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**Music and Imagery in Healthcare Marketing: Insights from Online Cancer  
Communities' Needs**

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## **Abstract**

**Background:** What does empathy look or sound like in healthcare marketing for people with serious conditions such as cancer? Does it mean that marketers and audiences must share the same emotional state as cancer patients, survivors, and their caregivers, such as a sense of melancholy, to build trust? Or might such strategies risk evoking pity rather than genuine engagement? Perhaps, if the actual needs of this cancer community could be uncovered, healthcare marketers could develop more emotionally engaging strategies, particularly in creating or selecting music and imagery. While existing research has explored the therapeutic and advertising functions of music and imagery separately, an integrated understanding of how these sensory elements address the emotional needs of vulnerable groups in healthcare marketing remains limited. This thesis investigates how music and imagery in healthcare marketing influence trust, emotional engagement, and customer loyalty by focusing on the needs of cancer patients, survivors, and caregivers in online communities.

**Methods:** The study applies Braun and Clarke's thematic analysis to 159 text entries from online cancer community threads and discussions, using Maslow's Hierarchy of Needs to categorise recurring emotional themes.

**Results:** The findings reveal key emotional themes, such as the need to be loved and to belong (33%), to feel worth (25%), to feel safe (22%), and to live a meaningful life (20%), are central to the emotional experiences of those affected by cancer. These insights are then translated into practical implications for designing emotionally sensitive music and visual strategies in healthcare marketing, by considering elements of music and imagery that evoke emotion. The results suggest that embedding these emotional themes can enhance empathetic storytelling through music and imagery. Future research could explore the effects of music and imagery on trust and engagement using diverse audiences and methods, including the careful use of sad emotional content.

**Keywords:** Healthcare marketing; Emotional approach; Cancer patients; Cancer survivors; Caregivers; Online communities; Digital media; Sensory elements; Music; Audio; Imagery; Visual; Thematic analysis

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## 1. State of Research

Marketing and healthcare have long intersected in the use of sensory elements. Despite of five senses that can be used in marketing, most used senses in communicating a brand are sight and sound (Lindstrom 2005), like music and imagery. The intersection of these elements in healthcare marketing invites deeper exploration. Numerous studies exist on music and imagery in therapeutic healthcare settings, as well as on their impact in general advertising. Classic marketing practice shows that sensory appeals are not new. As early as 1926, brands were using music to engage consumers, for example Wheaties cereal radio jingle (General Mills, 2016). In modern advertising, over 90% of radio and TV commercials incorporate some form of music (Allan, 2008), underscoring music's central role in shaping consumer attitudes.

The influence of music in healthcare settings is also not a new concept. As early as 1984, Bailey conducted a study about the use of songs in music therapy with cancer patients and their families, which explored song selection themes such as hope, pleasure, the world, reminiscence, relationships, needs and desire, feelings, and peace (Bailey, 1984). Similarly, this thesis draws on thematic analysis to identify recurring emotional themes in the experiences of cancer patients, survivors, and caregivers, revealing on their underlying needs.

Music is known to have therapeutic benefits. As an example, calming music can reduce anxiety and pain for cancer patients, especially when it is familiar and culturally appropriate to the listener (Huang, Good and Zauszniewski, 2010). Studies have further shown that music therapy can improve the quality of life (QoL) in adults with cancer by easing anxiety, depression, pain, and fatigue while encouraging feelings of hope in particular (Bradt et al., 2021; Pauwels et al., 2014). This is due to the dopamine release in the brain when listening to a song, triggering brain's reward effect (Salimpoor et al., 2011). Furthermore, dopamine evokes emotional reactions to specific pleasurable moments (Ferreri et al., 2019).

While therapy studies like Huang, Good and Zauszniewski (2010) focused on clinical outcomes, in advertising research, a marketing study by Khan, Abdul Hamid and Rashid (2019) found that advertising professionals deliberately use familiar, catchy tunes to influence consumer decision-making. Familiar songs or melodies are shown to trigger positive memories and feelings. It also suggests that familiar music in

advertisements influences people make decisions based on quick, surface-level cues rather than deep thinking (Khan, Abdul Hamid and Rashid, 2019).

Likewise, visual content is known to drastically enhance message recall through the picture superiority effect: when people see an image, their mind encodes it both as a visual and a verbal label, making it far more memorable than words alone (Paivio and Csapo, 1973). These findings demonstrate the significant influence of auditory and visual stimuli in marketing contexts. Visuals are powerful in engaging people more than text alone, as visuals can be emotive, persuasive, and hold a “positioning power” on the viewer’s imagination (Joffe, 2008). The content of an image can determine how audiences feel about a health message. Chang (2013) found that pictures are generally more effective than text in enhancing the health risk awareness and self-efficacy perceptions, specifically when the health issue is difficult or unpleasant to imagine. Images help trigger vivid mental imagery, making health risks feel more real and preventive actions seem more achievable (Chang, 2013). This suggests that selected imagery can shape emotional responses, allowing marketers to carefully design visuals that elicit the desired effect. These emotionally charged strategies can be effective since emotion-based healthcare ads elicit more favourable responses from consumers than purely informational ones (Kemp *et al.*, 2017).

Additionally, people become ‘hooked’ by storytelling in ads, or in today’s social media video, can be explained by the concept of narrative transportation theory (Chang, 2009). Healthcare campaigns demonstrate practical impact when they incorporate patient stories through visual narratives, often accompanied by emotionally resonant music to draw audiences into an empathetic journey rather than presenting solely factual information. These emotionally engaging strategies invite audiences into an empathetic experience, a process described by narrative transportation theory (Chang, 2009), which strengthens both credibility and memorability of the message. Emotional storytelling, especially around hope and survival, dominates cancer centre ads. One study found 85% of ads used emotional appeals, evoking hope for survival and framing treatment as a battle (Vater *et al.*, 2014). Evidence from recent studies by Gurrieri and Drenten (2019), analysing Instagram posts from female breast cancer patients and survivors, found that visual storytelling on social media also helps normalise hidden aspects of the illness experience and fosters social support among patients. In their study, patients’ images and narratives provided informational and companionship

support to others, effectively filling gaps left by formal healthcare communication. Such findings illustrate how imagery shared by patients builds a sense of community and trust, elements that formal marketing could learn from. Survivors often use images, like photos of scars, recovery milestones, etc., to communicate hope and solidarity. Analysing discussions in cancer forums or social media groups has the potential to improve understanding of their underlying needs, thereby disclosing, what kinds of visuals and musical themes resonate as genuine or comforting to patients.

Present-day digital media trends make this inquiry especially fitting. In 2024 and 2025, consumer attention has shifted heavily toward multimedia content, with social-media platforms and streaming services dominating entertainment, and younger audiences spending as much time with on-demand video, social media, and audio streaming as they once did with traditional TV (Deloitte, 2025). Healthcare marketers are responding by crafting campaigns that deploy videos, imagery, and music across social media and other digital channels. Recent industry surveys show a big growth in audio content consumption, such as music streaming and podcasts, alongside visual social media content (Deloitte, 2023). Which means, today's health consumers live in a world of visuals and sound.

As an active internet and social media user, it has often been observed that virality is frequently driven by the strategic use of music, especially trending audio tracks that are reused across platforms. Certain imagery also plays a key role, but what kind of visuals actually trigger emotional sharing or user engagement remains less discussed. While social media algorithms change rapidly, content creators actively share insights on what drives visibility and virality. However, in the context of healthcare, especially for cancer patients, survivors, and caregivers, virality alone is insufficient. Given their emotional state, content must be crafted ethically and with empathy. This leads to questions such as: What does empathy look or sound like in this context? Does it mean marketers and the group must share the same emotional state, such as a sense of melancholy, to build trust? Or might such strategies risk evoking pity instead of genuine engagement? More importantly, what are the actual needs of this cancer community? This is closely tied to the concept of sensory marketing, particularly through music (auditory) and imagery (visual), both of which have been shown to support therapeutic goals and improve emotional well-being in healthcare contexts. This study explores how music and imagery influence trust, emotional engagement, and customer loyalty,

drawing on insights from online cancer communities to better understand what makes these sensory elements both ethical and effective.

### **1.1. Research Question**

How do music and imagery in healthcare marketing influence trust, emotional engagement, and customer loyalty based on insights from online cancer communities?

### **1.2. Structure of Thesis**

This thesis is structured from the broader research background into the specific findings and implications related to music and imagery in healthcare marketing. The introduction provides a brief State of Research chapter, which explains the existing knowledge and gaps, followed by the Research Question that shapes the entire study. The next chapters provide theoretical foundations: Healthcare Marketing outlines the key concepts, strategies, and how emotional engagement leads to brand loyalty. This is followed by two detailed chapters on Music in Marketing and Imagery in Marketing, examining how each medium works to influence emotions, supported by examples and key considerations such as cultural relevance and emotional resonance.

The second half of the thesis focuses on the empirical work. The Method chapter outlines the research context, online cancer communities, as well as the data collection process, ethical considerations, and the use of Braun and Clarke's thematic analysis method. Maslow's Hierarchy of Needs is used as a guiding framework to categorise emotional needs found in the data. The Data Analysis Process explains how the emotional needs of patients, survivors, and caregivers were identified and interpreted. Based on these findings, the Implications for Healthcare Marketing chapter provides practical suggestions for using music and imagery in emotionally meaningful ways. The thesis concludes with a summary of insights, followed by Limitations and Future Research.

## **2. Healthcare Marketing**

### **2.1. Defining Healthcare Marketing**

Healthcare marketing is a specialized discipline that differs significantly from general marketing due to the industry's sensitive nature, the emotional and psychological state of its audience, and strict regulatory frameworks. Unlike traditional marketing, which often relies to persuasive tactics to drive consumer behaviour, healthcare marketing

must balance effective communication and promotion with ethical responsibility, patient education, and emotional engagement. Trust and credibility are keys, as messaging influences critical health-related decisions. What are the factors that set healthcare marketing apart from other types of marketing? The following section explores the distinctions between healthcare marketing and other marketing in general:

### **Marketing Ethics in Healthcare**

Marketing in healthcare is about more than just hitting business goals, but patient well-being should always come first. Marketers must be mindful of ethics, ensuring that their content follows both ethical guidelines and legal regulations, like Health Insurance Portability and Accountability Act (HIPAA) in the U.S. and General Data Protection Regulation (GDPR) in the EU, which protect patient rights (Haritha *et al.*, 2024).

Valuing ethics in healthcare shows professionalism, which builds trust by ensuring care that is necessary, informed, fair, high-quality, and free from harm or compromise (Latham, 2004).

**Sensitive target audience:** The target market has distinct needs and preferences, often tailored to specific groups (Elrod and Fortenberry, 2018). In the cancer community, patients, caregivers, and survivors experience significant emotional challenges. Beyond coping with physical and health-related changes, cancer patients often face fears, anxiety, loneliness, and frustration, as others may struggle to understand their journey (Yi and Syrjala, 2017; Wells *et al.*, 2022). As a result, they tend to be highly sensitive. This sensitivity demands that healthcare marketers craft their messages with empathy. But what exactly is empathy? The concept, as we understand it today comes from the word “Einfühlung,” a German term meaning “feeling into something.” Tracing back to 1909, the English psychologist Edward Titchener coined the term “empathy” while translating the work of philosopher and psychologist Theodor Lipps. Titchener used ancient Greek to translate “Einfühlung” as an analogy to the term “sympathy,” which refers to understanding and sharing someone else’s feelings (Herold and Vinken, 2021). In addition to this, the APA (American Psychological Association, n.d.) defines empathy as the ability to “understand another person’s perspective or feelings as if experiencing them yourself. It plays a role as ‘social glue’, promote rapport, increase cooperative behaviour, reduce opportunism, and enhance relationship quality.” In the context of healthcare marketing, by recognizing that empathy involves not just understanding but ‘feeling into’ another

person's experience, marketers can create messages that connect emotionally and meaningfully. Whether through storytelling, imagery, or music, it promotes a sense of connection that encourages cooperation and loyalty.

**Trust and credibility:** Consumers are shifting from passive to active roles, using health tech, mobile apps, and wearables to take control of their care (Anderson, Rayburn and Sierra, 2019). As healthcare marketing moves to digital, consumers increasingly rely on the internet and social media for health solutions, expecting trust, accuracy, and transparency. Misleading claims can lead to legal issues and harm brand reputation. To build trust, Kington et al. highlighted foundational principles that healthcare brands must follow: providing science-based information backed by evidence, remaining objective and free from biases, and ensuring transparency by acknowledging limitations. In response, consumers are resourceful, evaluating multiple sources both online and offline before making decisions (Kington *et al.*, 2021).

**Education over promotion:** Healthcare marketing creates a personal connection with consumers, as it involves health decisions that often require medical knowledge many individuals lack. Rather than solely about brand loyalty, its primary goal is to educate and inform consumers about topics such as treatments, healthcare solutions, quality of care, and drug composition. Providing the information about health condition in a way that raises awareness without inducing unnecessary fear is salient, as sometimes facts about health conditions lead to irrational panic (Kay, 2007).

**Longer Decision-Making Process:** As healthcare becomes increasingly personal, healthcare consumers today are taking a more active role in managing their health. With an abundance of information available online and offline, they seek credible healthcare resources to educate themselves and guide their decisions. Unlike consumer goods, which may have short-term effects, healthcare decisions can have long-term consequences, ones that can affect a person's quality of life. This deliberation is driven by the complexity of factors involved. According to a 2024 trend report by McKinsey & Company, consumers carefully consider a range of variables before making their final choice. They look at the quality and often relying on customer reviews to guide their judgement. They factor in practical aspects like waiting times, the convenience of distance with shorter travel times preferred, cost and insurance coverage (Buchter, Cordina and Eckroate, 2024). This process of comparison and

Careful evaluation ensures that the decision made aligns with not just immediate needs, but long-term health goals.

## **2.2. Strategies and Brand Loyalty in Healthcare Marketing**

Marketing strategies in healthcare increasingly aim to create an emotional connection and positive experience for the audience, whether on a hospital website, a pharmaceutical ad, or a wellness app. Building a strong brand in healthcare often means cultivating a sense of trust, empathy, and even comfort, so that patients feel a bond with the organisation or the brand.

One way to create this emotional connection in hospitals and clinics is by shaping the ambience in which services are delivered or presented, a strategy often employed by healthcare marketers. This is seen in hospital interior design choices, waiting room environments, also in website or app user interface design. The idea is to use environmental cues, including music and imagery, to reduce anxiety and improve user experience, which in turn boosts satisfaction and loyalty. For instance, clinics play soft background music in waiting areas or lobbies. Studies generally report that patients view music in waiting rooms positively, and some research has shown that soothing background music can lower patients' anxiety while they wait (Lai and Amaladoss, 2022). This approach is also being extended to digital platforms, where the equivalent of a calming waiting room ambience is conveyed through user interface design and the presentation of content. Marketing notes that visuals have an emotional impact (Joffe, 2008), which can improve brand awareness, increase engagement, and build trust, eventually encouraging users to take desired actions.

Hospitals typically engage in community-focus, highlighting patient stories and testimonials that are often shared in social media to build trust (Proenca, Rosko and Zinn, 2000; Richter, Muhlestein and Wilks, 2014).

Emotional storytelling is an effective strategy in healthcare marketing, to influentially build emotional connections and humanise services, especially through social media (Gurrieri and Drenten, 2019). This approach is also increasingly important in pharmaceutical advertising. However, in many countries, direct-to-consumer advertising of prescription drugs on television or in magazines is prohibited (Mintzes, Morgan and Wright, 2009). As a result, pharmaceutical marketing often shifts focus toward healthcare professionals or disease awareness campaigns that use storytelling

to educate patients about specific conditions and available treatment options (Schwartz and Woloshin, 2019; Mintzes, Morgan and Wright, 2009).

Health insurance providers, including private insurers and government or national health plans, often adopt digital marketing strategies through social network to maintain relationships with existing members and attract new member acquisition. Content marketing is common in this sector, with insurers sharing information related to health promotion. They often publish guides on healthy living, preventive care reminders, organise wellness events (e.g. city runs, sports groups), or combine these efforts to position themselves as supportive partners in their customers' health journeys (Loss and von Uslar, 2021). Once consumer trust is established, the reputation of the company can be positively influenced (Aboalghanam and Alzghoul, 2024).

All the above healthcare marketing strategies contribute to helping healthcare organisations improve their competitive advantage (e.g. higher trust and reputation), enhance visibility, understand patient needs and perceptions, and create memorable experiences (Purcarea, 2019), that eventually lead to brand loyalty. Because healthcare decisions are often emotional and involve a longer decision-making process, trust and credibility become the most important factors in shaping patient and consumer choices. The target audience is also distinct, often vulnerable and emotionally invested, requiring messages that inform without overwhelming and persuade without exploiting. These efforts in the long run support the development of a compelling and trusted brand in the healthcare sector.

### **3. Music in Marketing**

In the current state of research (see: State of Research), when used in therapeutic settings, music can significantly enhance the quality of life of individuals. Music has been shown to stimulate the release of dopamine, and listening to a song evokes reactions and pleasurable moments. A study on the relationship between music and brain function shows that music directly provokes emotions and triggers physiological responses, such as changes in heart rate, respiration rate, blood flow, and skin response, by activating both primal and emotional regions of the brain (Trainor and Schmidt, 2003). Because music can evoke reactions, it has been used in marketing to create impacts in consumers' minds. It shapes perception, strengthens brand identity, and influences consumer behaviour. When music is used as part of branding, music

can effectively communicate a brand's unique identities and values, making it easier for consumers, to recognise and remember the brand, even without musical training (Brodsky, 2011). This is due to the fact that musical components, like melody, harmony, and rhythm, can evoke associative images that reinforce a brand message, intensifying the unity of the overall brand communication (Fraser, 2014).

### **3.1. Ambient Music**

Ambient music, also known as elevator music or muzak, is often used in healthcare environments such as hospitals (Sars, 2023) and wellness centres (McGroarty, 2020) to create a calming atmosphere, and in fitness centres to elevate energy and physical performance. Moreover, ambient music can serve as a strategic communication tool that directly influences consumer choices, enhances perceived trust and brand values, and strengthens the engagement between consumers and the brand. Numerous studies have explored the role of ambient music in shaping consumer behaviour and decision making across various environments, focusing on factors such as genre, volume, and frequency levels.

The most popular study about ambient music is by North, Hargreaves, and McKendrick (1999), showing that traditional folks French or German music played in a supermarket increased sales of French or German wine, respectively. Most customers were unaware of this influence, highlighting how background music in a store can subtly guide consumer choices through cultural priming. North (2012) further extended this idea, demonstrating that background music can also influence how wine tastes. Participants rated wines in ways that matched the emotional connotations of the music they heard, such as perceiving the wine as more "powerful and heavy" when listening to *Carmina Burana* by Orff, "subtle and refined" with Waltz of the Flowers by Tchaikovsky, "zingy and refreshing" with Just Can't Get Enough by Nouvelle Vague, and "mellow and soft" with Slow Breakdown by Michael Brook. Western classical music genre in background, like Beethoven, Mozart, and Bach, played as ambient music at low-volume between 50 dB to 55 dB tends to induce relaxation, which leads to increased selection and purchase of healthier foods.

