

# Sentiment Analysis of Popular Hindi Songs

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## ABSTRACT

Since the time immemorial music has served as a universal language around the world. Lyrics, the heart and soul of music have historically been an important part of music's effectiveness as a medium for connecting with the general population. Lyrics have a high associative quality that makes them capable of influencing a person's emotional states. However, the potential for research into how lyrics affect happiness and sadness is usually disregarded. This study uses sentiment analysis to characterise good and negative emotions based on well-known Hindi songs. The present study intended to explore what kind of emotions different genre of songs elicit and what are the psychological mechanism of it. Using a focused-group interview technique, data were collected with the help of 15 Hindi songs which were categorised into three categories; patriotic, sad and romantic songs. It was discovered that while melancholy music carried the listeners back in time and made them feel sad, let down, and furious, patriotic songs made the listeners feel happy and proud. While the love songs brought back romantic memories for them, the main feelings they experienced were joy, partner longing, connection, and affection. The study holds its significance in advancing the understanding of how music affects emotions and mood regulation.

**Keywords:** Music, emotion, music and mood.

## Introduction

Formally, music is an arrangement of sounds with melody, rhythm, and typically harmony can be referred to as music. However, music is much more than just a formally organised system of tones and tempos to humanity. Music is an expression, according to writer Victor Hugo, that cannot be expressed in words and cannot be silenced. It has been shown to be among the most often used forms of expression and communication. Regardless of age, culture, or gender, it resides in the daily lives of individuals all around the world (Mehr et al., 2019). Since the beginning of

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time, scientists of all stripes have thought about music.

Despite the fact that music has captivated people for ages, we still know very little about the circumstances in which it arouses emotions. How is it possible that music, which doesn't seem to have any survival benefit (Pinker, 1997), elicits powerful emotions and is regarded as being so significant by so many people? The solution is still unknown. There are still many unanswered questions regarding the connection between music and emotion. The first is the specific question of what feelings music might elicit. Although there have been several speculations about this matter, it has rarely been looked into. Some researchers argue that music can induce 'basic' emotions (Krumhansl, 1997), some says both basic and complex emotions (Gabrielsson, 2001). Another pertinent question is how exactly people react to music; and how the individual and situational factors mediate the relationship between music and emotion.

### **Music and Emotions**

Music possess a dynamic ability to regulate, enhance or change emotions or mood. This dynamic skill not only allows for the expression of one's innermost feelings and moods, but it may also have a variety of positive effects for those that engage in it. According to the notion of mood management theory (Knobloch & Zillmann, 2002), people choose music based on a desire to lessen a bad mood or to maintain a bright outlook. Overall, data suggests that listeners would select music that makes them happy or that conveys uplifting and motivating emotions. Research in the sciences related to music suggests that successful participation in music can positively affect many facets of human life, including physical, social, educational, and psychological aspects. There is a growing body of empirical and experimental research on the broader benefits of musical activity (Biasutti & Concina, 2013). Such advantages have been demonstrated across the lifespan, including early infancy (Gerry et al., 2012), adolescence (McFerran et al., 2018), and older adulthood (Lindblad & de Boise, 2020).

Listening to music communicates a large number of feelings and thoughts that reflect ranges of moods, which can induce physiological arousal or be utilised for fun; nonetheless music is also linked to self-awareness, including self-reflection, escapism, emotional connections as well as social relatedness, including the sense of belonging to a certain social group, connecting with friends and relatives, etc. According to Bharucha and Curtis (2008), people listen to music to experience emotions based on the sentiments the music evokes. It can seem obvious to "listen to the sad song to feel sad" or "listen to the joyful song to feel happy," but it's important to stress that music can affect emotions both actively and passively.

