the former study also observed that only recognition and no evaluation of liking will not make consumers gravitate on the brand since it is associated with a negative evaluation.

Emotional affiliation between the consumer and the brand is even greater when the familiarity and liking are both present. Previous studies conducted within the field of auditory conditioning indicate this concept; familiarity especially through repeated use of a pleasant sound signal eased the process of recall and increased brand loyalty with time (Bruner, 1990). Sound in this case does not simply apply as a functional signal, but rather, as a symbolic relation to the emotional meaning to the consumer.

All this indicates that a successful sonic branding needs to be recognizable as well as emotional. Any brand able to produce sonic materials that resonate with their audience in a way that is enjoyable and memorable has a far higher chance of capturing their attention in the long run, resulting in a higher recall and loyalty.

2.6. Advertising and Marketing Communication Sound.

Advertising is not simply putting a sound in the background the use of sound can have in fact an impact on how consumers decode and retain messages and brands. The study The Importance of Sonic Branding (2021) indicates that the campaign that employs differentiating sonic elements is more likely to be recalled, have a more efficient emotional reaction and brand differences. Brands that retain a stable usage of a sonic identity among various touchpoints integration in television, digital, and in-store versions have even more strength when it applies to successful sonic branding (Spence, 2024). The same musical theme in the ads through different media enables the consumer to form a sub-conscious association that promotes the brand in the consumer mind, even at times when the visuals are not there anymore.

2.7. Effect of Culture and Demographics on Sound Perception.

The demographics including culture will also alter the way consumers react to sound. The younger generation of consumers are more inclined to modern and electronic and energetic sounds as compared to the older generation of consumers who would more likely react to melodic or nostalgia-oriented music (Krishna, 2012). Another thing is the culture; various rhythms and instruments can produce varying reactions in various persons. According to the Journal of Integrated Economic Research (2025), cultures in which sonic selections were more consistent, made viewers more attached to the messages. In markets such as India where the category of music may differ greatly between city and city, it is imperative to take consumer demographics into account in shaping sonic identities so that brands do not end up being categorically out of the realms of everyday existence of the target consumers.

2.8. Neuromarketing Subconscious Processing and Evidence.

However, as per the latest findings of the neuromarketing, the subconscious effect of sound has scientific evidence. Spence (2024) cites two neuroimaging studies (EEG and fMRI) which indicate that activation in the amygdala/hippocampus occurs when individuals hear brand sound familiar to them. These brain regions belong to emotions and memories, which supports the capacity of sonic branding to reactively result in perception that is caused by sonic branded stimuli without active focus. On the same note, EEG research has also shown an increase in attentional and arousal responses towards stimulus-and-branded sound pairing. Sound consideration leads to emotional and physiological arousal which, according to (Spence, 2011), generates more interest towards packaging that involves sound in its usual and regular way.

2.9 What is the difference between sonic branding and a sonic logo:

Based on the foregoing discussions, we observe that sonic branding and sonic logos do have dissimilar meanings, despite the fact that they both concern thinking about sound in the process of creating brand identity. They are both in favor of the experience and understanding of a brand at varying levels and by different meaning-making processes (Vorster, 2015). The sonic branding is more inclusive in the first place, and it refers to the entire spectrum of sonic factors that a brand employs to indicate its identity. It can be as little as on-hold audio systems and voice-overs, ambient soundscapes, and musical selection in the adverts, or the sonic logo. The entire scope of these sonic

components generates a broader sonic experience, in which brands can convey their personality and be authentic to their identity in a sound fashion (Vorster, 2015).

2.10. Sonic Branding Ethical considerations.

The persuasiveness of sound in marketing raises the issue of ethics. Sonic branding can have significant potential in creating emotional resonance as it has been said by the scholars, though it can also create a potential manipulation of consumer behaviour on a subconscious level (Treasure, 2012). Sound design is to promote transparency, genuineness and ethics. A moral attitude towards sonic branding must reflect the real brand attributes of the consumer and must express the authentic feeling that is not dependent on conditioning. The use of sound designer to reflect these traits and care is a new technique of offering artistic synergy to the sense experiences and consumer confidence instead of manipulation.

2.11 The connection between sonic branding variable and psychological processes on the consumer behaviour is illustrated in the conceptual format below based on the published research on sensory marketing and consumer psychology.