Conversely, high-volume music (around 70 dB) tends to generate a state of excitement and arousal, which can lower self-control and increase impulsivity, resulting in a greater preference for indulgent, unhealthy food choices, like pizza and ice cream (Biswas, Lund and Szocs, 2019). A loud environment, such as bar with music levels between

88 to 91 decibels (dB), also tends to increase alcohol consumption, especially among men. This suggests that higher music volume equals to higher arousal, a state of heightened awareness or activation in the body and brain, that involves feelings of excitement, alertness, anxiety, or increased energy (Guéguen, Guellec & Jacob, 2004). The presence of loud music in the background has significant effects on: it decreases the consumer's attention, leads to lesser consideration of the intricacy in the visual design of a product, and results in them choosing products with simpler visual design (Klein, Melnyk & Völckner, 2021). Suggested sound levels for background music should remain within a comfortable range of approximately 60 to 80 dB with frequency range for humans, especially for speech and meaningful auditory information, falls between 125 to 4000 Hertz (Hz) (Gray, 2021). Matching background music with the visual design of an environment shows that aligning sound frequency with visual brightness, such as using higher frequency sounds for brighter visuals, can automatically enhance attention and message recall through multisensory marketing (Hagtvedt and Brasel, 2016).

### **3.2. Jingle and Brand Anthem**

One of the most famous jingles of all time is McDonald's "Ba-da-ba-ba-baa, I'm Lovin' It", a short, catchy musical phrase that became synonymous with the brand. Jingles have long been a useful tool in marketing and branding to deliver brand messages in a way that sticks with people. Musical jingles appear to be a powerful tool in reinforcing brand messages withing advertisements, likely due to their ability to convey verbal content through melody rather than ordinary speech (Alexomanolaki, Loveday & Kennett, 2007). According to an earlier study by Yalch (1991), jingles are typically crafted so that their musical and verbal elements align harmoniously, often sharing phonetic features creating a mnemonic that helps lock information in the brain by creating mental connections, making it easier to recall that information later, especially when the tune is heard again or when the brand is brought to mind. Yalch further made a comparative study of 28 advertisements, half with jingles and half without. Those featuring jingles consistently outperformed others in terms of accurate brand-slogan association. Yalch found that the findings consistently demonstrated that brand names were more effectively remembered when linked to advertising phrases delivered through musical jingles rather than simple spoken words. Integrating music into advertisements, specifically through jingles, significantly boosted the ability to recall brand-slogan pairings.

A jingle typically includes singing to convey the brand message. According to Welch (2015), singing is a form of communication because the human voice is versatile and can be used for both speaking and singing. More than just words or music alone, singing also communicates different types of messages, such as emotions and meanings, simultaneously, both being produced and understood.

While jingles serve as brief and repetitive mnemonic devices, brand anthems represent a more extensive use of music in marketing. Some of the well-known examples of brand anthems are Coca-Cola's "Open Happiness" and Bosch's "Like A Bosch". A brand anthem is typically a full-length song that expresses a brand's identity, values, or lifestyle through musical storytelling, that can be used as the foundation for numerous television, digital, and event-based advertisements. Inserting sound effects and onomatopoeia, the use of words or phonetic speech sounds that imitate the actual sounds, into a song or jingle can enhance sensory engagement and brand recall. For example, Pepsi's "Fizz" campaign centred around the effervescent sound associated with opening a carbonated beverage. This not only enhances product quality but also evokes a sensory engagement that strengthens brand recall and emotional appeal (Spence, 2012). An additional layer to the effectiveness of both the jingle and the brand anthem is their potential to become an 'earworm', a catchy tune that loops involuntarily in one's mind. This phenomenon, described by Killingly and Lacherez (2023), involves the internal repetition or "singing along" of a tune, often without conscious awareness. Such involuntary musical imagery embeds the brand message deeply into the listener's memory, enhancing long-term retention and recall. Since singing often serves as the central activity for a group, and music is structured to tell a story or share an experience (Welch, 2005), the spontaneous nature of earworms suggests that jingles may function subconsciously as a form of word-of-mouth reference, promoting brand messaging even outside of active media consumption.

### **3.3. Sogos**

Netflix's 'ta-dum' sound, Nokia's classic ringtone derived from a Spanish guitar piece (Shaw Roberts, 2022), or Intel's iconic "bong" five-note chime (Intel, 2022) are some well-known examples of unique audio cues associated with a brand, commonly referred to as sonic logos (sogos). Sogos is part of brand identity, alongside visual elements such as logos, color palettes, and typography. Sogos are short instrumental or sung melodies, or sounds that could involve natural vocal samples, external noises,

or synthetic sound effects, used as sound signatures and typically two to six seconds long. Ideally, a simple and recognizable melody ensures flexibility across various media and marketing materials (Bonde & Hansen, 2013). Effective slogans with six tones, compared to those with only two tones, can drive higher consumer willingness to pay by shaping brand perception (Krishnan, Kellaris and Aurand, 2012). Playing the sonic logo at the beginning of the advertisement led to stronger consumer attitudes toward both the ad and the brand, while also enhancing emotional responses to them (Scott, Sheinin and Labrecque, 2022).

Composer Charlie Wilkins from PHMG (2021), an audio branding company, suggested the essentials of effective slogans by focusing on:

- Universal melody: Uses the pentatonic scale, making it globally recognisable and easy to sing.
- Syncopation: Off-beat notes create a playful, dance-like feel.
- Simple syllables: Easy to say and sing, encouraging repetition.
- Replicability: The simplicity allows it to be played or sung by anyone on any instrument, making it highly adaptable.

### **3.4. Thematic Background Music**

Apple's product launch videos are known for using thematic background scores in their product launch videos. For example, with the AirPods 4 launch video, "Someday" (Jonze, 2022), features two songs that mirror the main character's emotional shift from sadness to joy. It begins with "El Conticinio" by GuitarricadelaFuente, reflecting the character's initial melancholy. As the Active Noise Cancellation (ANC) feature from AirPods 4 is activated, the music transitions to "Perfect" by Sam i and Tropkillaz, featuring BIA and MC Pikachu, accentuating the transformation to a more vibrant atmosphere. The commercial featured background music that enhances the storytelling and the emotional connection without became a central focus or overshadowing the product's features. Thematic background music refers to instrumental music, or music with a few lyrics, used to support the emotional tone of an advertisement, video, or marketing campaign. Music used for advertising makes pictures and words more emotionally powerful and creates a special energy (Hecker, 2006). This is supported by research that examined the impact of music in advertisements by assessing eye-tracking, facial emotion and galvanic skin response

(GSR), which adding music to an advertisement has been shown to significantly increase viewers' emotional engagement, enjoyment, and perceived brand strength (Cuesta, Martínez-Martínez and Niño, 2020). Allan (2008) found that 91% of 3,456 prime-time television advertisements employed popular music related to the ad narrative, underscoring the strategic role of music in enhancing message relevance. Music, when combined with product-related voiceovers can influence consumer choices (Alexomanolaki, Loveday & Kennett, 2007), especially when paired with liked music, which can positively affect consumer preferences (Gorn, 1982). This effect is especially marked among younger audiences; Munsch (2021) notes that digital advertisements featuring popular music are more likely to capture the attention of Millennials and Gen Z, often prompting them to pause and engage with the content. Familiar background music can trigger personal memories and private imagery, which may distract from the brand message. This same familiarity can create new association between the music and the brand message, which improves later recall of the brand message when the music is heard again (Fraser, 2014). Moreover, music-evoked nostalgia has been linked to feelings of being loved and a renewed sense of life's meaning (Routledge *et al.*, 2011), suggesting that familiar music not only aids memory but also embeds the brand message within a deeply emotional and personally significant context.

### **3.5. Key Considerations in Music Choice**

#### **3.5.1. Music Elements that Evoke Emotions**

Both lyrics and melodies contribute to emotional communication in music, with melodies exerting a more dominant influence. Moreover, the emotional valence, whether positive or negative, interacts differently with lyrics, shaping the overall emotional impact (Ali and Peynircioğlu, 2006). This dynamic influences how consumers perceive and emotionally respond to a brand. Music helps construct brand identity, shapes consumer behaviour, and enhances memorability. Key musical elements such as pitch, chord progression, interval, tempo, and timbre (instrument choice) are known to elicit specific emotional responses and should be considered when creating or selecting music for effective brand communication. In addition to musical structure, cultural relevance to the target audience is an essential factor, as emphasized by Susino (2019), and the user generated content culture in this era of digital technologies.

## Pitch

Pitch serves as brand identifier in sogos (Bonde & Hansen, 2013). Further study suggests that sogos composed with high frequency and slow tempo are more likely to be associated with healthy foods (Techawachirakul, Pathak & Calvert, 2022). The finding aligns with previous investigation by Huang & Labroo (2019) about the impact of background music pitch on consumer healthy choices, revealing that higher-pitched instrumental music (pitch increased by 50%) influenced participants to select healthier options. Among 658 participants, 46% opted for oatmeal raisin cookies over double chocolate chip cookies, with oatmeal cookies being verified by participants as a healthier choice compared to chocolate cookies. Although neither lower pitched nor normal pitch music diminished overall sales, these conditions were associated with a stronger preference for more indulgent, less nutritious food items. When participants were exposed to low-pitched music, their caloric intake was approximately 681 calories, when the music was high-pitched, this decreased to 471 calories. This tendency is thought to be linked to the common association between higher pitch and perceptions of morality. It is similar to how music with high octaves, ranging from C5 to C6, is perceived as brighter (Collier & Hubbard, 1998). While direct research on the specific impact of low pitch music in marketing is limited, Alvin J. suggested that low pitch can have a calming effect in therapeutic settings (as cited in Lefevre, 2004).

## Chords and Intervals

There is no doubt music triggers emotional responses for listeners, as evidenced by neuroscientific research (Altenmüller *et al.*, 2002; Koelsch, 2005; Koelsch *et al.*, 2006). A musical chord is typically a combination of three or more notes played together, creating harmony. The notes in a chord are distanced at specific intervals. A single chord can evoke emotions on its own, particularly triads, are universally recognised as being associated with specific emotions: major chords equal to happiness and minor chords equal to sadness (Bakker and Martin, 2015; Lahdelma and Eerola, 2014). Table 1 summarises the emotional effects associated with different chord types according to Chase (2006). The categorisation in his table aligns with that found in other sources, such as Schuller, Dorfner, and Rigoll (2010), which provide similar information.

*Table 1 Emotional effects associated with chords adapted from (Chase, 2006)*

Chord	Example	Emotional Effects
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Major	C (C – E – G)	Happiness, cheerfulness, confidence, brightness, satisfaction
Minor	Cm (C – E <sub>b</sub> – G)	Sadness, darkness, sullenness, apprehension, melancholy, depression, mystery
Seventh	C7 (C – E – G – B <sub>b</sub> )	Funkiness, soulfulness, moderate edginess
Major Seventh	Cmaj7 (C – E – G – B)	Romance, softness, jazziness, serenity, tranquillity, exhilaration
Minor Seventh	Cm7 (C – E <sub>b</sub> – G – B <sub>b</sub> )	Mellowness, moodiness, jazziness
Ninth	C9 (C – E – G – B <sub>b</sub> – D)	Openness, optimism
Diminished	C <sup>o</sup> (C – E <sub>b</sub> – G <sub>b</sub> )	Fear, shock, spookiness, suspense
Suspended Fourth	Csus4 (C – F – G)	Delightful tension
Sevent, Minor Ninth	C7 <sub>b</sub> 9 (C – E – G – B <sub>b</sub> – D <sub>b</sub> )	Creepiness, ominousness, fear, darkness
Added Ninth	Cadd9 (C – E – G – D)	Steeliness, austerity

Same as chords, a distance between two notes, or music intervals also found to convey different emotional characteristics (Oelmann and Laeng, 2009). The possibilities of associated emotions are depicted in Table 2, as elaborated by Chase (2006). Nonetheless, he cautions that these emotional associations are not fixed; rather, they are influenced by the broader musical context, such as harmonic progression, rhythmic patterns, timbre, and other factors.

*Table 2 Emotional effects associated with intervals adapted from (Chase, 2006)*

<b>Interval</b>	<b>Associated Emotions</b>
Consonant	Pleasantness, generally positive emotional valence; not as strong or active as dissonant intervals
Dissonant	Generally negative emotional valence, strength, activity
Major intervals	Brightness, strength
Minor intervals	Dullness, weakness
Large intervals	Power
Small intervals	Weakness
Minor second	Melancholy, displeasure, anguish, darkness

Major second	Pleasurable longing, displeasure
Minor third	Tragedy, sadness
Major third	Joy, happiness, brightness
Perfect fourth	Buoyancy, pathos
Tritone	Violence, danger, tension, devilishness
Perfect fifth	Cheerfulness, stability
Minor sixth	Anguish, sadness
Major sixth	Winsomeness, pleasurable longing
Dominant seventh	Irresolution, displeasure, mournfulness
Major seventh	Aspiration, displeasure, mournfulness
Octave	Lightheartedness (sudden melodic leap)

## Tempo

Tempo is the most influential musical feature in shaping emotional perceptions (Juslin and Lindström, 2010). Tempo, from the Italian word for 'time', is the speed of music, measured in beats per minute (BPM) (Classic FM, 2022). Different tempos can regulate a range of emotions, such as sadness or happiness. Faster tempo, *prestissimo* (200 to 208 bpm), *presto* (168 to 200 bpm), and *allegro* (120 to 168 bpm), linked to stress, expressiveness, and amusement, while slower tempo, *moderato* (108 to 120 bpm), *andante* (76 to 108 bpm), and *adagio* (66 to 76 bpm) tend to create relaxation, neutrality, and boredom (Fernández-Sotos, Fernández-Caballero and Latorre, 2016). For some individuals, a slow tempo song may evoke sadness or unease instead of relaxation, as it may recall personal nostalgia with someone or become associated with negative feelings through emotional conditioning (Susino, 2019), known as episodic memory or sometimes called as "Darling, they are playing our tune" theory (Juslin and Västfjäll, 2008).

Moreover, the speed of background music can influence how consumers feel. Fast tempo music encourages consumers to be more open to variations and new offerings. this effect occurs especially when the music is familiar to them (Sun, Chang and Xu, 2023). Slow tempo music encourages consumers to linger longer, leading to more purchases. A classic study by Milliman (1982) examined how tempo affects supermarket shoppers. The study found that when slow tempo music, below 72 bpm, was played, shoppers moved more slowly through the store and sales increased by 38% compared to periods when fast tempo music was played. Milliman (1986) conducted further research that supports these findings. Conducted in a restaurant

setting, the study found that customers exposed to slow tempo music spent average of 56 minutes dining, compared to 45 minutes when fast tempo music was played. While the total food sales remained similar, the slower music led to increased sales of alcoholic beverages, indicating that customers lingered longer and made additional purchases.

With this in mind, it appears that slow tempo music encourages people to move more slowly and linger longer, though it may also induce sleepiness, boredom or even sadness, while fast tempo music can evoke amusement and excitement about new things, but may also create a sense of urgency and stress.

### **Choice of Instruments (Timbre)**

As previously discussed, chords can evoke emotions, and the emotional connotations of the chords are influenced by timbre (Lahdelma and Eerola, 2014). According to The American National Standard (ANSI, 1960), “Timbre is that attribute of auditory sensation in terms of which a listener can judge that two sounds similarly presented and having the same loudness and pitch are dissimilar.” Each instrument has its own timbre, its unique sound quality. That explains how different instruments shape listeners perception and influence emotional responses to music (Hailstone *et al.*, 2009). Musical instruments can express emotions powerfully because it mimics the human voice but can go beyond it in speed, intensity, and timbre. For example, a violin can mimic the sound of an angry voice, fast loud, and harsh, but exaggerate it even further, making the emotion feel stronger and triggering emotional responses, as explained by Juslin’s super-expressive voice theory (2001, as cited in Juslin & Västfjäll, 2008). The violin, along with the trumpet and clarinet, was most strongly associated with happy emotions, while the horn and flute were more closely linked to sad emotions (Wu, Horner, and Lee, 2014). Moreover, string instruments were as well associated with emotions such as nostalgia, melancholy and tenderness, whereas the piano was more strongly associated with feelings of happiness and joy (Lahdelma and Eerola, 2014). Some associations indicate that instruments with brighter timbres are generally perceived as happier, whereas those with darker or less bright timbres tend to convey sadness (Wu, Horner, and Lee, 2014). Say, a joyful melody can be paired with instruments characterised by naturally joyful timbral qualities. Meanwhile, the instrumental accompaniment in opera arias often conveys mixed emotions, complementing the vocal expression and reflecting the emotional complexity of

characters and dramatic situations (Wu, Horner, and Lee, 2014). Those, who intentionally use music to shape emotional responses, can select timbres that enhance the intended emotional expression of a melody in order to maximize its emotional impact (Wu, Horner, and Lee, 2014).

### **3.5.2. Cultural Relevance to the Target Audience**

Empirical research suggests that when the background music in advertisement matches the cultural context of its target audience or brand, it generates higher consumer pleasure and positive responses. In one experiment, music that matched a brand's cultural identity made listeners feel happier and more likely to share the product (Zhang, Wei and Cao, 2024). In part because familiar musical cues, may help reduce the psychological distance between consumers and the message, as suggested by Shen & Chen (2006). On a deeper level, music choice functions as an extension of individual identity, where genre preferences signal group affiliation, status, and cultural capital, while also evoking deep-rooted emotions and personal memories that enhance ad resonance and memorability, giving the sense that the brand's message aligns with one's true self or cultural identity (Abolhasani, Oakes & Oakes, 2017). Moreover, consumers show loyalty to specific music-based communities (musical subcultures). Conversely, misusing an iconic song or using music that clashes with the audience's culture can come off as inauthentic and prompt backlash (Abolhasani, Oakes & Oakes, 2017).

Culturally relevant music can influence customers perceptions when selecting products. For example, French accordion music in a store led to more French wine sales, whereas German folk tunes boosted German wine (North, Hargreaves and McKendrick, 1999), indicating that music cues of a product's origin can enhance its perceived authenticity.