### **Music and Emotion: A Complex Relation**

Though, in general music is linked with producing positive emotions, there are

empirical evidences that suggest music can also lead to negative ones; since the relationship between music and emotion is quite complex. To explain this Schubert (1996) claims that when unpleasant emotions are evoked in an artistic environment, a “dissociation node” is engaged, inhibiting displeasure centres. As a result, the stimulation caused by unpleasant emotions might be felt without the normally associated dissatisfaction. This is comparable to the “dissociation” or disconnecting from reality used as a coping mechanism by those who have experienced incredibly horrible things. Previous studies have discovered a strong positive relationship between absorption and loving bad moods in response to music (Garrido & Schubert, 2011). Thus, those who are highly negatively affected by music may be employed to fight inclinations toward absorption or dissociation, without arousal of resentment, as a result, listening to melancholy music falls under the purview of mood management theory which advocates for enhancing mood.

Some people could be drawn to depressing music despite the fact that it feeds their dysphoria. The exception to the mood management theory is provided by habitual ruminators and individuals with clinical or undiagnosed depression who appear to have an involuntary predisposition toward unpleasant stimuli. It has been proposed that people might better express their own depressing emotions by listening to slow or gloomy music. Aristotle also suggested catharsis as a justification for the appreciation of tragedy (Levinson, 1990). The idea behind catharsis is that letting go of strong feelings will help to reduce stress (Rathus, 2002). Sad music has a way of making people feel like they’re not alone in expressing their unfavourable feelings.

Nostalgia is another feature of negative emotions. The experience of nostalgia is frequently either joyful, negative, or a combination of the two (Zimbardo & Boyd, 1999). Grief is a further association between depressing music and bad feelings. It’s interesting to note that Zisook and Schuchter (2001) argue there is a distinction between normal grieving and the melancholy that some people experience as a result of the loss. It’s probable that mourning individuals find it challenging to get past their negative emotions when they concentrate on them. Therefore, according to Nolen-Hoeksema, Parker, and Larson (1994), this gloomy aspect of their coping mechanism can be detrimental. Another intriguing theory connects music to human concern about mortality and the ensuing search for meaning.

### **Theories of Music and Emotion**

There isn’t a single theory of music and emotion that everyone agrees on as of now. Many hypotheses, including prominent ones by Aristotle, Charles Darwin, Suzanne Langer, Leonard Meyer, Peter Kivy, and many others, have been put out to solve these issues. In the recent times three important perspectives delineates the relationship;

According to one perspective, there are a lot of “cues” in music with referential properties, therefore composers can employ a variety of features to convey pretty definite emotional meanings. According to Cooke’s (1959) theory, music is made up of a variety of melodic elements and rhythms with recognisable emotional significance. He suggested that these characteristics and patterns are used by composers to represent the complex and dynamic feelings they are trying to convey. In essence, melodic elements are thought to represent various emotions, making music a language of emotion.

A different viewpoint emphasises how expectations play a part in music (Huron 2006). If something is connected to something greater than itself, it gains meaning. Symbols and referents differ in kind when used in a designative sense. The difference in kind between words and the things and things they refer to is a characteristic of language. Referents and symbols share the same kind of meaning when it comes to embodied meaning. One musical occurrence “has a meaning” because it alludes to and raises the anticipation of another musical event, claims Meyer (1956). As a result, the emotional impact of music is mostly a result of the expectations it raises in the listener.

A third point of view holds that the relationship between music and emotion is supported by a number of different mechanisms. According to Juslin and Västfjäll (2008), expectations, direct stimulation of the brain stem (the area of the brain that regulates arousal and other basic functions), or association with other emotional cues are all ways that music can elicit an emotion. The second method of evoking emotion can be further divided into associations with emotions themselves (classical or Pavlovian conditioning) and associations with things or stimuli that have emotional associations on their own, such as (a) past occurrences (autobiographical memory), (b) visual imagery, and (c) human voice.

### **Research Methodology**

The present study aims to fill the knowledge gap by exploring what kind of emotions different genre of songs elicit and what are the psychological mechanism of it.

### **Data analysis framework**

Considering the nature of objectives a qualitative approach was adopted to conduct the study. And to analyse the data some basic methods of content analysis was used under the umbrella of sentiment analysis. Sentiment Analysis is described as the procedure of computing, identifying, and classifying views conveyed in a piece of text, particularly to evaluate whether the author’s viewpoint toward a specific topic or product is positive, neutral, or negative. In the present study sentiment analysis for popular Hindi songs is done by utilising data and techniques to classify

songs into different categories or moods based upon the emotions and expression they implicit.