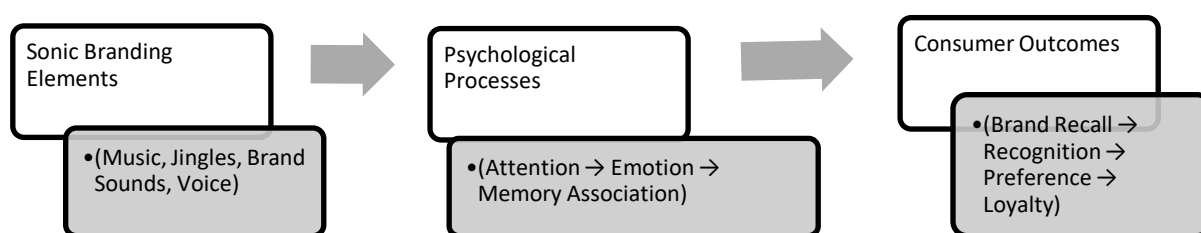


Figure 1: Conceptual Framework of the Psychological Impact of Sonic Branding

Research Gap

Little research has been done on what sound does regarding marketing/communication, but much of it is theory-based and large organizations that have succeeded with their sonic brand and branding. Nevertheless, very little has been conducted in young adults to understand their perception and reaction to sonic branding in their everyday digital lives. In addition, there are few empirical research studies on the impact of auditory branding against visual branding to generate brand recall and events, which brings a gap in literature. Hence, this research will address this gap, in the form of empirical research, which will focus on the impacts of sonic branding on the perceptions of young adults towards the brands, their capacity to remember brands and their emotional reactions towards the brands.

3. Research Methodology

Research design: The research design chosen will be a mixed research design; the primary and secondary data will be combined into a single research design, which will be descriptive research design and will focus on the psychological impact of sound on consumer perception and the use of sound as a sonic branding tool. This design will provide the researcher with a deeper insight into the connection between auditory variables and emotional involvement, memory, and brand recall. Since a descriptive approach enables a factual and systematic approach to the gathering and the analysis of the received survey data and theoretical frameworks based on the existing literature, we selected such approach. The research offers a mixture of both quantitative and qualitative information by gathering visible consumer reactions and symbolizing conceptualizations that come up in prior scholarly works.

Sources of data collection: The research project collected both primary and secondary sources of data to offer an in-depth analysis.

3.1 Primary Data:

Primary data were to be obtained on a structured questionnaire using Google Form that explored the attitudes and the emotional response of the respondents towards sound in branding. The questionnaire included questions in the multiple choice and Likert scale about several matters such as emotional attachment, brand recall and sound recognition. The survey was distributed to the participants through easy access and participation by sending them a link through emails, WhatsApp, and social media. There were 50 valid responses.

3.2 Secondary Data:

The secondary data was gathered by conducting a thorough review of available literature regarding research articles and academic journals as well as past research on sound, emotion and branding studies. The chosen literature consisted of theoretical models and empirical studies namely, peer-reviewed journals like; the Psychology and Marketing, Behavioural Sciences, Journal of Brand Communication and China Journal of International Economic Review. The reviewed literature provided the understanding of the basis theories and a gap that led to the purpose of the research study.

3.3 Sampling Design:

Purposive non-probability sampling was the sampling method. The participants were selected according to their suitability to the topic of the study and on their familiarity with such advertisements that used the elements of branded sounds. As a result, the sample of the participants was predominantly students and working adults that are exposed to multimedia marketing content. Despite the fact that the sample is quite small, consisting of 48 respondents, the sample offered some indicative information that can be used in exploratory analysis and provided a descriptive nature of the research.

3.4 Methods of Data Analysis

Google Sheets and Microsoft Excel were used to conduct survey data and analysis of survey data respectively. The descriptive statistics constructing frequency distribution, percentages and means analyses of responses in their interpretation of the responses were utilized. The given descriptive statistics were in form of charts and graphs that depicted depictive presentation of the findings (emotional influence, levels of recall and consumer preference in relation to sound-based branding). In the case of the secondary data, thematic synthesis served to identify key themes, trends, and findings presented in the previous literature review and synthesized them and compared them with the results of the research, as the first stage of the study. The combined analyses generated a more balanced point of view on the role sound has in branding.

A limited scope and delimitation of the study entails carrying out a study that can only assist in the understanding of psychological issues using normal behaviours in good on consumer perception. The research narrows down to the elements of sonic branding namely jingles, audio logos, and background music in advertisements. The inference made on a small sample of 48 respondents will not easily be extrapolated but at least there is some information that can be gained through exploratory nature. Moreover, the study contains no physiological testing (EEG, etc. or neuromarketing tools) of the study, in large part because of the pragmatic constraint.