Western listeners may associate minor key with sadness and major with joy, but listeners from cultures with minimal Western exposure often do not share this association (Schubert & Susino, 2021; Smit *et al.*, 2022). Similarly, musical scales are not universally perceived in the same way across cultures; rather they are often culturally conditioned. For example, Western music predominantly uses diatonic and chromatic scales that may sound unfamiliar or even unsettling to non-Western listeners. Studies have shown that the preference for consonant intervals, like perfect fifths or major thirds, is not entirely universal, but influenced by cultural exposure and

listening habits (McDermott *et al.*, 2016; Curtis & Bharucha, 2009). In contrast, numerous traditional musical systems rely on pentatonic or heptatonic scales, including the Bhairav in Indian music (Curtis & Bharucha, 2009), slendro and pelog in Indonesian gamelan, Uşşak and Hicaz in Turkish makam, and Segah and Mahur in Iranian dastgah. Within these traditions, musical scales are often linked to emotions, seasons, rituals, times of day, or places (Sethares, 2021). The pentatonic scale is considered the most accessible musical scale, largely because it appears in numerous cultural traditions (Savage *et al.*, 2015). These findings suggest that when composing music or selecting music for global audiences, marketers should be mindful of musical elements familiarity and its emotional connotations within specific cultural frameworks.

### **3.5.3. Music in User Generated Content Culture**

In today's globalised and digitally connected world, the concept of culture has expanded beyond traditional geographical boundaries. With the rise of the internet, especially social media platforms and online communities, culture is increasingly shaped by shared interests rather than regional location. This shift impacts marketing approach, instead of tailoring messages based solely on national or ethnic identities, marketers now need to consider the cultural dynamics of digital subcultures. In short-form videos, like TikTok, Shorts, or Reels for example, music is not merely a background element, it functions as a central narrative device that shapes the content, guides user interaction, and even determines the platform's algorithmic visibility, driving virality. Accordingly, Viktoriia (2025) explores in her recent study, how music shapes user engagement with digital content and how trends are born. When a particular track is adopted for a challenge on TikTok or Instagram, it becomes closely associated with a specific genre of user-generated content. This association motivates widespread participation, as users replicate the format using the same musical element. As the track gains popularity on social media platforms, more users adopt it in their video, accelerating its virality.

When creating or selecting music for short videos that are limited between 15 and 60 seconds, several key aspects should be emphasized: using a catchy musical hook, ensuring precise synchronisation between visuals and music to enhance mood and dynamics, optimising sound quality for mobile playback, and selecting or creating audio that is easily replicable and instantly memorable (Viktoriia, 2025).

#### 4. Imagery in Marketing

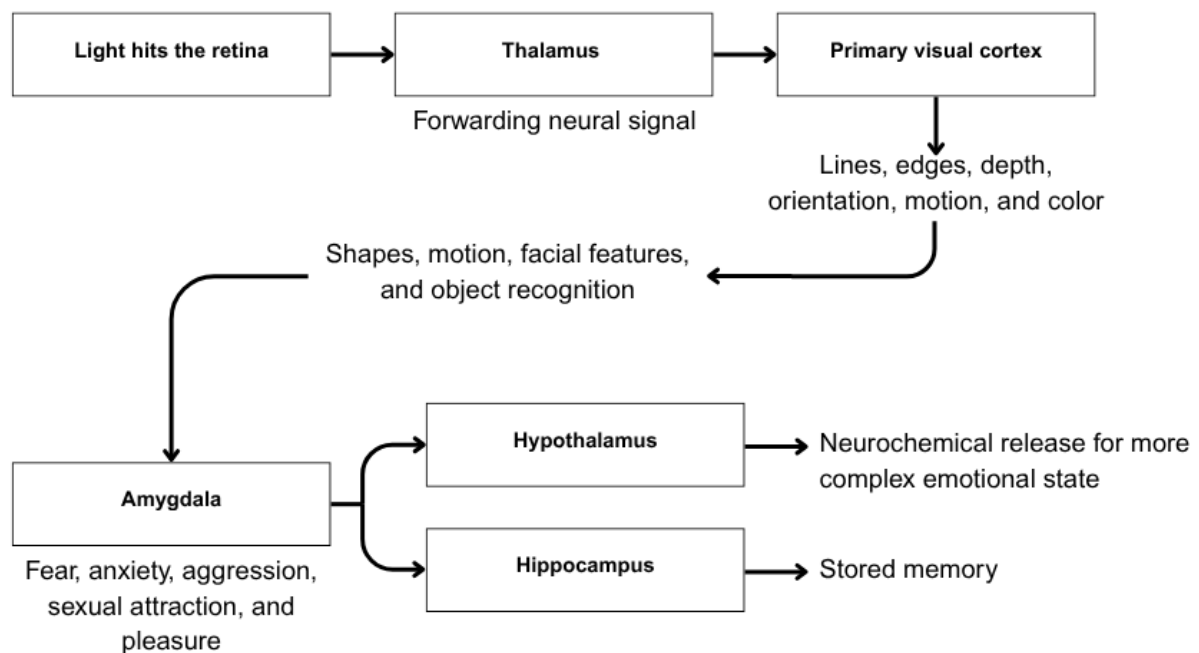
In marketing, imagery is far more than something pleasing to look at. Unlike general visual elements like layout or colour palette, imagery focuses on representations. It is a strategic tool to capturing attention, telling a story, and influencing consumer behaviour. Whether it is a photograph, a symbolic illustration, or an emotionally charged scene, the right image, where each element's position and form are intentionally selected to communicate a message and to elicit specific psychological responses. As Phillips and MacQuarrie (2004) argue, visual rhetorical figures enhance consumer engagement by prompting deeper elaboration and generating pleasure even under incidental exposure, thereby increasing effectiveness. Scott (1994) reinforces this view by emphasizing that advertising images, whether metaphorical or stylistically dramatized, often deliver abstract messages and emotional resonance that literal representations cannot. Visual tropes, such as a lipstick immersed in a glass of soda to signify refreshment, avoid rational scepticism and stimulate intuitive, affective interpretation. These symbolic constructions are not automatically absorbed; rather, they require culturally informed cognitive processing (Scott, 1994). Thus, advertising imagery functions as persuasive symbolic language that is rich, complex, and deeply embedded in cultural codes, making it an indispensable tool in the art of consumer persuasion.

One reason imagery is so powerful is because the human brain is wired to respond to visuals. Humans process images far faster than we process text, often in just 13 milliseconds (Potter *et al.*, 2014). The brain processes images in a series of steps from neural signals that are generated by the eye's photoreceptors, light sensitive cells in the retina (Lee, *et al.*, 2021; Roelfsema, 2023; Science ABC, 2021).

- When light enters the eye, it strikes the retina where it is converted into neural signals.
- These signals are first passed on to the thalamus, which acts as a central hub, forwarding the visual input to the primary cortex.
- The primary visual cortex in the occipital lobe receives the input and processes basic visual features such as lines, edges, depth, orientation, motion, and color, followed by further interpretation of shapes, motion, facial features, and object recognition.

- The refined visual information is then transmitted to the amygdala for emotional processing that enables fast emotional responses, like fear, anxiety, aggression, sexual attraction, and pleasure.
- If the image is emotionally charged, the amygdala signals the hypothalamus to initiate physiological responses, such as changes in heart rate or neurochemicals release for more complex emotional state.
- Simultaneously, the hippocampus works alongside the amygdala to determine whether the visual experience is meaningful enough to be stored as a memory, integrating emotional and contextual information into long-term or short-term memory.

Figure 1 The brain processes images



The brain's fast millisecond-processing of images and the close relation of neural and emotional pathways underscores the strategic importance of imagery in marketing. This highlights the necessity for carefully crafting and selecting effective marketing imageries that can trigger immediate attention, influence decision making, and eliciting emotional engagement, long before conscious processing begins. Part of this is the psychological mechanism of the 'truthiness effect', the phenomenon in which rapid visual associations enhance the perceived credibility of accompanying statements, even when the images provide no factual evidence (Newman *et al.*, 2015). Additionally, according to Paivio's Dual Coding Theory (1991), verbal and visual information are

stored in separate but connected channels, meaning that when both are used together, memory and comprehension improve. In marketing, this means an advertisement with the right image can make a message not just more attractive, but also memorable. It is not merely about what people see, it is about what they preserve to trigger easy recall.

Effective imagery that illustrates a brand's story tends to create stronger emotional engagement, more positive associations, and a greater willingness to pay a premium price, indicating stronger brand attachment. (Lundqvist *et al.*, 2013). People enjoy and are naturally drawn to stories, as they have served as a communication tool passed down through generations for as old as humanity itself. Stories help define who we are, shape our identity, values, sense of belonging, and find meaning in life (Roche and Sadowsky, 2003). When people talk about brands, they often associate brands as symbolic roles, like hero, rebel, or nurturer, revealing deep unconscious archetypal desires that influence emotions and behaviour, often without them realising it. Storytelling allows a person to feel like the protagonist of their own narrative (Woodside, Sood and Miller, 2008). When individuals relate to brand stories, identifying with the characters or situations depicted, the brand may evoke a sense of hope or shared aspirations, positioning itself as a means of achieving personally meaningful goals (Escalas, 2004). However, this emotional connection should not be manipulative or exploit consumers' vulnerabilities and fears that lead to consumer misconceptions, especially in the area of healthcare marketing (Sher, 2011), which follows to a reasonable assumption that when people discover manipulation and hypocrisy, disappointment is likely to occur. Such disappointment can make consumers lose their trust in the brand. In the worst case scenario of healthcare marketing, false hope induced by manipulative imagery may lead to harmful health risks (Sher, 2011). For example, in the promotion of diet pills, idealised visuals may encourage unsafe consumption practices, causing risks to both emotional well-being and physical health. (Danciu, 2014).

#### **4.1. Photography**

Among various types of imagery, like visual graphic or illustrations, the presence of photographic imagery featuring real objects, people, and environments is evidently regarded as one of the most effective and attractive tools in marketing, especially in social media (Li and Xie, 2020). This is because photographic imagery has the capacity

to convey emotional contagion, an automatic empathetic response in which they unconsciously mimic (Baberini *et al.*, 2015). Certain categories of images are more likely to elicit strong emotional responses, particularly positive affective reactions.

#### **4.2. Video**

The accuracy of emotion recognition and the perceived intensity of emotions from exaggerated body movements are even more easily recognised and perceived when presented in motion or video formats rather than in still images (Atkinson *et al.*, 2004). According to GWI's 2025 Social Media Report, video features such as TikTok, Reels, Shorts, and long-form uploads dominate social media. Marketers' focus on creating video content is increasing, as viral videos on social media platforms can achieve broad exposure through user-driven sharing at minimal spend (Tellis *et al.*, 2019). People often seek immediate positive emotions to replace their underlying emotional states. Scrolling through short videos on social media can become an addictive habit because it offers instant gratification and a temporary escape from reality (Zhao and Zhou, 2021). Tellis *et al.* (2019) found that a touch of drama, with a clear plot, relatable characters, and an element of surprise, is a key formula of virality, especially when celebrities, babies, or animals are included. When people feel inspired, warmed, entertained, and excited by a content, they are more likely to share it.

#### **4.3. Imagery that Evokes Emotions**

Imagery, whether in photography or videography, is known to reliably evoke specific emotional responses, particularly those categorised within the International Affective Picture System (IAPS). As demonstrated by Mikels *et al.* (2005), certain IAPS images are consistently associated with single discrete emotions. For example, images depicting laughing monkeys or older women surrounded by birds elicit amusement, while scenes such as a desert landscape or an astronaut in space evoke awe. Similarly, emotionally resonant photographs of a mother with her child or an elderly couple tend to evoke contentment, and action oriented images like skiing or whitewater rafting are linked to excitement. The findings reveal that numerous images within the IAPS can trigger clear emotional reactions, either as distinct emotions or as recognisable blends of emotions (Mikels *et al.*, 2005).

**Human faces and expressions of happiness** — Imagery with facial expressions is generally easy to interpret, even for very young children. In a study involving 22 children of age three, participants were able to quickly recognise emotions conveyed

through photographs (Geangu *et al.*, 2016). This highlights the intuitive nature of visual communication. Imagery containing human faces significantly increase social media engagement, being 38% more likely to receive likes and 32% more likely to receive comments, regardless of age or gender (Bakhshi, Shamma and Gilbert, 2014). Seeing a smile in a photograph can trigger a subconscious emotional resonance, evoking positive feelings (Dimberg, Thunberg and Elmehed, 2000). A picture becomes even more engaging when the portrait features a direct gaze, as emotions such as joy and anger are perceived as more intense and socially engaging because the gaze direction is congruent with the emotional expression (Adams and Kleck, 2005).

**Bodily expressions and gestures** — Beyond facial expressions, body language, such as open arms, slouched shoulders, or a gentle embrace can elicit emotions. Bodily expressions work as nonverbal communication and provide more information than facial expression alone. Because body cues can convey vulnerability, strength, or support, they add depth to the emotional message of an image. Bodily expressions are effective in conveying basic emotions such as anger, fear, happiness, sadness, and disgust, even in the absence of facial cues (Atkinson *et al.*, 2004). Exaggerated body movements significantly improve both emotion recognition accuracy and perceived emotional intensity (Atkinson *et al.*, 2004). Table 3, compiled from studies by Kleinsmith and Bianchi-Berthouze (2013), Witkower and Tracy (2019), Noroozi *et al.*, (2021) further illustrates how specific bodily behaviours are consistently associated with the expression of both positive and negative emotions.

*Table 3 Body expressions with associated positive and negative from studies by Kleinsmith and Bianchi-Berthouze (2013), Witkower and Tracy (2019), Noroozi et al., (2021)*

Emotion Characterised	Body Expressions
<b>Negative</b>	
Fear	<p><b>Posture &amp; Head:</b> Head bent or upright, shoulders forward, trunk collapsed or bowed.</p> <p><b>Arms &amp; Hands:</b> Elbows bent, arms in front, hands near face.</p> <p><b>Movement:</b> Jerky or slow; backward lean or motion.</p> <p><b>Legs &amp; Feet:</b> Knees bent, weight shifts backward.</p> <p><b>Overall:</b> Tense, defensive, and withdrawn posture.</p>
Anger	<p><b>Posture &amp; Head:</b> Head bent forward or down, tense posture.</p> <p><b>Arms &amp; Hands:</b> Clenched fists, arms forward or crossed, hands on hips, pointing or shaking.</p> <p><b>Movement:</b> Fast, jerky, forceful; forward or downward motion; stomping.</p>

	<b>Legs &amp; Feet:</b> Strong footing, sometimes stepping back.
Frustrated & despair	<b>Posture &amp; Head:</b> Shoulders forward or tensed, head lowered or slumped. <b>Arms &amp; Hands:</b> Arms raised, dropped, or hanging; limited or tense movement. <b>Movement:</b> Slow, heavy, or abrupt; collapsed or withdrawn posture.
Anxious	<b>Posture &amp; Head:</b> Slightly tense, inward or guarded posture. <b>Arms &amp; Hands:</b> Somewhat expanded but restrained <b>Movement:</b> Slow, low-energy, cautious.
Sadness	<b>Posture &amp; Head:</b> Head down or in hands, slumped or shrunk posture. <b>Arms &amp; Hands:</b> Hands closed, lowered, or self-touching; arms may wrap around body. <b>Movement:</b> Slow, minimal, withdrawn.
<b>Positive</b>	
Joy and Happiness	<b>Posture &amp; Head:</b> Head tilted up, open chest, upright posture. <b>Eyes &amp; Face:</b> Relaxed gaze, looking around. <b>Arms &amp; Hands:</b> Arms raised or open, expressive hands. <b>Movement:</b> Fast, energetic, expansive gestures. <b>Legs &amp; Feet:</b> Legs open or stretched, feet directed outward.
Pride & Triumphant	<b>Posture &amp; Head:</b> Head tilted back, erect posture, chest expanded. <b>Arms &amp; Hands:</b> Arms raised, outstretched, or on hips. <b>Movement:</b> Controlled, high-energy, deliberate. <b>Legs &amp; Feet:</b> Stable, grounded stance. <b>Eyes &amp; Face:</b> Head held high, confident gaze.
Surprise	<b>Posture &amp; Head:</b> Head tilts or moves backward, slight body twist. <b>Arms &amp; Hands:</b> Hands quickly move to face or head; arms may raise. <b>Movement:</b> Sudden, fast, reflexive; body shifts or steps back. <b>Legs &amp; Feet:</b> Straight legs; backward step or shift. <b>Eyes &amp; Face:</b> Eyes wide, mouth often touched or covered.
Valence	Arms extended upward, body open, greater distance between feet (3D space).
Warmth	Rounded arm and body shapes, gentle, flowing, and static movements.
Sympathy	Open arms, upright posture, relaxed muscles, slow and gentle forward movement.
Serene & Content	Expanded posture, low energy, smooth but precise head movements.

**Babies** — Imagery of infants tend to elicit emotional effect on people, often sparking instant empathy and nurturing instincts. Research shows that people who are more in tune with their own emotions are more effected by emotional stimuli like an image with

baby schema features (Lehmann, Huis in't Veld and Vingerhoets, 2013). 'Kindchenschema' or baby schema effect (BSE), first described by Konrad Lorenz (1943), refers to a set of specific infant traits, such as large, round eyes, a high forehead, soft cheeks, and a small nose and mouth, that naturally trigger positive feelings in others. These features are widely perceived as cute and tend to trigger caretaking behaviours in adults, even when there's no biological relationship to the infant (Glocker *et al.*, 2009). In fact, infants who strongly exhibit baby schema traits are often judged to be not only more adorable but also healthier, more likeable, and more competent than less cute babies (Maier *et al.*, 1984). Interestingly, this response is not limited to baby humans faces. Baby animals that share these facial characteristics can evoke similar emotional reactions (Lehmann, Huis in't Veld and Vingerhoets, 2013). Even robots with rounded faces, big eyes, and small features often viewed as more trustworthy and friendly, making them more effective in human interactions (Chen and Jia, 2023). Moreover, women in particular seem especially sensitive to baby schema traits, both in babies and in animals, highlighting how deeply rooted and widespread this psychological response is (Lehmann, Huis in't Veld and Vingerhoets, 2013). Altogether, the baby schema effect plays a major role in shaping how we emotionally engage with others, whether human, animal, or even machine.

**Nature and animals** — Nature scenes, such as forests, oceans, mountains, and animals, are often associated with feelings of calmness, peace, freedom, and psychological well-being. Exposure to such imagery has been shown to significantly reduce physiological stress indicators, including skin conductance, muscle tension, and heart rate, while also promoting more positively-toned emotional states and enhancing subjective well-being (Ulrich *et al.*, 1991). The use of natural images in advertising has been found to evoke pleasant emotions, similar to the emotional uplift people experience when immersed in nature, which then transfer to the associated brand (Hartmann and Apaolaza-Ibáñez, 2009). This beneficial impact on health and emotional states can be attributed to the concept of biophilia, introduced by Edward O. Wilson in 1984, which posits that humans have an innate affinity for nature and living organisms, a natural "love for life" (Zhong, Schröder and Bekkering, 2022). Furthermore, incorporating natural environments as the backdrop for social experiences has been shown to enhance the emotional quality of these moments and contribute to greater life satisfaction (Chang *et al.*, 2020). Therefore, integrating natural

elements into imagery can positively influence both psychological well-being and brand perception (Grinde and Patil, 2009).