### Participants and Procedure

The participants of the study involved undergraduate and postgraduate students at University of Delhi. The age range of the participants was 19-25. The selection of Hindi songs included only those songs which had at least 5 million or more views, and the categorisation of songs were done via expert opinion. Total 15 songs were selected which were categorised into three categories; A.) Patriotic Songs: *Desh Mere, Ae Watan, Bharat, Vande Matram, and Jann Gann Mann*; B.) Sad Songs: *Filhal, Pachtaoge, Tera Ghata, Dhoka, Woh Channnd Kahan Se Laoge*, and C.) Romantic Songs: *Rattan Lambiyan, Dil Ko Karar Aaya, Doobey, Chhand Baaliyan, and Meri Jaan*. After selection of songs, three focused-group discussions were conducted with an 8 membered group. On the very first day they were made to listen patriotic songs and further discussion was made around what kind of emotions they felt, and how they relate it to their life. On the consecutive days, same procedure was repeated with sad and romantic songs.

### Results

The data obtained are displayed in a tabular form, under three broader categories, the elicited emotions, the nature of emotion and the meaning for life.

**Table 1 The elicited emotions, the nature of emotion and the meaning for life for patriotic songs.**

Song Views	Emotion	Positive emotion	Negative emotion	Meaning for life
Desh Mere 62M	Patriotism, respect for our soldiers, selflessness, gallantry, and sad	Feeling patriotic, respectful/ Gallantry and selfless	sad	The feeling of belongingness, and fulfillment.
Ae Watan 127M	Strong, determined, loved, and happy	Strong, determined, loved, and happy	—	Feels like home but also like responsibility at the same time.
Bharat 8.4M	Peace, patriotic, blessed, and happy	Peace, patriotic, blessed, and happy	—	Progressive as it encourages to do something great for the country.
Vande Matram 29M	Happy, proud, and patriotic	Happy, proud, and patriotic	—	Pride and devotion
Jann Gann Mann 11M	Patriotism, energy, passion	Patriotism, energy, passion	—	Lives in mind and represents the nation along with the duty to serve the nation.

**Table 2 The elicited emotions, the nature of emotion and the meaning for life for sad songs.**

Song Views	Emotions	Positive emotions	Negative emotions	Meaning for life
Filhall 1B views	Sad, upset, and feeling of hopelessness	—	Sad, upset, and feeling of hopelessness	Life is full of uncertainties, and nothing really goes according to plan which is the ultimate truth of life.
Pachtaoge 587M views	Sad, heartbreaking, and emotional	—	Sad, heartbreaking, and emotional	Life can be hard at times but instead of blaming, it is best to learn the lesson life has to teach and move on with it.
Tera Ghata 482M views	Sad, happy, weird, relaxed, and soothing	Happy, relaxed, and soothing	Sad and weird	Acceptance is better than denial to move forward in life.
Dhoka 89M views	Felt sad and lost the sense of satisfaction	—	Felt sad and lost the sense of satisfaction	Never trust someone too much
Woh chaand kaha se laoge 93M views	Sad, angry, feeling despair, and heartbroken	—	Sad, angry, feeling despair, and heartbroken	Self-love is necessary before loving anyone else.

**Table 3 The elicited emotions, the nature of emotion and the meaning for life for romantic songs.**

Song Views	Emotions	Positive emotions	Negative emotions	Meaning for life
Raataan lambiyan 643M views	Gloomy, grieved, heartbroken, and disappointment, happiness, good old days	Old positive memories	Disappointment, and heartbroken	Love is the purest thing in life, we should try to find real love.
Dil ko karaar aaya 234M views	Peaceful, calm, serene, aesthetic	Feeling loved	—	Relationships with loved ones is all that matters in the life.
Doobey 73M views	Lustful, Carefree, freedom, Intimacy	Intimate days with loved ones	Not having a partner	Living the life in a way one wants to live, freedom is the most beautiful thing of life.
Chaand baaliyan 13M views	Happiness, affection, attraction, romance and admiration, feeling vulnerable in love	Happiness, and affection	—	Love is the essence of life
Meri jaan 66M views	Horny, playful, lustful sexy and sad	lascivious,	—	Love is supreme and Love is God.