4.RESULTS

4.1 Sample Characteristics

Out of the 54 respondents who took the online survey, majority of them were between the ages of 18 and 25 and students in colleges. Hence, they are the target demographic of this study as young consumers.

Among the respondents, 37 (68.5) were boys and 17 (31.5) girls. Since this study targeted young consumers, this sample is suitable to use in the analysis of the psychological impacts of sonic branding on these consumers.

4.2 Emotional, Psychological Impact of Sonic Branding.

The research question required the respondents to answer whether they believe brand sounds are cooler than logos or not and the research result is that of the 54 respondents:

1. 28 (51.9%) answered yes,
2. 20 (37.0%) answered maybe,
3. 6 (11.1%) answered no.

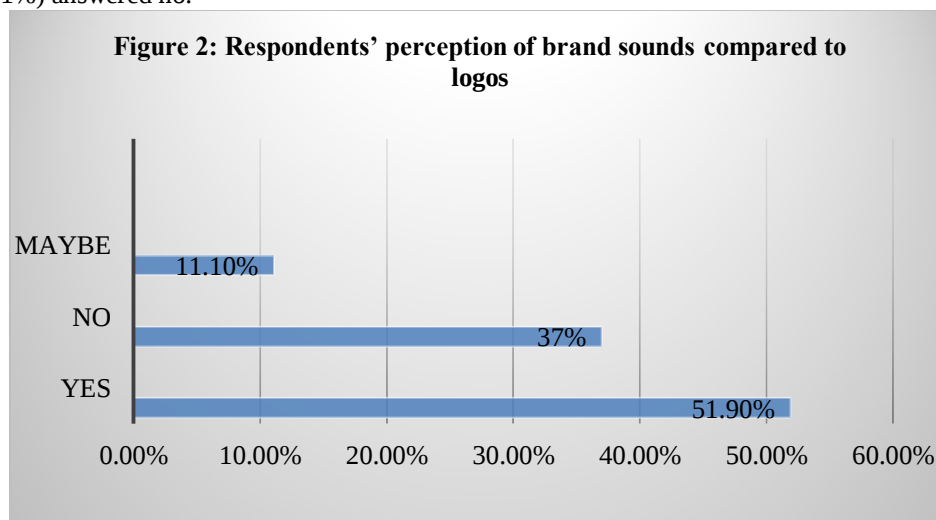


Figure 2: Recognition of Brand Sounds Among Respondents

As over fifty percent of the respondents find sonic branding to be interesting and engaging as a branding tool and a significant portion also conditional (perhaps) about the use of sound to recognize a brand, it is foreseeable that the application of the sonic brand elements will have a positive influence on the emotional attachment that the customers feel toward a brand.

4.3 Distribution of Perception Gender-wise.

The following was the distribution by gender:

Though there were a little bit higher agreement (Yes responses) in male than female respondents, a visible difference in frequency does not always mean that it has a statistical significance. Thus, inferential analysis took place.

GENDER	YES	NO	MAYBE
Male	20	6	37
Female	8	0	17
Total	28	6	54

Table 1: Chi-Square Test: Gender × Perception of Sonic

4.4 Inferential Analysis Chi-Square Test.

In order to establish whether there was any statistical interaction between both gender and the perception of the respondents towards the coolness of sonic branding, a chi-square test of independence was used to analyze the data.

The findings of the analysis were:

$$\chi^2 (2, N = 54) = 3.74, p = .154$$

The p-value of .154 is not statistically significant since it exceeds the set alpha value of .05.

So, no statistically significant difference in terms of gender existed between the perception of the brand sounds as being cooler than the brand logos. Thus, there was no statistically significant difference in the perceived attractiveness of male and female respondents to sonic branding.

4.5 Correlation Analysis between the Sonic Branding Exposure and Brand Recall.

To determine the relationship between exposure of consumers to the sonic branding messages by brands and their recall of the corresponding brands, a correlation analysis was conducted to determine how much exposure to the sound of a particular brand is related to the capacity of an individual to recall and recognize the brand.

The analysis outcomes showed that exposure of the respondents to sonic branding messages had moderate positive correlation ($r = 0.42, p < 0.05$) with the memory of the related brands. Differently put, respondents who indicated higher degree of exposure to the sound(s) which were linked to specific brands were also more apt to recognise and recall those brands according to the sound which was a given auditory stimulus, which was created by the said sounds.