Biophilia extends beyond natural scenery to include animals, which are also parts of nature and capable of eliciting similar emotional responses (Keller and Gierl, 2020). Anthropomorphism or animal portraiture presents animals in a manner that closely resembles human characteristics, often featuring close-up images that highlight facial expressions, gaze, and posture. This representational approach makes a sense of relational familiarity. This connection can evoke a greater empathy and enhancing emotional engagement (Whitley, Kalof and Flach, 2020). In marketing contexts, the use of animal characters, particularly pets, has been shown to generate more favorable brand attitudes, enhance entertainment value, and increase perceived message credibility (Keller and Gierl, 2020).

**Symbolic and inspiration** — According to Maslow's Hierarchy of Needs in 1943, individuals are motivated to fulfil lower-level needs before seeking higher level growth (McLeod, 2007). Emotional responses to imagery can become more hypnotic and emotionally shifting when the imagery taps into the viewer's current unmet needs (Arntz, 2012). Symbolic and inspirational imagery can evoke emotional responses by validating the viewer's aspirations and self-definitional goals (Wicklund and Gollwitzer, 1981). These responses may include hope, motivation, and a strengthened sense of ideal self. For example, an imagery of a woman reaching the summit of a mountain as a metaphor for overcoming hardship and symbolising strength, achievement, and resilience to affirm an identity of inner power, foster self-esteem, and the belief that triumph is possible. Another example, the brand Nike's cinematic campaigns often show underdog athletes overcoming adversity, invoking inspiration and motivation. According to Thrash and Elliot (2003), inspiration is a key psychological construct that influences self-determination in goal pursuit, creativity, and overall well-being.

**Slice of life and nostalgia** — Slice of life imagery, that represents everyday social moments and personal relationships with friends or romantic partners, such as a couple walking hand-in-hand, a group of friends enjoying a game night or picnic, a pair taking selfies or documenting their travel together, can evoke pleasant emotions. Notably, interactions in slice of life imagery that centre around familiar and emotionally meaningful themes, such as friendship, dating, and leisure, are rated more satisfying (Zagacki, Edwards and Honeycutt, 1992). Such imagery of everyday scene can also

trigger a nostalgic response that promotes recognition, emotional warmth, and social connectedness (Mendelson, 2004). Routledge et al. (2011) explore that nostalgia helps individuals maintain or restore a sense meaning of life. Within the framework of multisensory communication, the nostalgic effect of imagery can be significantly heightened when paired with music. It becomes valuable when people face existential threats or suffer from low meaning, as nostalgic reflections can boost vitality, emotional well-being, and suggesting overall psychological resilience. Evoking nostalgia through slice of life imagery can foster trust and empathy, making communication more human and emotionally engaging.

#### **4.4. Key Considerations in Imagery Elements**

Aesthetics are inseparable from imagery, as they contribute in shaping emotional perception. Our experience of beauty is often rooted in the emotions triggered by what we see (Joshi *et al.*, 2011). Such color, tone, and shape, are the basic visual elements in creating aesthetic appeal and are strongly associated with emotional responses. These elements should be considered when developing visual content for brand campaigns and social media activations.

While colors psychologically influence emotions, their perceptions vary across cultures (Yu, Xie and Wen, 2020). With marketing now heavily driven by user generated content (UGC) on social media, the digital transformation sparked by the rise of the internet has reshaped traditional marketing through a surge in online media platforms (Yu, Xie and Wen, 2020). Nevertheless, images with greater colour variation and vibrancy tend to enhance the impressions and online click-rates, as well as to be positively received and shared (Li and Xie, 2020; Yu, Xie and Wen, 2020). To assess the visual appeal of such content, Yao *et al.* (2012) introduced a colour triplet analysis algorithm that identifies aesthetically pleasing three-color combinations based on patterns found in highly rated photographs. Triplets, such as dominant + secondary + accent, offer a practical balance to catch attention but remain simple enough for the brain to process, making them ideal for emotionally resonant imagery in social media campaigns. In addition, specific colour combinations with bright and high-key tones imagery might evoke positive emotions, and oppositely low-key tones imagery might convey seriousness to negative emotions.

Three specific visual features: roundness, angularity, and complexity (or simplicity), combined with colour can predict whether an image evokes positive or negative

emotions, almost as accurately as a much larger and more complex set of 200 visual features, including texture, composition, facial, and shape features (Lu et al., 2017). Wang et al. (2023), found the constancy of visual features of roundness and angularity can influence emotional responses. They highlight that round and simple shapes, commonly seen in smiling faces or like a photograph of a coffee mug from top angle, are generally associated with positive emotions, evoke warmth and positivity. Angular and complex shapes, often found in expression of anger, tend to evoke negative feelings, indicate threats. The simplicity of an image is preferable, as it has the strongest correlation with valence and is more often associated with positive emotional responses than complex ones (Lu et al., 2017). Lu et al.'s (2017) exploration of roundness, angularity, and simplicity in images is not only psychologically meaningful but also computationally useful for retrieval systems, enabling them to rank online search results based on emotional features, such as simplicity or roundness, aligned with users' emotional preferences.

Imagery acts as the initial point of contact between an advertisement and its audience, particularly in the fast-paced digital environment where attention spans are limited where viewers make split-seconds judgements. For this reason, professionally produced imagery, whether in photography or videography, plays a vital role in various online and offline channels (Ajiva, Abhulimen and Abhulimen, 2024). High-quality and aesthetically consistent images not only capture attention but also enhance the perceived credibility and appeal of the advertisement (Ajiva, Abhulimen and Abhulimen, 2024). Research finds that high-quality imagery significantly increases click-through rates and improve the engagement (Li and Xie, 2020), as users are more likely to engage with ads that appear relevant, polished, and emotionally resonant with their needs or aspirations. Ajiva, Abhulimen and Abhulimen (2024) highlight that professional imagery helps brands articulate their message and value beyond aesthetics, in a clear way and relevant with audience. In doing so, they not only attract attention but also foster trust and recognition, while improving click-through rates and UGC sharing.

## **5. Method**

Qualitative research aims to develop a deeper understanding of how individuals experience, interpret, and respond to the world around them, including meanings they give to their actions, thoughts, and interactions (Moser and Korstjens, 2017). This study

adopts a qualitative research design to explore how healthcare marketing, particularly through music and imagery, can be more effectively aligned with the emotional and psychological needs expressed in online cancer communities. Given the complexity and nuance of emotional expression among cancer patients, survivors, and caregivers (hereafter referred to as the PSC group), a qualitative approach allows for in-depth interpretation of recurring patterns, concerns, and lived experiences to identify emerging themes related to the needs of the method. This method is especially appropriate for research that engages with subjective meaning not easily captured through quantitative measures. Cleland (2017) emphasizes, qualitative inquiry is particularly valuable for addressing “how” and “why” questions related to emotional engagement, trust, and personal meaning. In this context, the study not only aims to identify recurring emotional themes but also to interpret the underlying needs and values that shape how individuals respond to healthcare messaging. By focusing lived experience over numerical analysis, this approach enables a more nuanced understanding of what resonates and what does not, in emotionally sensitive settings such as healthcare.

Rather than applying a pre-established emotional categories, this study follows an inductive thematic analysis approach as outlined by Braun and Clarke (2006), which allows patterns and meanings to emerge from the data without being constrained by a pre-existing coding framework, with the goal of capturing authentic expressions of needs, frustrations, hopes, and coping mechanisms. Thematic analysis is a flexible yet thorough method for identifying, analysing, and interpreting patterns of meaning within textual data. This approach aligns with the study’s aim of uncovering how music and imagery in healthcare marketing intersect with the emotional and psychological needs of cancer community members. While frameworks such as Wilcox’s Feelings Wheel (1982) or Plutchik Wheel of Emotion (2001) were considered, they risk reducing complex emotional states to fixed categories. Instead, Maslow’s Hierarchy of Needs (McLeod, 2007) is used cautiously as an interpretive lens during the later stages of analysis, offering a broader view of emotional motivations without relying on top-down emotional categories that may not reflect real experiences. By prioritizing context, meaning, and interpretation, this methodology is well-suited to examine how healthcare marketing can communicate with greater empathy and relevance. It enables the development of insights grounded in real experiences, developing more responsive and emotionally attuned messaging strategies.

To capture these insights authentically, the study draws upon naturally occurring data, specifically publicly accessible threads and comments from forums and social media where patients, survivors, and caregivers engage in candid, peer-to-peer dialogue. These platforms offer an unfiltered window into PSC groups' lived experiences, often revealing vulnerabilities, emotional turning points, and unmet needs that might be unnoticed in more structured settings such as researcher-directed interviews or survey.

This study takes a non-interventionist and observational approach. No prompts, questions, or structured interviews were introduced. Instead, the approach engages with the data as it existed in its organic, public form, preserving the integrity of the original voices. This design is particularly well-suited for exploring sensitive topics such as cancer, where direct questioning might risk distorting emotional truths or reinforcing narratives like "staying positive".

Analysing unfiltered peer-to-peer interaction offers unique insight into psychosocial dynamics of cancer communities. The communities often serve as emotionally safe spaces where individuals reveal feelings that might not surface in clinical or formal settings. Such authenticity is critical for healthcare marketers to craft messages that are not only effective but genuinely empathetic. By grounding the research in naturally expressed needs and concerns, this design supports the development of emotionally resonant and ethically attuned marketing strategies.

### **5.1. Online Cancer Community**

The choice to focus on cancer communities is both strategic and theoretically grounded. Cancer is a condition associated with significant physical consequences and affects someone's entire life narrative, emotions, and identity, with the possibility of social disruption. It disrupts not just the body but the narrative of the self (Frank, 1998), making it one of the most discussed and emotionally expressive diseases in online forums. Cancer-related platforms often include stories that involve diagnosis, respond, hope in remission, grief in recurrence, and transformations in identity, reflecting complex layers of emotional insights and psychological meaning.

Compared to more manageable chronic illnesses, cancer is uniquely situated as a site of meaning-making. It acts as an uninvited catalyst for reassessing values, relationships, priorities, and self-worth. These emotional and cognitive processes are precisely the aspects that healthcare marketing often seeks to tap into, particularly in

campaigns aimed at building trust, fostering emotional engagement, and enhancing brand loyalty (Kotler, Shalowitz and Stevens, 2008). By studying cancer discussions, this research captures emotional intensities and turning points that are relevant for understanding how patients form emotional connections with healthcare messages through music and imagery.

Furthermore, cancer affects a large and diverse population across gender, age, and cultural background, making findings from such communities more transferable to general healthcare contexts than would be the case with rarer or more niche diseases. The similar emotional responses observed across cancer experiences, ranging from fear to empowerment (Yi and Syrjala, 2017; Wells et al., 2022), suggest that the emotional and mental experiences seen in cancer care are likely to be similar for people dealing with other chronic diseases (Institute of Medicine, 2008; Katon, 2003).

This study consists of three distinct roles with interrelated perspectives within cancer communities: patients, survivors, and caregivers. Each group provides emotional insights across different phases of the illness journey, thereby enriching the analytical scope and practical applicability of the research.

Patients contribute first-hand, often on-going expressions of coping, fear, uncertainty, and autonomy. They articulate immediate emotional and informational needs and are highly sensitive to how healthcare messages are framed.

Survivors often reflect narrative about resilience, meaning identity reconstruction, and emotional growth. Their experience helps uncover how communication strategies can foster long-term trust and loyalty beyond the treatment phase.

Caregivers, while often overlooked, provide crucial insight into secondary emotional work, decision-making on behalf of others, and the stress of supportive roles. They are key stakeholders in healthcare decisions and often mediate the patient's engagement with brands, platforms, and services (Berry and Bendapudi, 2007; Fox and Rainie, 2002).

Collectively, the PSC group allows this study to explore both individual and relational emotional dynamics. In line with relational marketing principles, healthcare communication is not only directed at patients as consumers but also those involved in care and decision making (Berry and Bendapudi, 2007). Thus, marketing strategies

based on PSC group insights are more likely to resonate across the healthcare experience ecosystem.

The peer-to-peer nature of emotional storytelling online, even among strangers, is one of the reasons for selecting online platforms. Unlike interviews or surveys, peer narratives are co-constructed, evolving through interaction, validation, and mutual encouragement. This dynamic reveals how emotional needs are expressed, negotiated, and reframed in community settings. For example, expressions of fear may be met with empathy, advice, or even humour, creating emotional routes that help us understand how healthcare communication works, particularly when discourse emerges around music or imagery in healthcare marketing. Understanding how real people communicate their health journeys with peers provides guidance for crafting messages that feel human rather than transactional. Moreover, the community-generated environment of online platforms aligns with participatory health communication models, which emphasize autonomy, dialogue, and patient voice (Ong *et al.*, 1995). For healthcare brands and institutions aiming to build emotional connections and long-term trust, this method offers more ethical and effective approaches than traditional fear-based or cure-focused marketing.

## **5.2. Data Collection**

The increasing frequency of online health communities has transformed the way individuals seek information, express emotions, and connect with others experiencing similar conditions. These platforms provide fertile ground for qualitative research, especially in healthcare communication, because they enable access to naturally occurring, emotionally nuanced data. Online platform users proactively share personal narratives, which are less likely to be shaped by social desirability bias or the presence of a researcher, as might occur in interviews, focus groups, or survey (Fox and Rainie, 2002; Bender, Jimenez-Marroquin and Jadad, 2011).

Online communities are particularly valuable in cancer-related study due to the emotionally charged experience and impact of the illness. Unlike other chronic diseases, cancer evokes intense discussions around mortality, identity, and transformation. These discussions often unfold over extended timelines, allowing for observation of dynamic changes in emotional needs throughout different illness phases. As such, online platforms serve not only as information hubs but also as emotional ecosystems where patients, survivors, and caregivers find validation,

support, and meaning. The data generated in these communities is unstructured yet expressive, making it ideal for inductive, thematic analysis (Braun and Clarke, 2006).

Moreover, online platforms align closely with modern healthcare marketing, which is increasingly digital-first (Neuhauser and Kreps, 2010). By analysing naturally occurring conversations within online cancer communities, this study accesses insights that can directly inform the development of empathetic and emotionally aware healthcare marketing activities, like campaigns or brand development.

To explore how music and imagery in healthcare marketing can be better aligned with the emotional and psychological needs of individuals affected by cancer, this study draws upon publicly available data from a variety of online cancer communities. These platforms were selected for their accessibility, emotional richness, and spontaneous peer-to-peer interactions, which provide lived experiences and unfiltered emotional expression. A thorough online search was conducted to identify relevant sources, beginning with seventeen communities and support groups. Eight were excluded for reasons including low user engagement, limited emotional discussion, restricted access, or an overly clinical focus. Ultimately, nine online communities were selected for inclusion based on their active participation, depth of emotional narratives, and alignment with the study's aim to understand psychosocial and emotional needs.

The final set of communities reflects a diversity perspective, encompassing general cancer support forums, condition-specific platforms (e.g., breast, bowel, prostate cancer), and demographics such as adults, adolescents, and young adults, while excluding children for several reasons. First, ethical considerations around consent and privacy are especially stringent when it comes to minors. Second, children's participation in online forums are extremely limited, and their healthcare-related communication is often mediated or entirely managed by adults, typically parents or caregivers, who speak on their behalf. The selected communities include: Macmillan Cancer Support ([www.macmillan.org.uk](http://www.macmillan.org.uk)), Breast Cancer Now ([www.breastcancernow.org](http://www.breastcancernow.org)), Cancer Council Online Community ([www.cancer.org.au](http://www.cancer.org.au)), Prostate Cancer UK ([www.prostatecanceruk.org](http://www.prostatecanceruk.org)), Bowel Cancer UK ([www.bowelcanceruk.org.uk](http://www.bowelcanceruk.org.uk)), Memorial Sloan Kettering Cancer Center ([www.mskcc.org](http://www.mskcc.org)), City of Hope ([www.cityofhope.org](http://www.cityofhope.org)), Youth Cancer Survivors ([www.beatcancer.eu](http://www.beatcancer.eu)), and the Colorectal Cancer Alliance ([www.colorectalcancer.org](http://www.colorectalcancer.org)). These forums offer frequent discussions where patients, survivors, and caregivers

share personal reflections, emotional struggles, and coping strategies, making them particularly valuable for examining how emotional themes can inform empathetic healthcare marketing.

In addition to formal discussion channels, this study includes publicly accessible content from TikTok, specifically in the comment sections and contents under hashtags such as #cancer, #krebs, #cancerfighter, #cancerawareness, #cancersurvivor, and #cancersucks. TikTok offers emotionally expressive user reactions, particularly in the comment sections. Insights were further gathered from Reddit, a social media platform and online discussion forum with a wide range of topics. Individual communities within Reddit focus on a specific topic or interest. Users usually go by pseudonyms (usernames), which encourages more open and honest discussions, especially in support groups or sensitive topics. These platforms help capture experiences not always present in structured support forums, especially among younger users. The inclusions of hashtag searches on TikTok and specific Reddit communities (Subreddits such as r/cancer, r/breastcancer, r/cancer, r/cancer-fear, r/cancer-lonely, r/cancer-anxiety, r/cancer-mental), was guided by snowball sampling and was informed by prior research. Through snowball sampling approach, initial communities and content led to the identification of additional platforms and threads that reflect the emotional needs and lived experiences of the PSC group. Prior research by Yi and Syrjala (2017) identified recurring emotional themes such as isolation, abandonment, fear of recurrence, and existential anxiety, while Wells et al. (2022) highlighted ongoing depression, body image concerns, shifting family roles, and loneliness.

The participant voices represented in the data include a range of perspectives: cancer patients currently undergoing treatment, survivors reflecting on their journey, and caregivers (including family members and close friends) who share their emotional challenges and support strategies. This heterogeneous mix enriches the dataset with varied emotional tones, from vulnerability and fear to resilience and empowerment. This diversity provides a broader range of emotional expressions, allowing for a more complex identification of recurring needs and patterns within the PSC group during thematic analysis.

Almost all of the data consists of English-language content, one post is in Indonesian language. In total, the dataset comprises 159 text entries, collected from post captions, comment sections, and discussion threads across the selected platforms, as listed in

[Appendix 1](#). These texts were collected through purposive sampling, selected based on their relevance to emotional needs, communication preferences, or responses to cancer-related messages involving music, imagery, or general media representation. Threads that explicitly referenced emotional experiences, psychological struggles, visual materials, music, imagery, or general media representation were included in the analysis. The data was collected over a four-month period between March and June 2025, ensuring an up-to-date modern perspective while allowing for thematic saturation.

The decision to use naturally occurring online discourse is grounded in both methodological and ethical reasoning. These platforms allow for observational, non-interventionist access to candid emotional narratives, which might remain suppressed in more structured settings such as interviews or surveys. Moreover, as Cleland (2017) and Moser and Korstjens (2017) highlight, qualitative studies benefit from data embedded in natural social contexts, where people express themselves without researcher influence.

In sum, this sampling strategy enables rich, contextual exploration of emotional communication across different user groups, providing a solid foundation for identifying recurring needs and emotional cues relevant to empathetic healthcare marketing.