## Discussion

The songs were analysed in terms of their grand themes;

**Patriotic Songs:** A patriotic song is one that makes the listener feel nationalistic,

which implies feelings of pride for the nation. Songs with patriotic lyrics show a nation's love and respect. It conveys allegiance and steadfast support for one's own country. For some, the phrase "national anthem" or "a song that gives them chills when their country's name is spoken" may be used when referring to the patriotic song. As the Table 1 shows, the major forms of emotions that were elicited by the patriotic songs were respect for soldiers, gallantry, true devotion, loyalty, being blessed, love, respect, and loyalty for the country. Though a bit of negative emotions were also aroused as these songs remind them of the memories of how soldiers had sacrificed their lives and fought for their country. The meaning of life column shows that the major form of meaning of life raised from these songs were feeling of belongingness, fulfilment, and responsibility. These show that participants felt belonged to their motherland and are attached to it along with the feeling of being at home while also being in charge of some responsibilities. The possible explanation for such pride, and gallantry is the symbolic representation used in the patriotic songs and the metaphorical connotation of lyrics, which fills the heart of listener with joy and pride for the country.

**Sad Songs:** Some songs have the power to bring a tear to one's eye. It could be brought on by bereavement, thoughts of a loved one from the past, or memories of those who have passed away. It is clear from Table 2 that the major emotions that were elicited by these group of songs were sadness, upset, feelings of hopelessness, anger despair and heartbroken. Despite being the sad songs these songs also resulted into emergence of some positive feelings like happiness, relaxed and soothing. The meaning of life section entails that these songs make the listen gravitate towards the uncertain nature of life, anything can happen; so individual should learn a lesson from mistakes and move ahead instead of ruminating the same thing. Moreover, some has also advocated about the need for self-love, and considered it as more important than love from an outside external agency. One possible explanation for such response patterns could be understood in terms of conditioning whether classical or operant. While listening to these sad music, the lyrical cues retrieved those memory that were conditioned with the individual, like recalling there ex-partners or friends, and these state and mood dependent retrieval foster the associated sadness and disappointment.

**Romantic songs:** These are songs which meant to be used for the expression of romantic love between partners whether real or imagined. As depicted in the Table 3, The major emotions that emerged by these group of songs were peace, calmness, freedom, intimacy, lust, affection, attraction, and playful. The major positive emotions indicated towards having memories of old days and longing for partner along with some hint of wanton. Despite being the romantic songs, these songs also generated some sense of disappointment, feeling of heartbroken, and the grief of not having a partner. These could be attributed to the fact that participants thought of their own relationships and these differences arise due to their individual

life experiences. Most of the participants asserted that in love is the most important thing in life, without it life is incomplete and one should aspire for true love in the life.

### **Conclusion**

Music play very significant role in human life, as nearly every walk of human existence is associated with some forms of music, whether it is wedding, funeral, birth, or any kind of celebration. Music influences us in unique ways that call for psychological explanation: it energises, astounds, calms, delights, and in other ways modifies our emotional states. The present study investigated this relation of music and emotional state. By using sentiment analysis technique data were collected through focused group technique using a total of 15 songs which were categorised into patriotic, sad and romantic songs. It was obtained that patriotic songs filled the participants with joy and pride, while the sad songs took the participants in the old memory lane and caused them to feel sadness, disappointment and angry. While the romantic songs filled them with romantic memories and the prominent emotions were happiness, longing for partner, intimacy and affection. The findings of the study implies that, a music with positive connotation can be used to uplift the mood of an individual, while a sad music can be used to calm the nerves of an agitated or frustrated individual.

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