The findings affirm to the psychological concept known as the more an individual is exposed to auditory stimulus, in different places, he/she will start identifying the auditory stimulus with the brand it is promoting (which is the associative memory). Since consumers will remain to be open to special auditory stimuli that is related to specific brands in each of the multiple media avenues over a specific period of time, the same consumers will develop strong cognitive links between the audio stimuli and the corresponding brand that they are linked to. Therefore, it can be assumed that sonic branding will result in a higher probability of building a strong brand recognition and remembering among young consumers with its help than any other forms of branding (visual, tactile) will.

4.6 Brand Recognition by Sound.

The questions that were posed to the respondents were based on whether they were familiar with well-known sounds which are related to brands and whether the consumers had the capacity to identify brands on the basis of sound. Overall, consumers can associate a sound or jingle with a particular brand through the sonic branding.

The information indicates that the proportion of participants who identify brands according to their sonic components (i.e., the use of sound cues, such as jingles, sound signatures), and their recognition are high; the latter is identified as one of the key characteristics of respondents.

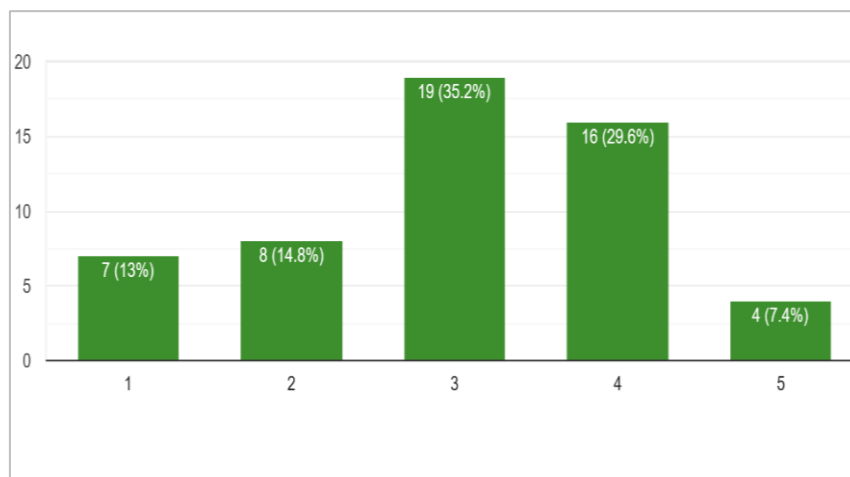


Figure 3: Recognition of Brand Sounds Among Respondents (1-5 scale)

5. Discussion

The aim of this research was to create a better knowledge about the influence of sonic branding (i.e. sound and auditory effects brands produce) on the way consumers think, feel and react to brands. The findings made offer some useful information about how sound can be used to form perceptions about a brand, bring about emotional attachment to a brand and heighten the attractiveness of a brand to its consumers.

5.1 Sound and its effect on emotions and psychology.

A majority of the participants told that to them when they hear a sound related to a brand, they find that sound attractive to them with a little more than half all the participants saying that they thought brand sound was sometimes cooler than brand logos. Thus, it demonstrates that it is possible to induce emotional and attentional processes in young consumers with the help of the sound related to a brand.

Psychologically speaking, human beings perceive auditory stimuli much faster than they perceive visual stimuli and due to this connection between sound and the limbic system (the brain segment that controls emotions), sound can establish an instant emotional response. Thus, repeated brand sounds can enhance associative memory networks thereby establishing a faster recognition of a brand as well as emotional familiarity when a brand is played.

The results of this paper align with the principles of sensory marketing that holds that the multiple sensory approaches to branding will contribute to increased cognitive interest by a consumer and will lead to superior retention of consumer knowledge about a brand.

5.2 Memorable Branding and Sonic Branding.

Although the visual branding remains the most popular method of brand identification, as the results indicate, sonic branding can be utilized in the brand identification process. Many of the participants demonstrated the tendencies of brand-related sound recognition; that is, the more often the participants hear and visualize a sound which is repeated, the more they will remember.

This is in line with the principle of classical conditioning which note that in case a sound is paired with a brand frequently, a conditioned response will develop between the sound and the brand. In their study, Varghese, Selvakumar, Arthi, and Suganya (2023) discovered that sonic branding plays a major role in brand equity through its effect on the brand recall and consumer engagement.

Sonic branding, therefore, does not replace visual branding but enhances the overall remembering capability of a brand using sound as its mechanism.

5.3 Gender Disagreements and Brand perceptions.

The significant difference was not found in the relation between gender and the perception of sonic branding appeal by the young consumers ($2, 54 = 3.74, p = .154$).

This means that young customers share similar sentiments on sonic branding irrespective of gender. The insignificance of the difference implies that young consumers do not consider a big psychological disparity in the manner in which they evaluate sonic aspects of brands.