### **5.3. Ethical Considerations**

Ethical considerations were carefully maintained. As the data was collected from publicly available threads in online cancer communities, informed consent was not required. Only threads from publicly accessible forums and platforms were included. Publicly available means access to the data is visible to public without registration, or subscription, or participation in monitored chatroom (Eysenbach and Till, 2001; European Commission, 2021). No attempts were made to interact with users, extract private content, or identify individual identities. Although this study does not involve direct interaction with PSC group, it adheres to ethical research standards appropriate for qualitative, observational work with publicly accessible online data. In accordance with the AOIR Ethics Guideline (Markham and Buchanan, 2012), contextual integrity and perceived privacy were respected, and steps were taken to minimise harm to individuals and communities involved. All data were anonymised, and any potentially identifying information was removed to protect participant privacy. Direct quotes in this paper have been paraphrased from the original text, which is stored in the [Appendix 1](#).

#### **5.4. Guiding Framework Considerations**

Music and imagery both have the power to evoke emotions. Underlying emotional needs are also evident among members of cancer communities, and these desires need to be fulfilled. This suggests that specific types of music and imagery, tailored to relevant topics, can be used to enhance engagement. Hence, to effectively capture the complexity of emotional expression within PSC group, this study adopts Maslow's original five-tier Hierarchy of Needs (1943, as cited in McLeod, 2007) as a guiding framework for thematic coding. This model helps shape our understanding of human needs and desires as motivations that drive how people make life decisions. It also provides marketers with a useful perspective on their target audiences, helping them identify which needs are most motivating and enabling more effective and empathetic communication.

Maslow's model was selected because of its capacity to reflect emotion as a function of unmet or fulfilled needs, rather than a rigid emotional tag. For example, a user sharing a post about fear or recurrence may not simply be expressing 'fear', but may be articulating a deeper need for safety, reassurance, or control. Similarly, a comment reflecting anger may point toward unmet needs for esteem, validation, respect from others, and recognition. While expressions of longing or sadness may reveal a need for love from family and friends, belonging, or a sense of connection. These moments often reflect a desire to reclaim normalcy or emotional closeness. This influence can be embedded in the music and imagery used within various media channels to increase persuasive power, subtly appealing to deeper, often unarticulated needs that make people pay attention, trust the message, or even act on it.

Rather than categorizing emotions into fixed affective labels, Maslow's model allows for flexible interpretation grounded in human needs, including physiological needs, safety and security, love and belonging, self-esteem, self-actualisation, which aligns more closely with the lived realities shared by patients, survivors, and caregivers (PSC group). This needs-based structure provides an interpretive lens that does not merely label emotional states but instead contextualises them within broader psychosocial challenges and aspirations voiced in their narratives.

Marketers can strategically draw upon different levels of Maslow's Hierarchy of Needs to craft compelling brand messages. While the strongest and most universal drivers of human motivation often stem from the three foundational levels of the hierarchy, these

needs do not work like a strict ladder. Instead, they can complement one another and serve as a brand distinction when thoughtfully integrated into marketing strategies as an emotional trigger through storytelling in music and imagery.

Alternative emotional classification models were explored but found to be less suitable for this study. Wilcox's Feeling Wheel (1982; Appendix Figure 5), while offering a broad spectrum of emotions arranged by intensity, was also found to present several limitations in this context. While its extensive range may be theoretically useful, it can complicate emotional classification in practice, making it harder to define the underlying needs. The broad spectrum increases the risk of inconsistent or subjective interpretations, which may reduce the accuracy and reliability of thematic analysis. Additionally, its application risks appearing overly prescriptive or optimistic, especially in communities where users explicitly push back against toxic positivity. Two individuals shared their experiences:

*"[...] One thing that really frustrates me is when people from the outside keep telling me to stay positive. Honestly, I don't need that. It feels like they're trying to control how I should feel. I know how to cope with this in my own way, and being pushed to be positive just makes me feel like I have to hide my real emotions. [...]"*

*"I really dislike it when people tell me to stay positive 😊 I believe it's perfectly okay to have bad days and let myself feel down from time to time 🙄"*

Such expressions underscore the need to acknowledge negative emotions as valid, rather than reframing them into simplified emotional categories.

Similarly, Plutchik's Wheel of Emotions (2001; Appendix Figure 6), though widely used in psychological studies, tends to compress emotional complexity into a limited set of basic, biologically-rooted emotions arranged in binary oppositions, such as joy vs. sadness, fear vs. anger). Many threads and comments contained overlapping affective tones, such as bittersweet hope, cautious optimism, or proud vulnerability. These hybrid states are not easily mapped onto Plutchik's discrete oppositional pairs when attempting to define the PSC group's implicit and explicit needs.

Furthermore, rigid classifications of emotion risk neglecting underlying needs or values that drive emotional expression. A purely categorical approach might tag a post as 'sad' or 'angry' without recognising its deeper thematic link to fear of abandonment, loss of autonomy, or desire for normalcy. In contrast, a needs-based framework encourages

the researcher to ask why certain emotions arise and how to connect those emotions to actionable insights that inform empathetic, need-driven communication strategies. This approach also allows the thematic analysis to remain sensitive to the emotional ambiguity and non-linear progression common in qualitative research design (Cleland, 2017), particularly in cancer narratives, where moments of hope may coexist with grief, and support may be found amid anger. Eventually, this approach supports the ultimate goal of this research: to guide healthcare marketing strategies that are empathetic rather than tone-deaf, emotionally resonant, and responsive to identified needs.

## **6. Data Analysis Process**

This chapter outlines the analytical process through which raw qualitative data was systematically transformed into meaningful themes. Drawing from publicly available discussions within online cancer communities, the aim was to uncover emotional patterns and underlying needs expressed by PSC group in relation to healthcare communication, particularly in response to music and imagery in healthcare marketing contexts.

Given the subjective and interpretive nature of the research, a qualitative approach was essential for capturing the complexity and nuance embedded in personal narratives. Thematic analysis, as described by Braun and Clarke (2006), was chosen for its flexibility and its capacity to uncover both explicit content and latent meaning across the dataset. This method allowed for a structured yet adaptive examination of emotional expressions within the PSC groups' threads, ensuring that patterns could emerge organically.

This required to read through all the collected data several times to become familiar with it and to note early ideas. Then, meaningful segments of text were systematically coded, capturing both explicit content and underlying meanings. These codes were then grouped together to find patterns or shared meanings, which became the starting point for possible themes. The themes were reviewed and refined in relation to the entire dataset to ensure they accurately represent PSC group's experiences. After that, each theme was given a name and a clear explanation. Throughout the process, the central research question guided the analysis, ensuring that theme development remained relevant and focused. Once the final themes were clearly defined and

named, they were illustrated with compelling quotes and integrated into the narrative of the findings.

### **6.1. Know and Understand the Data**

The first phase in the analysis began with getting thoroughly familiar with the data. This stage involved going over them multiple times, rather than merely reading the data, in order to begin identifying meaningful patterns, emotional tones, and recurring ideas. This is applied to the full dataset, which consisted of publicly available comments and threads collected from online cancer communities, primarily on Reddit and the communities' social media, like Facebook. The first reading provided a general sense of the content and emotional tone. Later, readings focus on detail and interpretation, helping to start noticing emerging patterns, keywords, and hidden emotion phrases. Informal notes were taken to capture early analytical thoughts that guide the development of codes, trying to understand what people say and how they were saying it. Several different needs might be identified from simply one text from one participant. for example, while reviewing the following post:

*"I'm really scared about the meds, chemo and if it'll work... I hope I can deal with it. Thank you, guys."*

Besides explicit expression of fear related to treatment, it also included hope and gratitude. It is noteworthy that emotions such as fear and hope can co-exist, reflecting emotional complexity.

This phase also involves reading the data with curiosity, rather than simply summarising content. Drawing from Braun and Clarke's (2006) suggestion that familiarisation should be an active process, attention was focused on the context in which emotions were expressed to the threads that were written during diagnosis, post-treatment, or recurrence, and whether they reflected personal struggles or support from others. This helped to identify possible interpretive pathways, such as the role of uncertainty, the importance of social connection, or shifts in tone over time.

Additionally, certain repetitive motifs began to surface even in these early stages. For example, feelings of being 'forgotten' and descriptions of bodily changes. Established emotion classification models like Plutchik's Emotion Wheel or Wilcox's Feeling Wheel were considered to guide the analysis. These models offered useful insights into emotional range and intensity. However, these frameworks did not fully capture the

layered, desire-driven nature of the captured expressions. Many comments reflected not only isolated feelings, but deeper needs for safety, connection, reassurance, or meaning. Consequently, Maslow’s Hierarchy of Needs is identified as a more suitable structure for interpreting the emerging emotional patterns.

In sum, the familiarisation phase requires active, deliberate attention to what PSC group says, how they say it, and why certain words or themes might recur. This provides a crucial interpretive lens through which the rest of the thematic analysis was developed.

## 6.2. Coding

A data-driven and manual coding approach was applied. All comments were read carefully and line by line, with descriptive notes and color-coded highlights used to mark emotionally meaningful content. Coding was conducted manually using Excel spreadsheet, which allowed for transparency, visual organisation, and greater control over the evolving organisation process.

Table 4 shows how the initial codes were developed directly from the raw data, focusing on semantic cues and emotional expressions. Additionally, some comments reflecting reactions to music and imagery were also collected, which often intensified emotional responses.

*Table 4 Example of initial codes processed from publicly accessible threads and comments from forums and social media where patients, survivors, and caregivers engage in candid, peer-to-peer dialogue.*

<b>Comment Snippet</b>	<b>Initial Code</b>
<b>"I'm feeling afraid, but being here with my four kids and my husband feels like a true miracle. I just hope I can be as strong as you are 🧑🏻❤️."</b>	Scared but grateful for family support.
<b>"I'm exhausted and overwhelmed by constant fear. I feel completely alone and cut off from others. I avoid opening up to family and friends because I'm afraid of adding to their worries."</b>	Emotional exhaustion, persistent fear, loneliness, isolation, fear of burdening others.
<b>"I've talked to many women who've shared feeling self-conscious about their bodies after going through breast cancer. Feeling confident in your body is such a personal</b>	Body image concerns, post-cancer self-consciousness, vulnerability in appearance, personal struggle with confidence and self-esteem.

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**experience—especially when it comes to wearing something like a swimsuit."**

**"I'm currently in remission... and even though the experience was traumatic, it brought unexpected positives into my life. It reshaped my path in meaningful, mostly positive ways. Thank you for sharing this—sometimes it feels like we're only allowed to talk about the pain and sadness, but there's more to the story. ❤️💕"**

Remission, transformation through illness, positive life changes, emotional growth, gratitude for shared experience, challenging negative expression norms, validation of positive narratives.

**"I have family and friends who've gone through breast cancer, and it's heartbreaking to watch them face something so difficult. This commercial tries to come across as sweet and touching, especially with the use of 'Landslide' song, but then, like always, it shifts to listing the usual scary side effects. It just doesn't sit right with me."**

Empathy and connection, emotional sensitivity, emotional safety and trust, anxiety about medical side effects, distress triggered by media, highlighting the emotional effect of music.

Alongside broader thematic codes, specific keywords were also extracted, emotionally resonant words or phrases that reflected recurring emotional tones or subtle shifts in self-perception. These keywords, though more granular, were seen to offer rich insight into the emotional landscape and may be used to inform emotionally effective messaging in healthcare marketing. These were identified by locating vivid, emotionally charged language or unique turns of phrase directly from the data, integrating a step by Naeem et al.'s (2023) thematic analysis, specifically, the selection of keywords through recurring language patterns and vivid expressions that emerge from PSC group' own words. For example:

*"You came for my life and tried to break me—but I've already defeated you once, and I'll do it again if I must. Cancer, you may be strong, but I'm stronger. I'm not just a fighter—I'm a winner. And this fight? I'm here to win it."* → keywords: fighter, winner, and strong.

Interesting keywords found across multiple threads included terms and phrases that, while sometimes subtle or infrequent, stood out as emotionally meaningful and often disrupted the dominant narratives of despair:

*awesome; battle; being there* (mentioned 3 times); *be all ears* (mentioned 3 times); *beautiful; amazing; one day at a time / day by day* (mentioned 4 times), *be brave / don't be scared* (mentioned 2 times), *duck / bunnies / cute animals; fighter, winner / won the fight* (mentioned 2 times); *strong* (mentioned 2 times); *practice confidence; storm; monster; struggles; trust, and weird advice humour* (mentioned 4 times).

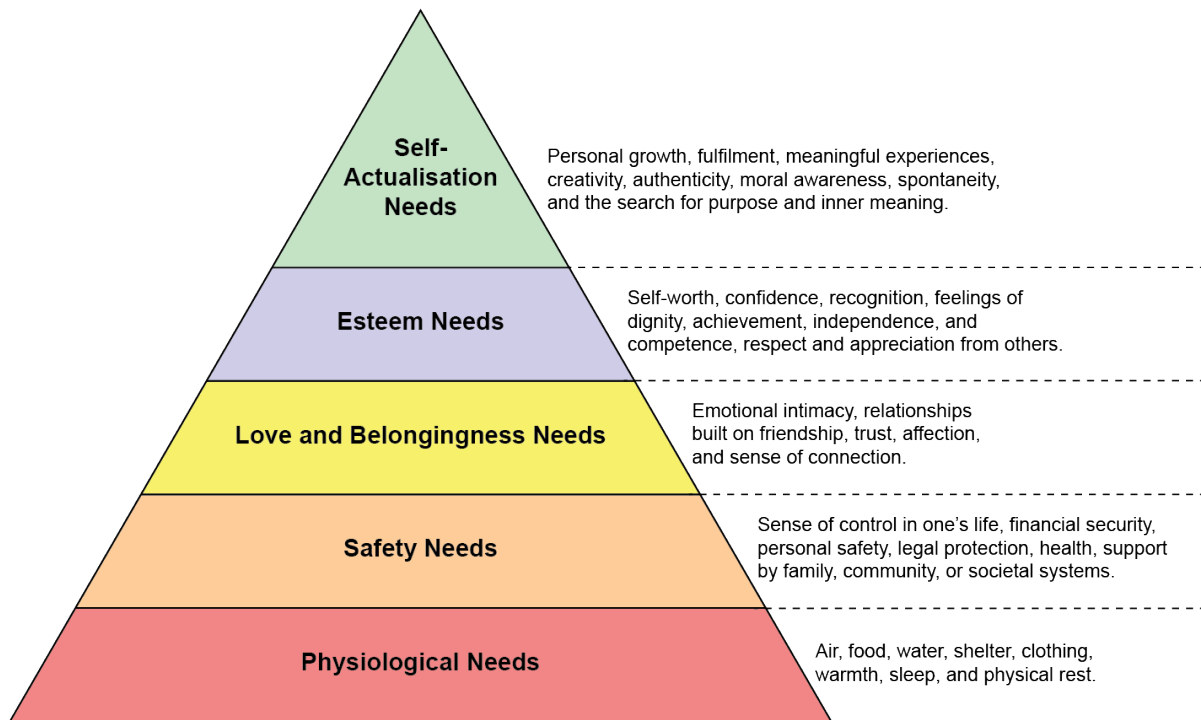
Such keywords represent a resilient, self-empowerment tone that holds strategic values for emotionally resonant healthcare marketing, particularly when applied through affirmative lyrics or empowering visual storytelling.

### **6.3. Identify the Needs**

The analysis shifted from codes to broader, more interpretable themes to understand the underlying needs of the PSC group. All initial codes were reviewed and then organised into meaningful clusters. This process involved identifying conceptual relationships between codes and grouping into candidate themes of potential needs, an early stage in recognising the deeper narratives embedded in the data.

Maslow's Hierarchy of Needs (McLeod, 2007; Figure 2) was used as an interpretive framework. Maslow's model suggests that human motivation is structured in layers, from basic physiological and safety needs to higher-level needs such as love, esteem, and self-actualisation. This hierarchy model supports a clearer and effective interpretation for organising PSC group' emotional expressions into structured categories of unmet or desired needs.

Figure 2 Maslow's Hierarchy of Needs



**Physiological Needs** – these are the most fundamental human requirements for survival, including essentials such as air, food, water, shelter, clothing, warmth, sleep, and physical rest.

**Safety Needs** – the second tier of the hierarchy involves the desire for stability, predictability, and a sense of control in one's life. Such needs are often supported by family, community, or societal systems. Examples include emotional and financial security, personal safety, legal protection, health, and protection from harm or uncertainty.

**Love and Belongingness Needs** – this level reflects the human need for connection, acceptance, and emotional intimacy. It includes relationships built on friendship, trust, affection, mutual support, and sense of connection by sharing the same experience. Thee desire to give and receive love.

**Esteem Needs** – the second highest level involves desire for self-worth, confidence, and recognition. They include feelings of dignity, achievement, independence, and competence, as well as the need for respect and appreciation from others.

**Self-Actualisation Needs** – representing the highest level of Maslow's hierarchy, these needs relate to realising one's full potential and pursuing personal growth,

fulfilment, and meaningful experiences. They encompass creativity, authenticity, moral awareness, spontaneity, and the search for purpose and inner meaning.

To support this process, emotionally resonant keywords and patterns were also highlighted. Preliminary themes were developed by aligning emotionally charged codes with these underlying needs. For example, expressions of fear about treatment outcomes were mapped to safety needs as health, bodily integrity, and protection from harm are fundamental components of this category in Maslow's model. When individuals express anxiety about chemotherapy, surgery, or disease progression, they are often voicing concerns over their physical survival and security, core aspects of the safety level.

On the other hand, statements of gratitude, longing for connection, or feelings of being ignored or forgotten were associated with love and belongingness needs. According to Maslow, this level reflects the human desire for emotional intimacy, social inclusion, friendship, and meaningful relationships. In PSC group, such needs are reflected in users seeking feeling of belonging, expressing appreciation for support, or lamenting the loss of social bonds during treatment. These expressions indicate a deep yearning for social connection, affection, and emotional closeness, indicators of love and belonging needs.

Each code was interpreted individually and reviewed directly in relation to Maslow's hierarchy of needs. The emotional or psychological meaning embedded in each code guided its alignment with the appropriate need level. For example, in the comment

*“At first, I was anxious about how my body looked. On my first trip to the pool, I brought a T-shirt to cover up, but I didn't end up wearing it. Most of my fear came from not knowing what to expect. But once I got there, I realised no one was actually paying attention.”*

The assigned code was body image problem and insecurity. This was then linked to Esteem needs, as the concern reflects issues of confidence, self-worth, and how the individual perceives themselves in a social environment.

In some cases, individual threads reflected more than one need or emotional state, allowing for the development of sub-themes that acknowledged complexity and overlap. For instance,

*“As a proud husband of a survivor, let me say, you look beautiful. You beat cancer, and that’s incredible. We marked her last chemo with a head shave at my trusted barber. When he revealed the cut, the whole shop cheered. Now, two years later, she has the most beautiful curly hair. You’ll get there too, I promise. You already look amazing, and you’ll feel even better in time. Sending love. F\*ck cancer!”*

The excerpt reflects a supportive partner affirming the survivor’s worth, beauty, and strength, offering both appreciation and affection. It illustrates the intertwined needs for self-esteem and love/belongingness. While these needs were fulfilled through spousal support in this case, others may seek similar affirmation from different sources. Within broader thematic categories, distinct patterns or variations emerged, leading to the development of sub-themes. These sub-themes allowed for a more nuanced representation of the data, capturing different dimensions or expressions of the same overarching needs.

Additionally, keywords extracted during initial coding, such as “winner,” “storm,” “awesome,” were reexplored during this phase to refine thematic boundaries. These keywords helped to decide where the boundaries between different themes should be drawn. For instance, “winner” and “awesome” were often used in threads expression coping mechanisms and self-redefinition, guiding its placement under the theme of Esteem, specifically within the sub-theme achievement and self-worth. Table 5 presents an illustrative overview of the preliminary themes and their alignment with needs.

Table 5 Illustrative table of preliminary themes and needs alignment

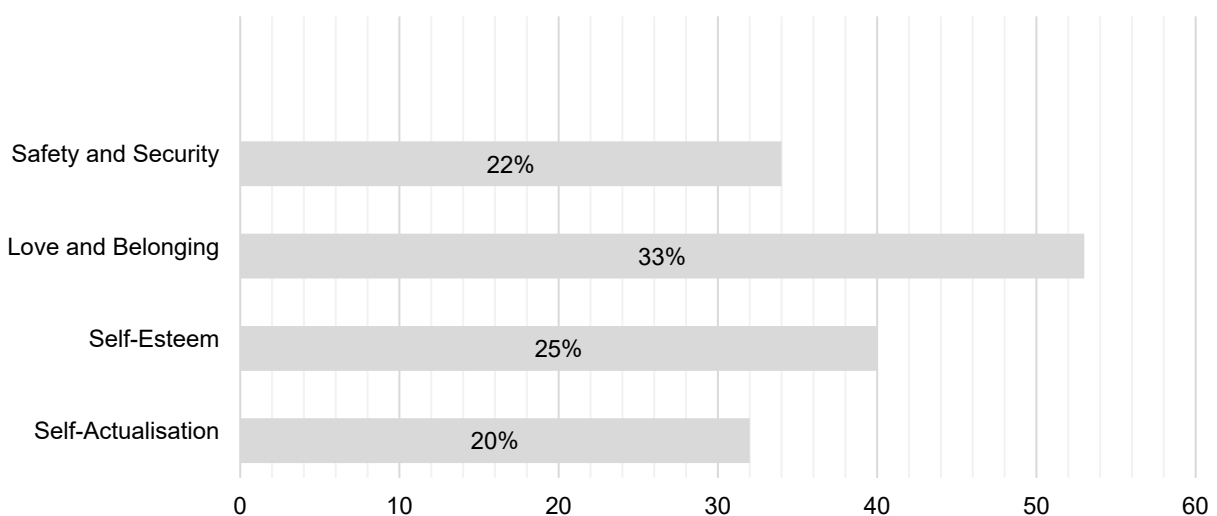
<b>Comment Snippet</b>	<b>Initial Code</b>	<b>Maslow's Needs</b>	<b>Intertwined Needs</b>	<b>Sub-Themes</b>
"I was single during chemo and dating was nearly impossible. Whenever I brought up my cancer, people would just disappear. I eventually gave up. After treatment, I tried dating again but got stood up on my first date. Being a single woman with cancer is really tough."	Dating life, rejection, and emotional vulnerability  Loneliness and longing for connection and relationship, loss of confidence	<b>Love and Belonging</b>		Emotional intimacy, relationship
"It was terrifying to realize that the only treatment option was such an extreme surgery, and I couldn't stop worrying about what my quality of life would be afterward."	Frightened about treatment / surgery, worried about QoL	<b>Safety</b>		Health and sense of control
"As a proud husband of a survivor, let me say, you look beautiful. You beat cancer, and that's incredible. We marked her last chemo with a head shave at my trusted barber. When he revealed the cut, the whole shop cheered. Now, two years later, she has the most beautiful curly hair. You'll get there too—I promise. You already look amazing, and you'll feel even better in time. Sending love. F*ck cancer!"	Support from partner: encouragement and appreciation; Celebration of recovery; Body positivity and transformation; Restoring hope and future orientation; Shared identity of survivorship; Uplifting emotional tone ("you'll get there too")	<b>Esteem</b>	Love and Belonging	Self-worth, appreciation from others, intimacy, affection
"My condition is just one of those things that come with living in an imperfect world!"	Acceptance, coping mechanism	<b>Self-Actualisation</b>		Morality, acceptance, experience purpose and meaning

## 6.4. Review

After completing the early stages of coding and mapping the emotional expressions within the data to Maslow's Hierarchy of Needs, a thorough review of all entries was run to ensure accurate interpretation and classification. This involved reevaluation of the coded segments and the broader emotional context to confirm the appropriateness of their alignment with psychological needs. Particular attention was given to the consistency and distinctiveness of the categorisations.

From 159 of text entries, extracted from post descriptions, comment fields, and community discussions across the selected platforms, Love and Belonging came out as the most frequently identified need, appearing 33% of the entries (n = 53). This was followed by Esteem needs, which were identified 25% (40 times), Safety needs around 22% (34 occurrences), and Self-Actualisation 20% (n = 32). These frequencies reflect recurring emotional patterns and psychosocial concerns voiced by cancer patients, survivors, and caregivers in online communities. Meanwhile, the most basic Physiological needs were not explicitly mentioned in any of the entries. Perhaps because such needs, related to food, sleep, hygiene, or medication, are often perceived as physical or clinical issues, rather than emotional concerns typically discussed in peer support forums. Participants may assume these needs are being addressed by healthcare professionals, and instead choose to express their feelings and emotional aspects of their experiences.

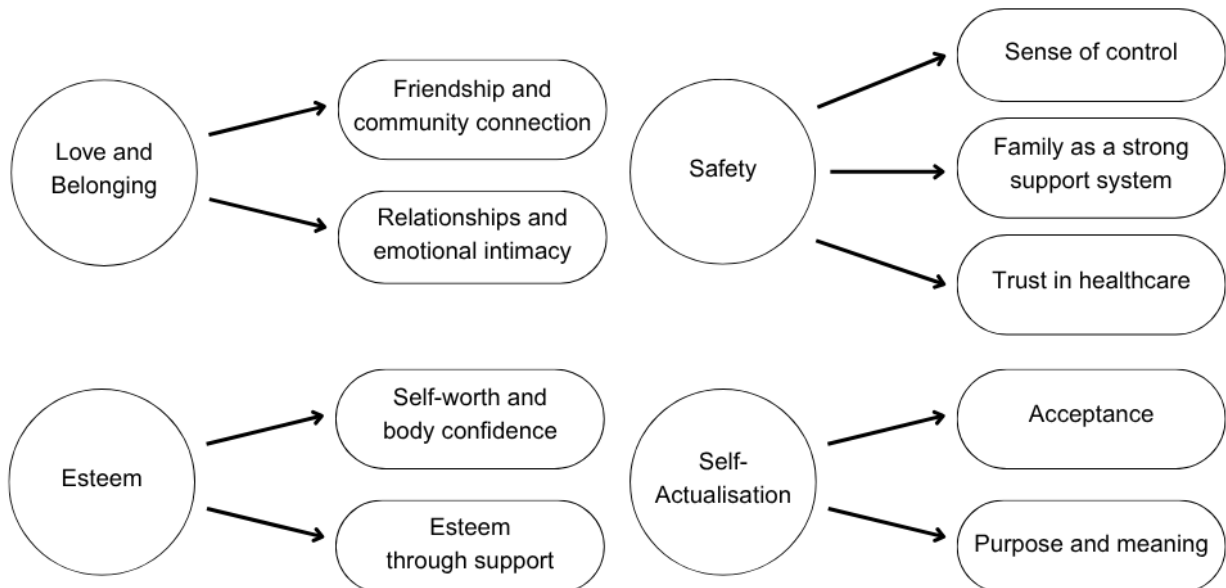
*Figure 3 Frequency of the underlying needs identified from the PSC group*



Each identified need directly served as the main theme in the analysis. Upon further refinement, it became noticeable that these overarching needs often manifested

through distinct emotional expressions or contextual variations. To capture the contextual variations more precisely, sub-themes were developed. During this phase, the process of mapping sub-themes to specific levels of Maslow's hierarchy of needs was also initiated (Figure 4).

Figure 4 Thematic mapping



For instance, the need for Love and Belonging appeared in two major dimensions:

- A longing for friendship and connection within communities, often grounded in shared illness experiences and mutual emotional understanding.
- A desire for emotionally intimate and trusting relationships, frequently centred around romantic partners.

Similarly, Esteem needs emerged in nuanced forms:

- One sub-theme highlighted self-worth and body confidence, particularly among individuals navigating physical transformation due to treatment. Self-worth and confidence were expressed through a sense of comfort with bodily transformation, body positivity, and the desire for realistic representation.
- The intersection of self-esteem needs with the need of love and belonging was reflected self-esteem that developed through support, respect, and appreciation received from a partner, family members, or social networks.

Safety needs were expressed both in emotional and practical terms:

- Cancer often brought feelings of chaos. The need for control and predictability, especially during uncertain treatment phases through preparation, planning, or understanding treatment options was seen as emotionally stabilising.
- Trust in healthcare: reflecting the need for competent, well-informed care and the importance of clear communication in medical decision-making. PSC group repeatedly emphasised the need to feel physically safe, well-informed, and treated with care. Framing knowledge in healthcare through clear healthcare communication as a form of emotional safety, empowered individuals to make informed decisions, reducing fear and restoring a feeling of control.
- A strong support system provided by family. Family was consistently portrayed as a source of emotional stability and practical support. For many, family presence is important to feeling safe and cared throughout the illness journey. Conversely, those in caregiving roles expressed a deep desire to ensure the best possible healthcare and safety for their loved ones, showing a dual perspective of both receiving and providing stability.

Self-actualisation needs were expressed particularly through:

- The search for purpose and meaning as in one's illness experience emerged as a key aspect of self-actualisation. Rather than viewing their condition solely as a source of suffering, individuals often sought to reinterpret it as an opportunity for growth, contribution, or a redefined sense of identity. This reframing also functioned as a coping mechanism, helping individuals manage emotional distress by assigning value to their experience.
- Acceptance, especially in relation to long-term uncertainty, and bodily change. Some individuals described reaching a state of peace with their diagnosis or changed bodies, suggesting a deep psychological integration of their experiences.

This thematic structure not only reflects the layered and intersecting nature of human needs but also underscores how individuals use digital communities to articulate, negotiate, and sometimes fulfil those needs. Each theme and sub-theme offers insight into the emotional landscape for health communication, and by extension, informs strategies for emotionally responsive healthcare marketing.

## 6.5. Result

The analysis of the underlying needs of the PSC group led to the identification of four main themes, each with various sub-themes, highlighting the group's core emotional and psychosocial needs (Table 6).

*Table 6 Themes and sub-themes were derived from an analysis of the underlying needs of the PSC group, using Maslow's Hierarchy of Needs as a guiding framework.*

Themes & Sub-Themes	Maslow's Needs
<p><b>To be Loved and to Belong</b></p> <p><i>Sub-Theme:</i></p> <ul style="list-style-type: none"> <li><i>Friends to Hold</i></li> <li><i>Somone to Hold</i></li> </ul>	Love and belonging
<p><b>To have Worth</b></p> <p><i>Sub-theme:</i></p> <ul style="list-style-type: none"> <li><i>Not Pretty. Powerful and Brave.</i></li> <li><i>You are awesome!</i></li> </ul>	Esteem
<p><b>To Feel Safe</b></p> <p><i>Sub-theme:</i></p> <ul style="list-style-type: none"> <li><i>Taking Control: One Day at a Time</i></li> <li><i>Trusted Health Source</i></li> <li><i>Family as an anchor of support and security</i></li> </ul>	Safety
<p><b>To live a Meaningful Life</b></p> <p><i>Sub-theme:</i></p> <ul style="list-style-type: none"> <li><i>Finding Meaning and Purpose</i></li> <li><i>Accepting Imperfection</i></li> </ul>	Self-actualisation

### **Theme 1: To be Loved and to Belong**

The dataset is dominated with the need to be loved and to belong, particularly among individuals navigating their life after a cancer diagnosis. This theme expresses the longing for emotional closeness, validation, and meaningful connection, whether in the form of friendships or romantic relationships. For many, the illness disrupts existing social dynamics and intensifies the feeling of emotional isolation. Hence, to be loved and to be longed is found to be the category that motivates PSC group the most.

### *Sub-Theme: Friends to Hold*

Participants often expressed a longing for shared experiences and a community that understands their struggles. The loss of normalcy and the perception that others have moved on while they continue to battle emotionally is a recurring narrative. Some describe this phase not as active sadness, but as emotional numbness or a fading sense of emotional connection. Even when surrounded by others, the lack of authentic emotional support leaves them feeling alone and detached. One user remarked,

*“I never expected cancer to feel this isolating. I'm not exactly sad or angry, more like emotionally numb. I stay positive and interact with others in a friendly way, but deep down, it feels like I'm facing everything alone. Emotionally, it's a solo battle, and because of that, I just don't have the energy left to give to anyone else.”*

- *Sub-Theme: Someone to Hold*

In addition to platonic connection, some threads reveal a desire for a romantic intimacy, a partner to lean on, trust, and feel safe with. Concerns about how a cancer diagnosis might impact dating prospects or long-term relationships were common. The fear of rejection, abandonment, or being perceived as “damaged” complicates the search for love, making the emotional need for romantic connection even more vulnerable. One stated,

*“I'm worried that my diagnosis might make it harder for me to find a new partner. More than anything, I'm looking for someone I can truly trust.”*

Together, these sub-themes highlight the hidden emotional work involved in survivorship. The PSC group, express a longing not only for someone to be there, but also for someone who truly listens.

### **Theme 2: To have Worth**

Self-worth is not tied to external validation or superficial ideals, but rather to inner strength, resilience, and the persistence of navigating day-to-day struggles while dealing with the emotional and physical effects of cancer. Two distinct yet complementary directions to reclaiming self-worth: one from internal empowerment, and the other from interpersonal affirmation.

- *Sub-theme: Not Pretty. Powerful and Brave.*

Among the PSC group, there is a frustration and pain associated with the loss of bodily autonomy and self-image. Many struggle to accept the physical transformations, like weight gain, hair loss, and scarring, caused by treatments like chemotherapy or hormone therapy. Idealised media portrayals of picture-perfect patients and survivors often deepen this dissonance, making real patients feel invisible and misinterpreted. In this context, “powerful and brave” becomes a more truthful and empowering message than “pretty” or injecting any idea about appearance. ‘Powerful’ speaks to the process of reclaiming control over one’s body and identity, while brave reflects the emotional and physical resilience required to face these challenges. Confronting illness with courage, enduring adversity, and redefining strength are not about being pretty. It is about embodying identity beyond appearance.

*“Most of my clothes don’t fit anymore because I’ve put on weight from the Lupron and AI treatments. Kisqali caused most of my eyebrows to fall out. I feel unattractive. I’m not relaxing in some picturesque garden. I’m at work, pushing through the day because I have a mortgage to pay and two kids to take care of. I can’t afford to stay in bed all day, even if that’s what my body wants. Those ads should feature real cancer patients, not some actress.”*

- *Sub-theme: You are awesome!*

The sub-theme “You are awesome!” reflects the kind of esteem that comes from being recognised, appreciated, and supported by others. This sub-theme captures moments when patients receive acknowledgement for their endurance, their sacrifices, and their ongoing fight, whether from a partner, family member, or from people around them, who truly see them. This theme includes moments of praise, celebration of recovery, and expressions of body positivity. It highlights how acknowledgment from others can help restore hope, foster a sense of future orientation, and strengthen a shared identity of survivorship. One person was expressed,

*“People love to praise my husband as some kind of saint for looking after me now. But what about all the years I spent taking care of him? I worked two jobs*

*most of my life and rarely spent anything on myself. Where's the recognition for how awesome I am—facing stage 4 cancer and still standing?"*

### **Theme 3: To Feel Safe**

The theme To Feel Safe captures the emotional need for stability and security when navigating the unpredictable and often frightening journey of cancer. This includes the need to manage fear, particularly fear of recurrence or complications during treatment, and to find stability at a time of chaos. Emotional safety becomes just as critical as physical safety, with participants expressing a longing for control, clarity, and comforting connections that can help them feel a sense of grip and stability when everything feels uncertain.

- *Sub-theme: Taking Control: One Day at a Time*

The need to feel in control is often addressed through coping strategies like focusing on the present and managing stress by taking things 'one day at a time'. The quote,

*"For me, my first treatment happened right after an emergency room visit. It all moved so quickly I barely had time to process it. I got through it and now I'm just waiting on a bone marrow transplant. This round feels different, and I really relate to what you're going through. I'm right there with you, just taking it one day at a time,"*

illustrates how survivors and patients bring up psychological safety through shared understanding and mindful pacing, fulfilling their need for a sense of control.

- *Sub-theme: Trusted Health Source*

Having access to clear and empathetic medical information is a core component of feeling safe. A trusted health source help to make a decision, whether a doctor, a caregiver, or a digital platform that respects privacy, as well might ease anxieties related to treatments, procedures, and long-term outcomes.

*"It was terrifying to realize that such an aggressive surgery was my only option, and I couldn't stop thinking about how it might affect my quality of life."*

PSC group emphasised not only the need for reliable and trustworthy information but also the emotional relief that comes from not being constantly reminded of their illness. Members of the PSC group expressed frustration with digital media algorithms that repeatedly target them with cancer-related advertisements, which can feel intrusive and emotionally triggering. For caregivers, the presence of a trusted source is especially vital as they navigate complex decisions on behalf of someone they care about.

*“It’s just not fair—the things you’ve had to go through, all the pain you’ve endured, just for a chance at life. Please join us in praying for peace and comfort. Cancer is cruel, and my sweet girl is really struggling right now 🙏. [...] It breaks me to the core 💔 that, as her mother, all I can do is be here. God, please give her the strength to keep fighting.”*

- *Sub-theme: Family as an anchor of support and security*

Family emerges as a crucial emotional anchor. Offering not only practical help but also a supportive care environment and presence. In moments of despair, family members are often described as the sole constant, the ones who hold space, provide strength, and restore a sense of safety. Presence itself is the most profound form of support. Expressions of gratitude and dependence on family show how important these bonds are in maintaining emotional stability throughout the cancer journey.

- **Theme 4: To live a Meaningful Life**

This theme captures the need to live meaningfully, not by denying cancer, but by finding meaning within its experience. Cancer is often experienced not only as a challenge but also as a source of insight and transformation. Survivors and patients frequently strive to make sense of their journey, not merely to endure it, but to find meaning, purpose, and growth. This process involves reframing pain, questioning cultural expectations, and deepening their connection to self and others.