This is the fact that the marketers need to consider when formulating the sonic branding measures targeting the audience members within the age brackets of 18 to 25. Perhaps, there is no need to develop various sonic branding approaches depending on gender.

5.4 Sonic and Visual Brands Relationship.

Another finding of the results is that sound is a complement to the visual part of branding, that it assists it gain initial brand recognition at the stage when the visual logos is the most widely used one when initially encountering a brand; yet, sound will leave a mark and generate emotions. In a similar manner, previous studies indicated that it is necessary to incorporate visual and audio branding simultaneously to create stronger associations among consumers (Li et al., 2022).

Therefore, multisensory branding involving auditory and visual components, should be applied by the brands in order to reinforce brand identity and recognition.

5.5 Exposure to Digital Media and its role.

As the majority of the respondents are in school now and use digital media regularly, the majority of their time online should be dedicated to brand exposure, which is represented on digital platforms, mainly, streaming services and social networks. Repeated viewing of the brands digitally makes the frequency effect more on how the respondents recall the sound of a brand, which is required in the formation of an auditory memory.

It is also in line with the cognitive learning theory, which says that the more we are exposed to a similar stimulus repeatedly in our various senses e.g. sight and sound, the more likely we are to efficiently encode and recreate such stimulus i.e. recall the auditory logo of the brand.

It has been demonstrated that the effectiveness (psychological) of sonic branding among young consumers can be improved with the use of digital media environments. Taylor (2022) highlighted the fact that sonic branding has gained a significant role as a promotional means of contemporary marketing because of its capability to draw the attention of consumers fast.

5.6 Theoretical Implications

According to sensory marketing theory, sound stimulation improves the overall experience of consumers of a brand.

Classical conditioning Pairing sounds with brands results in association of the sounds with brands.

Attention theory: According to the theory, sound may be activated as a stimulus that notifies purchases to purchase a product because they hear the audio stimulus right before the brand is sold to them.

According to the associative memory theory, when using distinct auditory stimuli, which are also employed to identify a brand in the advertising of their brand, it will be more powerful in the memory of that specific brand in remembering the brand.

Hence, the research endorses the fact that sonic branding is a stimulus to the mind and not merely a marketing communication approach.

5.7 Limitations of the Study

Even though the results of the research are applicable, the following limitations must be considered:

1. The sample size was small (N = 54).
2. The sample was mostly male dominated.

The sampling was done through convenience sampling.

1. The instrument used to collect the responses of the respondents was self-reports; hence there might be bias.
2. The research concentrated on young people who are in colleges, so, it was not adequate to generalize the results to the general population within the age group of 16-30.

The next generations of research ought to consider a bigger and more varied sample of individuals (e.g. various age groups) in order to be able to generalize the results of the current research to the entire population.

Conclusion

This study examined the psychological impact of sound on brands and their influence on perceptions, emotions and brand recall in young consumers. The discussion is that sound plays a part of the perceptions and memories of consumers when dealing with a brand.

Findings showed that the majority of the interviewees were interested and appealing to the sounds of brand and more than half of the participants felt that the sounds of brand tend to be more distinctive than a company logo. This implies that sonic branding is a better marketing instrument that enhances emotional and cognitive associations among brands and customers. Sound can also recall the memories which are stored, attract attention, and connect a brand and its identity in a powerful manner.

The response data also indicated that consumers can recognize brands that have a sound on them, which is in line with the theory of repeated exposure to audio leading to a greater retention of a brand. In the contemporary media world, when individuals constantly encounter digital advertisements (text, images, etc.) or short-term information, unique sound signatures can become the successful recognition points, in the absence of the visual ones.

The inferential analysis of these respondents shows that there are no essential differences between males and females in terms of their attitude to sonic branding; hence, a company that utilises audio identity tactics to target young segments of the population can target one whole population without necessarily trying to establish credible gender differences in their advertising efforts.

Through this information, we are able to realize that sonic branding is not only a special form of advertising, but it is a way of applying psychology to the establishment of memories through emotion as well as a way of establishing associations between the consumer and the product. As competition keeps increasing in order to capture the attention of the modern consumer, brands that establish a unique sonic identity (brand) with a connection to their visual brand will establish a more emotional connection with their consumers and eventually be in a position to have the best recall of the brand and a lasting relationship.

Future studies can build on this finding by including a large number of subjects of different ethnicities and genders as well as examining how products with sonic branding are received culturally and whether or not consumers who were exposed to audio branding more than once time compared to those who have been exposed once become brand-loyal consumers in the future.

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