- *Sub-theme 1: Finding Meaning and Purpose*

Several from PSC group describe cancer as an unexpected turning point prompting a re-evaluation of personal values, social connections, and life goals.

Humour, even when dark or unconventional is a coping strategy that interprets distress through humour, transforming fear into something manageable and even meaningful. Participants also highlight how remission, or simply the endurance of treatment, marks more than a medical milestone, rather it manifests personal transformation. Through reflection, they often identify newfound strengths, deeper empathy, or life goals they may not have considered before illness. This growth-oriented narrative challenges the often-negative norms of illness topic, replacing despair with emotional depth and clarity.

- *Sub-theme: Accepting Imperfection*

The metaphor of *Kintsugi*, the Japanese art of mending broken pottery with gold, illustrates how survivors learn to embrace their physical and emotional scars. Rather than concealing the damage, they describe a journey of accepting imperfection as part of their evolving identity. This acceptance is not passive; it reflects emotional growth, self-compassion, and a rejection of unrealistic norms that demand positivity or perfection. By acknowledging their vulnerabilities, PSC group reclaim control over their narratives, encouraging both self-worth and authenticity.

Amid uncertainty and pain, PSC group often express a deeper yearning to live with intention, transforming their struggles into stories of resilience, gratitude, and emotional clarity. This drive to find meaning emerges as a vital coping mechanism, helping them emotionally reframe their circumstances and navigate life with a renewed sense of empowerment.

*“I lost my arm to stage 4 cancer, a rare type called alveolar soft part sarcoma that has spread to my lungs. Each day, I wake up with fear, but I keep going. I choose to live. And this: creating, writing, putting my whole self into this app, this is my way of living. It’s not just a passion, it’s a lifeline. Something I need to hold on to.”*

When a product or service in healthcare does not directly satisfy human needs, marketers can still effectively evoke strong emotional triggers by integrating one to two of these themes into music and imagery in healthcare marketing activity, either it is for advertising, branding, or broader health communication strategy. When a theme or

more thoughtfully combined, these elements have the potential to complement each other and motivate audiences on a deeper emotional level, suggesting the fulfilment of psychological and social needs. For instance, healthcare brands or services targeting PSC group audience can feature music and imagery that symbolically connect the product or service with confidence, recognition, or personal achievement. This turns marketing strategies into meaningful engagements to deliver messages that feel authentic and empathetic. In this way, music and imagery contribute to building trust, fostering emotional engagement, and ultimately enhancing loyalty toward the healthcare brand.

## **7. Implications for Healthcare Marketing**

Drawing from insights in online cancer communities, it becomes clear that patients, survivors, and caregivers (PSC group) respond strongly to visual and auditory cues in communication media, such as advertisements. However, the dataset shows that they often react negatively to cues that feel artificial, lack authenticity, or fail to represent their lived experiences. This calls attention to the importance of tailoring visual and musical elements that offer PSC group's essential needs to be loved and to belong, to have worth, to be safe, and to live a meaningful life.

The empirical evidence from existing research in this study shows that music and imagery have the capacity to evoke strong emotional responses. The emotions evoked are intended to motivate audiences on a deeper, more personal level, suggesting the fulfilment of psychological and social needs through designed music and visual imagery.

Thematic music and imagery tell a story, allowing individuals to perceive themselves as the protagonist within a meaningful narrative (Woodside, Sood and Miller, 2008). This narrative experience enables them to engage with the brand as the central character, much like a film's protagonist, individuals are accompanied by music that mirrors their personal narrative. When individuals relate to brand stories, identifying with the characters or situations portrayed, the brand can evoke a sense of hope and shared aspiration, positioning itself as a pathway to achieving personal or meaningful life goals (Escalas, 2004), achieving a compelling brand narrative for stronger bonding and engagement.

## 7.1. Implications of Music in Healthcare Marketing

The role of music in marketing, specifically healthcare marketing, extends from background ambient music in hospitals and wellness centres to dynamic audio branding in advertisements and digital media. Elements of ambient music, such as volume and genre, can significantly influence consumer behaviour and emotional response. For instance, low-volume classical music stimulates relaxation and promotes healthier decision-making, whereas high-volume or loud music can lead to increased arousal, impulsivity, and reducing attention to product details (see: Music elements that evoke emotions). These effects are particularly relevant in designing environments and experiences that support health-conscious behaviours or encourage engagement in wellness-related services.

Beyond ambient applications, music functions as a branding tool through formats like jingles, brand anthems, and sogos. Jingles enhance brand recall by aligning melody with messaging, while singing itself boosts emotional resonance and memory retention (see: Jingle and Brand Anthem). Sonic logos, short memorable audio signatures (see: Sogos), act as auditory anchors, enhancing brand perception and emotional connection when consistently applied across media. Thematic background music, especially familiar tunes, further deepens narrative impact and emotional engagement in advertising, with strong effects observed among younger audiences like Millennials and Gen Z (see: Thematic Background Music). Together, these musical strategies offer a rich toolkit for healthcare marketers to foster trust, enhance emotional engagement, and build brand loyalty.

In healthcare marketing, especially in campaigns involving cancer care, music must be chosen carefully to avoid deepening emotional distress. As highlighted in the dataset:

*“[...] the background music in the ad is Landslide by Fleetwood Mac. Thankfully, it was just the instrumental version — even that was enough to make me emotional. If Stevie’s voice had come on, I probably would’ve broken down in tears. [...] Cancer is already heartbreaking, and the idea of breast cancer is especially frightening for women — there’s no need to make it feel even heavier.”*

Even instrumental music like *Landslide* by Fleetwood Mac triggered a negative reaction. This demonstrates that emotionally charged music, while powerful, can sometimes overwhelm rather than comfort, particularly when themes of loss, fragility,

or fear are already present. To be effective, music must support emotional storytelling without adding to the psychological weight; otherwise, it risks chasing away the target audience. To address this theme effectively, a suggested musical strategy is presented in Table 7.

*Table 7 Implications of thematic music in healthcare marketing*

Themes	Considerations for Music
To Be Loved and to Belong	<p><i>Pitch:</i> moderate to slightly higher pitches to evoke warmth, emotional brightness, and reassurance, associating the brand with hope and moral support. Avoid overly low or monotonous pitches that may feel heavy or sombre in this context.</p> <p><i>Chords and intervals:</i> songs with major chords and consonant intervals create a sense of optimism, cheerfulness, and stability. Gentle seventh or major seventh chords can convey emotional depth and romantic softness without evoking sadness. Avoid songs with excessive minor chords or dissonance, which may heighten feelings of loneliness or melancholy.</p> <p><i>Tempo:</i> music in <i>andante</i> and <i>moderato</i> reflects emotional sincerity and attentiveness. This pace encourages feelings of being gently accompanied rather than rushed, aligning with the desire for emotional presence.</p> <p><i>Timbre:</i> instruments with soft, warm, and relatable timbres, such as acoustic guitar, piano, and strings. Avoid harsh or overly dark timbres that may intensify feelings of abandonment or sadness.</p>
To have Worth	<p><i>Pitch:</i> mid to lower pitch to ground the listener and reflect inner strength. Avoid unnaturally high pitch which may feel insincere or overly cheerful in serious contexts.</p> <p><i>Chords and intervals:</i> major chords with added richness, such as major sevenths or ninths, to evoke feelings of pride, depth, and complexity. Suspended chords can suggest unresolved strength or tension, reinforcing the nuance of living with illness. Avoid excessive minor or diminished chords that may imply sadness or weakness.</p>

*Tempo:* a moderate tempo to *allegro* mirrors persistence and dignity. Not too slow to feel passive, and not too fast to feel forced. This pacing respects the emotional work of daily survival.

*Timbre:* warm, rich-sounding instruments like the cello, viola, French horn, and upright bass are often used to convey depth, gravity, and perseverance. Digital instruments that produce a similar bass effect can also be used.

To Feel Safe

*Pitch:* low to mid-pitched music to signal calm, reassurance, and grounding. High-frequency pitches may unintentionally trigger anxiety or urgency.

*Chords and intervals:* consonant harmonies and stable chords, like major chords, in a song may support emotional ease. Dissonant or diminished chord that can suggest tension, unease, or danger, are not suggested.

*Tempo:* steady tempos, like *andante*, can support mindful pacing and emotional regulation. This mirrors the lived of “taking it one day at a time” and serves cognitive clarity.

*Timbre:* instruments with soft, round timbres, such as flute, piano, harp, or ambient synth pads. These create gentle soundscapes that do not demand attention but offer emotional presence. Avoid sharp or metallic tones that may startle or overstimulate.

To Live a  
Meaningful Life

*Pitch:* moderate range of pitch, allowing both lightness and gravity to coexist. A balanced pitch reflects emotional openness.

*Chords and intervals:* incorporate complex chords such as major seventh, suspended chords, or added ninths, which convey nuance, openness, and emotional ambiguity. These tonalities support introspection and subtle hope. Intervals like the perfect fourth or major sixth evoke buoyancy and longing, ideal for capturing the tension between pain and purpose.

*Tempo:* moderate tempo aligns with reflection and narrative processing. Overly fast rhythms can feel out of sync with the emotional with the emotional pacing of survivorship. Music that unfolds gradually illustrates the emotional journey of making sense of one’s experience.

*Timbre*: expressive, emotional instruments such as cello, violin, piano, or soft electronic pads may evoke inner transformation and emotional depth. Brighter tones timbres, like acoustic guitar and warm synths, can also be used for moments of uplift to suggest light emerging from struggles.

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Consider avoiding melancholic music, slow tempos, or lyrics that risk triggering painful memories or deep sadness, especially when such music may evoke episodic memories tied to fear, loss, or despair. While sad music can evoke empathy and even positive emotions (Eerola *et al.*, 2021), it may also be emotionally overwhelming for vulnerable groups, such as cancer patients, survivors, and caregivers. Interestingly, sad music is often favoured by Gen Z listeners (Spotify, 2023), suggesting it may carry emotional value in certain contexts. Therefore, further research is needed to understand whether sad music might have the power to influence consumer behaviour in healthcare marketing, and under what conditions it might be effective without causing harm.

Equally important is to avoid music that feels exploitative, mismatched, or that romanticizes suffering. Music must be selected with careful attention to cultural relevance. When the music is culturally out of place, it can undermine trust and weaken the emotional impact of the message. For instance, using a Western classical piece in an advertisement targeting cancer survivors in Southeast Asia may feel distant or overly dramatic if it lacks cultural or emotional resonance with the audience.

Music that aligns with cultural relevance, lyrical and musical elements, such as scales like pentatonic, intervals, rhythms, and instrumentation, should either be globally recognised or aligned with the cultural listening habits and emotional codes of the target audience. Selecting familiar genres, emotionally resonant motifs, and community-recognised sounds can foster a stronger sense of connection. Where lyrics are included, using language and expressions that are culturally familiar and emotionally meaningful further enhances the effectiveness and authenticity of the message.

Lyrical themes (if present) should centre around expressions of being loved and belonging, such as “being there”, “be all ears”, and celebrating beautiful moments of connection; affirmations of self-worth, including keywords like “awesome”, “amazing”,

and “strong”, even when battling physical or emotional change; the reassurance of feeling safe, conveyed through lyrics that encourage trust, “one day at a time”, “don’t be scared”, or “be brave”; and finally, the pursuit of a meaningful life, reflected in imagery of weathering the “storm”, confronting the cancer that was described metaphorically as “monster”, embracing “struggles”, or using humour as a form of emotional reframing. Other metaphors like, “fighter”, “winner”, can soften the emotional tone while reinforcing themes of bravery, hope, and enduring identity.

In short-form media platforms such as TikTok or Instagram, music featuring real voices or empowering thematic lyrics allows personal storytelling. Short, catchy, emotionally resonant tracks may invite participation in digital campaigns. In such cases, participation itself becomes an act of self-affirmation and connection, reinforcing users’ underlying needs.

A relevant comparison can be found in the RNIB sogos branding project, not cancer specific, but illustrative of this practice in healthcare marketing. Developed by the sound design studio Molecular, the initiative reimaged the audio identity of the Royal National Institute of Blind people by creating a sonic logo asset (John, 2024; Molecular Sound, n.d.). The project was especially resonant because of the community’s involvement. Individuals with sight loss directly contributed spoken word elements and musical cues. The RNIB project shows effective branding that foster emotional connection, inclusivity and community engagement. The result is not only user-generated and shareable content but also suggests a satisfied need to belong in a community (see: Appendix 2 RNIB sogos branding project).

## **7.2. Implications of Imagery in Healthcare Marketing**

*“No one in these ads looks ill, exhausted, or even a bit sick. It’s pure fantasy.*

*Even the outfits bother me. Everything’s so flowy and whimsical, like we’re supposed to be wandering around in caftans in a field full of flowers.*

*It’s got that whole “live, laugh, love-only-if-you-use-this-drug” vibe, and honestly, it’s all just wrong.”*

The quote from the PSC group reflects a growing discontent with the over-stylised and emotionally detached imagery often used in healthcare advertisements. Instead of capturing the real experiences of those affected by illness, many ads fall into fantasy-like portrayals that feel disconnected from the struggles and emotional complexities of

living with cancer. Flowing outfits, idealised settings, and forced optimism risk alienating rather than engaging audiences who seek authenticity, emotional validation, and meaningful representation. Another quote highlights the fact that healthcare advertisements sometimes use objectifying imagery. Beyond being disconnected from the lived experiences of people dealing with illness, such portrayals can reinforce harmful cultural messages, especially for women. One respondent voiced discomfort and anger over a breast cancer ad shown during a football game, noting how it felt like yet another instance of women's bodies being sexualised, even within the context of healthcare.

*"How embarrassing for girls to have to see that ad while they're just trying to watch football with their families. It's a shaming. Like, we can't even escape being sexualized during a football game, or in healthcare, of all places. No matter what, it feels like we're always being told that our bodies exist just for men to look at. And the way breast cancer is talked about sometimes? It's like, "Men love boobs, so don't get breast cancer! or "Make sure you get checked, so stranger men can keep staring and enjoying your boobs." Like... seriously? It makes me sick!"*

The quote referred to a Super Bowl breast cancer awareness commercial, which featured scenes of a stranger staring at a woman's chest, along with other shots that excessively focused on breasts. The entire message seemed to revolve solely around breasts, zoom-ins on women's chests. This approach was perceived as dehumanising, reducing the seriousness of the illness to the potential loss of male pleasure, rather than focusing on the patient's health, dignity, or emotional journey. This example reveals a profound disconnect between commercial imagery and the complex emotional of the very people such campaign claim to support. These visual missteps can undermine trust, making viewers feel unseen or misrepresented, particularly when the aesthetic feels more aligned with lifestyle marketing than with genuine healthcare storytelling. To address this misalignment, healthcare marketing must move toward imagery that is more authentic and emotionally resonant, whether in the form of still images or video. Imagery should support a relatable narrative tailored to the unique needs of the PSC group, emphasizing shared struggles, small victories, and emotional resilience. The following imagery strategies in Table 8 can serve as practical recommendations:

Table 8 Implications of thematic imagery in healthcare marketing

Themes	Considerations for Imagery
To be Loved and to Belong	<i>Human faces:</i> eye contact and smiles are emotionally contagious, evoking joy and a sense of connection. Direct gaze communicates warmth, attunement, and social inclusion.
	<i>Body expressions and gestures:</i> Open arms, gentle embraces, or close physical proximity reinforce themes of safety, trust, and emotional belonging, even without words.
	<i>Human and nature:</i> scenes of shared activities with friends of loved ones, especially in natural settings, promote a positive emotional tone and convey a love for life and meaningful relationships.
	<i>Symbolic and inspirational imagery:</i> visual metaphors, such as intertwined hands, symbolise enduring support, trust, and emotional healing. These elements resonate deeply with those seeking intimacy and reassurance after a diagnosis.
	<i>Slice-of-life &amp; nostalgia:</i> Nostalgic imagery, like shared meals, quiet companionship, holding hands, evokes feelings of home, belonging, and emotional warmth. Everyday moments validate the longing for normalcy and meaningful social bonds.
To Have Worth	<i>Symbolic metaphors:</i> use of strong, inspirational metaphors reinforce themes of growth, meaning, and emotional resilience.
	<i>Faces of survivors:</i> show unfiltered expressions, determination, gentle pride, to convey authenticity. Vulnerability and triumph validate real experiences and evoke empathy.
	<i>Body expressions:</i> Visuals of individuals who appear proud, triumphant, and emotionally grounded, conveying serenity and contentment, are important. Too posed or idealised beauty should be avoided, as it may feel inauthentic or distant.
	<i>Nature and animals as symbol and inspiration:</i> Nature scenes can be used to evoke a sense of freedom and emotional release. Animal imagery can serve as metaphor, illustrating strength, courage, and the power of adaptability through imperfection. Such symbolic and inspirational visuals are especially relevant to the

	theme <i>To Have Worth</i> , as they help express inner power and the message of not giving up.
To Feel Safe	<i>Human face and body expressions</i> : using imagery that features human faces, for example, a portrait of a healthcare provider with direct gaze and open, upright posture can evoke trust and reassurance. Rounded body shapes and relaxed gestures suggest safety and control.
	<i>Children and babies</i> : infants or young children in a frame often provoke immediate empathy, activate nurturing instincts, and evoke tenderness, reinforcing the instinct to safeguard life. Such imagery can be especially powerful in maternal or caregiving subthemes.
	<i>Cute animals and symbolic imagery</i> : the use of baby schema through ‘cute’ animals softens message delivery and fosters emotional warmth.
	<i>Nature elements</i> : incorporating elements of nature, either in the background or as part of the setting, can promote a sense of calm and serenity. Even subtle natural elements help convey the idea that things are being gently cared for, reducing stress and reinforcing the feeling of being in good hands.
	<i>Technological Innovations and treatment advances</i> : Imagery of advanced treatments and technologies can be emotionally appealing to the need of safety. (Vater <i>et al.</i> , 2014)
To Live a Meaningful Life	<i>Human faces</i> : imageries that include real patients, survivors, or caregivers in a scene with can create emotional connection and shared life meaning and purpose.
	<i>Body expressions</i> : postures that convey autonomy and emotional engagement with life, such as open stances, upright posture, and expressive hands engaged in meaningful activity, can communicate contentment and inner strength.
	<i>Nature elements</i> : Visuals of nature and animals may also evoke a love for life, pleasant emotions, and a sense of freedom, inspiring viewers to find meaning as part of the natural world and the greater

	universe. Nature imagery can also symbolize faith, such as the idea that seeds grow regardless of human intervention, suggesting that things are being taken care of.
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Research in therapeutic psychology shows that imagery tied to unmet emotional needs, evokes strong emotional responses and facilitates deep emotional processing (Arntz, 2012). This mechanism highlights how imagery becomes emotionally intense when it resonates with an individual's core psychological needs. When visual content taps into these underlying emotional layers, it can create a sense of recognition and validation, particularly for those who have felt unseen or dismissed by traditional medical narratives. Therefore, in emotionally sensitive contexts such as cancer care, visual storytelling should move beyond clichéd stock visuals to reflect real, lived experiences, capturing moments of vulnerability, strength, and connection.

Aesthetic quality is equally important to appear professional to influence emotional engagement, credibility, and user trust (see: Key Considerations in Imagery Elements). Colours and tones should be chosen with intention. On digital platforms, especially user-generated content (UGC) environments, vibrant yet emotionally aligned visuals improve both click-through and shareability rates. Best practices suggest using colour triplet combination (see: Key Considerations in Imagery Elements) and limiting overly complex palettes to avoid visual overload. Simplicity in imagery, not overcrowded scenes, helps direct focus and encourages emotional resonance. Professionally crafted along with emotionally authentic visuals can positively impact brand recognition and deepen the sense of emotional safety and relational connection with audiences navigating health-related challenges.

However, it is not recommended to over-idealise or excessively beautify healthcare imagery. Unnecessary editing may create a disconnection between the audience's emotional reality and the marketing narrative, leading to distrust or even alienation. This can escalate into a bigger problem when the overall visuals include important health information, credibility must outweigh over aesthetic perfection. Furthermore, in contexts where patients may be identifiable, privacy must be carefully protected. Consent, anonymization, and sensitive use of patient imagery are core ethical considerations in healthcare. Maintaining the right balance between emotional appeal,

visual clarity, and respect for users' lived realities is key to responsible and effective imagery in healthcare marketing.

An illustration of these implications of imagery in healthcare marketing is demonstrated by knowyourlemons.org in their campaign Know Your Lemons to educate about breast health. The initiative uses lemons as symbolic visuals to teach early detection of breast cancer (see Appendix Figure 7). By using elements of nature, the campaign illustrates various symptoms in a way that is non-threatening, accessible, and visually memorable. This approach aligns with the emotional theme To Feel Safe, particularly the sub-theme of Trusted Health Source, by reducing fear and stigma around self-examination. The simplicity of the overall visuals, paired with vibrant, high-contrast colours, enhances visual and information clarity. Similarly, the 2014 Testicular Cancer Canada awareness campaign reflects the theme To Feel Safe is expressed by combining humour and symbolic animals to enhance cuteness in the imagery, making it easier to address a sensitive topic. The campaign features guinea pigs in place of testicles (see: Appendix 3 2014 Testicular Cancer Canada awareness campaign; Figure 8).

At the time of writing this thesis, Pfizer's Big Game Commercial 2025, featuring a song by LL Cool J's "Mama Said Knock You Out" (Pfizer, n.d.), serves as a relevant example of how music and imagery can be effectively applied to communicate emotional meaning in healthcare marketing (see: Appendix 4 Pfizer: Knock You Out campaign 2025; Figure 9 & Figure 10). The commercial strategically combines powerful imagery and music to evoke the emotional themes of To Have Worth and To Feel Safe. The hip-hop anthem creates the vibes of powerful, defiant, bold, and energized. The track features a hard-hitting beat, a confident vocal delivery with a fast, punchy rhythm in a mid to lower pitch helps ground the listener, conveying a sense of inner strength rather than artificial cheerfulness. The aggressive fast tempo made the mood feel tough and unstoppable. The pounding drum loops made listeners feel physically strong and ready to fight. The bold lyrics, like "Don't call it a comeback", sparked feelings of defiance and determination. Overall, the music pushed the mood from passive to powerful, built up energy, focus, and confidence, conveying a sense of resilience and comeback strength.

The use of a hip-hop anthem alongside the visual transformation of a young cancer patient into a victorious boxer, creates a narrative of empowerment and resilience. This

aligns with the theme To Have Worth, where the child is not portrayed as a passive recipient of care but as an active fighter: capable, brave, and celebrated. Such scene affirms the dignity and inner strength of individuals undergoing treatment, especially children, by placing them at the centre of a heroic and hopeful storyline. It delivers the message that they are not defined by illness but by their courage and determination.

The theme To Feel Safe also emerged through the imagery of support and emotional reassurance. The hospital setting is transformed into a place of celebration, where medical staff cheer the boy's recovery, and the final embrace from his mother symbolises a return to safety and familial love.

Public response to the campaign has been positive. Notably, comments on Pfizer's LinkedIn page, where the video was shared, offered insight into audience reactions, as comment section on Pfizer's other platforms such as YouTube was disabled. One commenter, a mother of a childhood cancer survivor, expressed,

*"As a mother of a child, who has bravely battled and survived cancer, this ad really hit home. Watching kids fight through that is heartbreaking but also incredibly inspiring. Cancer is never just one person's battle, it affects the whole family. This commercial beautifully shows that strength and support."*

## **8. Conclusion**

Thematic analysis was conducted to investigate the underlying needs of PSC group Using Braun and Clarke's thematic analysis alongside Maslow's Hierarchy of Needs. Four core thematic needs emerged:

- The need to be loved and to belong. *Sub-theme*: friends to told; someone to hold.
- The need to feel worth. *Sub-theme*: not pretty. Powerful and brave; you are awesome!
- The need to feel safe. *Sub-theme*: taking control: one day at a time; trusted health source; family as an anchor of support and security.
- The need to live a meaningful life. *Sub-theme*: finding meaning and purpose; accepting imperfection.

These themes reflect the emotional and psychological expectations from the cancer patients, survivors, and caregivers about how they want to be approached and understood in healthcare communication.

The aim is to design marketing approach that appeals visual and audio senses in a way that feels respectful, empathetic, and emotionally supportive. Music and imagery can be applied together or separately, as long as they align with the emotional needs expressed by the community.

The theme *to be loved and to belong* calls for music with warm sound, not too high pitch, major chords, moderate tempos, and soft, bright timbre instruments like acoustic guitar or piano. Imagery may include smiling faces, direct eye contact, open body language, and shared moments in natural settings. Symbolic cues like intertwined hands can express emotional closeness and support.

For the theme to have worth, the music creation or selection can lean toward mid-to-low pitch and strong, major or suspended chords, especially when played by deep-voiced instruments like the cello or timpani, create a confident and grounding bass effect. The mood should bring out the proud feeling. Imagery conveying resilience, such as survivors with unfiltered expressions, body language showing confidence and triumph, and inspirational metaphor imagery that illustrates themes of emotional resilience.

Stable chords, consonant harmonies slow to moderate tempo, and soft round instruments, like ambient pads, might be suitable to address the safety need. Sharp or dissonant sound might cause eerie feeling and anxiety. The safety need can be particularly translated into reassuring visuals of medical care or nature, that create a sense of trust, safety, and progress. Calm, direct human expressions with open posture can support the message of safety and security.

Finally, to live a meaningful life can be supported by music in moderate pitch that shows emotional openness. Using complex chords, moderate pace, additionally expressive and bright timbre should persuade hope, purpose, and meaning. Imagery of living a meaningful life can be shown through real faces of survivors and caregivers to express connection and purpose. Open, active body language reflects strength and engagement with life. Nature and animals evoke freedom, joy, and faith in life's ongoing journey.

Tempo should be carefully considered across all themes. A moderate to fast tempo is recommended across all themes, as a slower tempo may induce melancholy and unintentionally trigger painful or sad episodic memories. These themes are also applicable to lyrical songs, either through direct incorporation of the theme or by using related keywords, especially in the user-generated (UGC) environments. In visual design for digital marketing that is driven by UGC, clarity, colour, aesthetic tone, and professional cleanliness all contribute to how trustworthy and emotionally engaging the content feels. In addition to the consideration, cultural sensitivity is important to avoid misinterpretation.

As Simon & Garfunkel once sang, “Silence, like a cancer, grows.” The absence of emotional connection can be as harmful as the illness itself. So let there be music, and imagery, that speak to what this community truly feels: the need to be loved and to belong, to be safe, to feel worth, and to live with meaning. In short, healthcare marketing that connects emotionally with the PSC group must go beyond general appeals. It must listen to what this community truly needs and respond with care, creativity, and ethical responsibility.

## **9. Limitations and Future Research**

This study was conducted by one person, which may influence how the emotions and needs of the PSC group were identified and interpreted. While efforts were made to remain reflexive and grounded in the data, the analysis still reflects the perspective of the student conducting the study. This can influence how emotional nuances were understood, especially in sensitive topics like illness, fear, and hope

There were also some challenges during the qualitative analysis itself. Identifying and labelling emotional needs can be complex, particularly when posts contain overlapping feelings or when expressions are subtle or culturally shaped. Some emotions may have been oversimplified, while others might have been missed altogether. These analytical decisions, while thoughtful, are still subject to human error and personal bias.

In terms of data collection, this study used snowball sampling to gather public online posts. While this method helped find related and relevant discussions, it may have created selection bias. The online cancer community used in the study may not reflect the full range of patient, survivor, or caregiver experiences, especially those who are not active on social media or who faces barriers to digital access. Posts from more

active, outspoken, or emotionally expressive users are more likely to appear, while voices from less active or more reserved individuals may have been left out. The choice of which posts to include was also filtered based on clarity and direct relevance to the research themes, which could unintentionally exclude complex or less visible experiences. Additionally, most online posts do not include detailed information about the user's age, gender, or cultural background, which makes it difficult to explore how these factors influence emotional needs or preferences for music and imagery.

Another limitation is the broad scope of the topic. The study explores four central focuses: the emotional needs of the PSC group based on online community discussions, how healthcare marketing uses music and imagery to communicate, and how emotional alignment can be improved through these sensory strategies. While these areas are closely related, examining all three in one master's thesis may stretch the depth of analysis. Each of these topics could stand alone as a separate study, and combining them means that some areas, particularly the application side, had to be explored at a more conceptual level.

While the study discusses emotional influence, trust, and loyalty conceptually, it does not include direct measures, like surveys or experiments, to test how these emotions affect consumer behaviour in practice. The study proposes how music and imagery might better align with emotional needs. These ideas were not tested in real marketing campaigns or with target audiences, so their practical effectiveness remains hypothetical.

Future research could build on this study by including direct methods such as surveys, interviews, or experiments to measure how specific emotional cues in music and imagery actually influence trust, emotional engagement, and loyalty in healthcare settings. Testing these ideas with real audiences or through controlled campaigns would help assess their practical value and relevance. Work in the future could also include forums for other conditions and diseases to see if emotional needs and reactions differ across patient communities.

It would be also relevant to explore how sad music and imagery can be used effectively in healthcare marketing as there is also connection between sad music and the pleasurable emotions it can evoke. Research suggests that the enjoyment of sad music is linked to hormonal changes, especially involving dopamine, which activates the brain's reward system in those who empathically connect with the music (Eerola et al.,

2021). Moreover, platforms like Spotify (2023) made a report that sad music has gained popularity among Gen Z as a way to explore and process emotions. However, when it comes to imagery, research has shown that intensely sad visuals may reduce empathy or backfire if perceived as exaggerated or inauthentic (Baberini *et al.*, 2015).

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## Appendices

Appendix 1: [the dataset of PSC group, comprises 159 text entries, collected from post captions, comment sections, and discussion threads across the selected platforms.](#)

Figure 5 Wilcox's Feelings Wheel (1982)

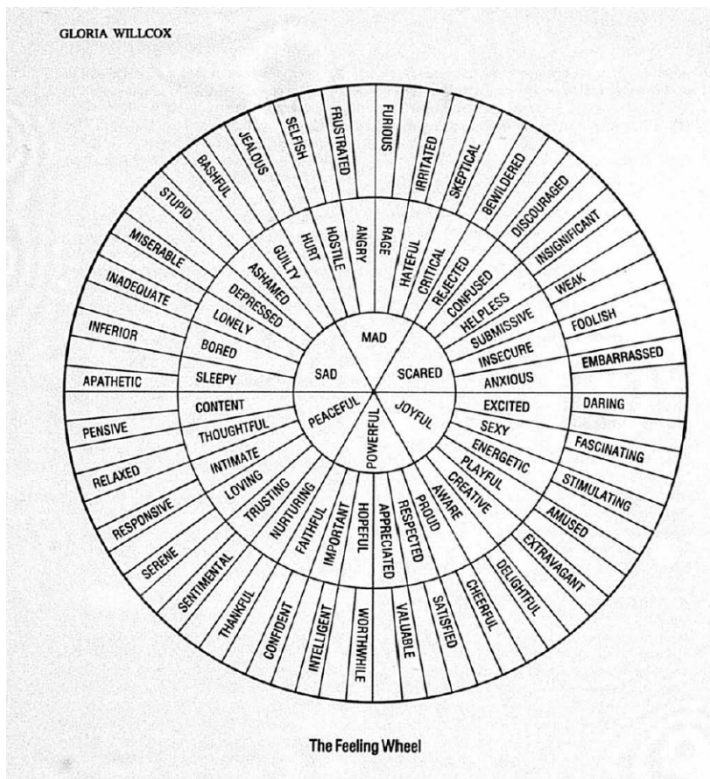
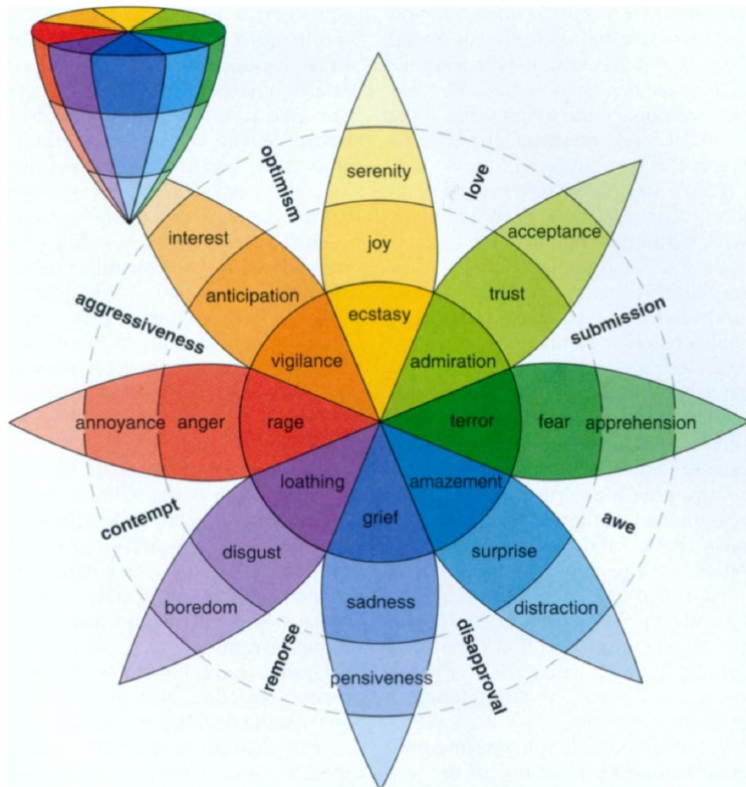


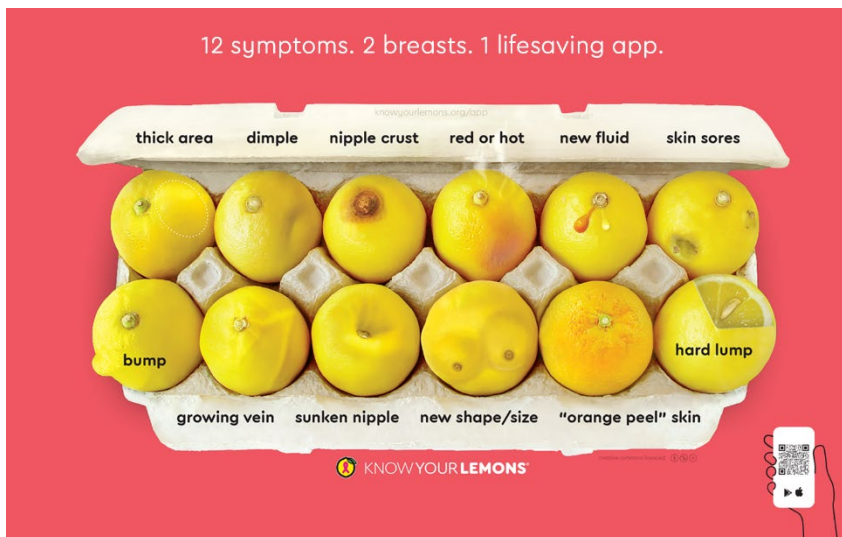
Figure 6 Plutchik Wheel of Emotion (2001)



Appendix 2 RNIB sogos branding project (<https://youtu.be/DKcuxgikW0I?si=KIPDb-nffAbpaovA>)



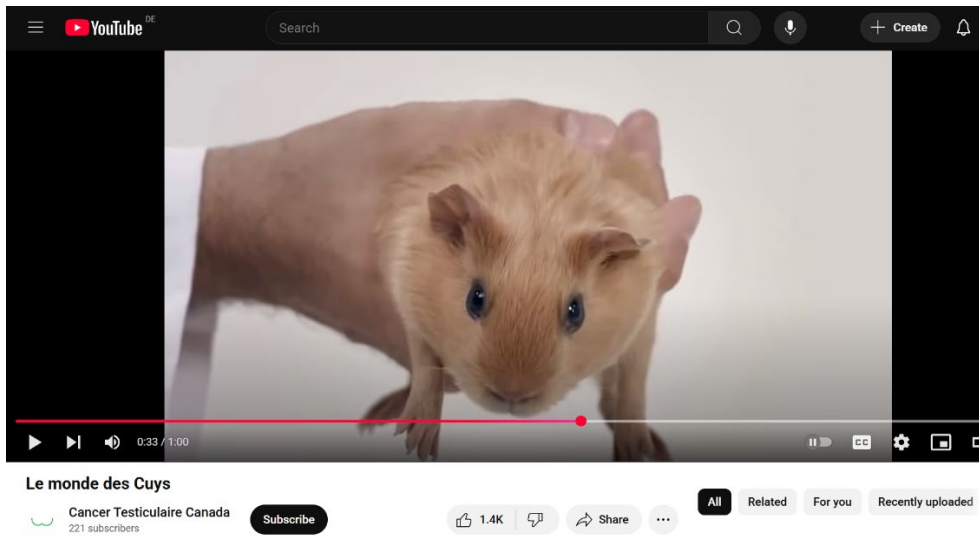
Figure 7 Know Your Lemons campaign by [knowyourlemons.org](http://knowyourlemons.org)



Appendix 3 2014 Testicular Cancer Canada awareness campaign (<https://www.youtube.com/watch?v=H9rE77WNjFY>)



Figure 8 2014 Testicular Cancer Canada awareness campaign



Appendix 4 Pfizer: Knock You Out campaign 2025 (<https://www.youtube.com/watch?v=vjnE1Q68c9I>)



Figure 9 Pfizer: Knock You Out campaign 2025



Figure 10 Pfizer: Knock You Out campaign 2025

