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Research on Music Make People Happy

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Abstract. Extensive research has determined that music possesses the ability to evoke affective responses within human beings by systematically triggering the parts of the human brain that are controlled and regulated by means of dopamine. The concept of music holds an enigmatic quality, and it has been determined that it has been present throughout ancient human history as well. Hence it can be readily established that music holds a certain modicum of hedonic power that enables it to induce certain feelings of intrinsic satisfaction and happiness that can effectively mitigate the impact of mental stressors and initiate feelings of motivation, encouragement and power. This research article aims to systematically deduce the ability of music to invoke feelings of happiness within the minds of individuals. This research employed a secondary qualitative research design. A substantial body of literature was extracted from extant research publications and subjected to a systematic content analysis. Through this research, it can be readily concluded that music can potentially affect the human brain in profound ways. Listening to music can directly evoke feelings and emotions pertaining to happiness. The general happiness and satisfaction from one's life can be accurately measured through the levels of associated subjective wellbeing of a human at any particular point in time. This particular value averages at a certain level, which is representative of generalized life satisfaction in human beings and is directly proportional to happiness.

Keywords: Music, human brain, emotion, subjective wellbeing

1. Introduction

Music holds primary status as being one of the most satisfying daily activities that has the ability to evoke an affective response in human beings about happiness and joy [1] [2]. Indulging into music on a daily basis is widely considered to be a pleasurable and motivating activity that ultimately leads to higher levels of happiness and mental well-being within the minds of individuals [3]. The concept of music holds an enigmatic quality, and it has been determined that it has been present throughout ancient human history as well. Hence it can be readily established that music holds a certain modicum of hedonic power that enables it to induce certain feelings of intrinsic satisfaction and happiness that can effectively mitigate the impact of mental stressors and initiate feelings of motivation, encouragement and power [4]. This essay aims to provide a critical and elaborative discourse on how music can invoke feelings of joy and happiness within the minds of individuals. This discourse would draw upon the evidence given by extant literature regarding the connection between music and

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happiness. This essay would assess and analyse the ability of music to create happiness through both rational and emotional aspects.

2. Music Make People Happy. Examples and Evidence from Extant Literature

Previous research shows that music holds an evocative ability to induce positive emotions within the minds of the individuals [5]. Music can also be effectively deployed for the purposes of problem-solving situations and facilitation of social interactions and relationships [6]. A study done on a national level in Sweden further indicates that music is associated with lower rates of mortality [7]. The sensory properties of music allow it to possess a certain mood regulating ability which enables the people to utilise it as a strategy for the management and regulation of their emotions and moods. Through the perspective of scientific psychology, the feelings of emotions associated with happiness are termed as 'subjective wellbeing'. This subjective wellbeing also possesses the quality of stability and consistency over a certain period of time. The actual modicum or level of subjective wellbeing that a human being possesses at a specific point in time can be accurately measured through inductive techniques such as questions pertaining to satisfaction with life. While certain specific and peculiar measurement modalities are also available which focus on one particular domain of life that makes a central or significant contribution towards satisfaction, depending upon the individual and the kind of life they lead. Various studies have determined that irrespective of the measurement instrument that is deployed, this subjective wellbeing averages between 70-90% on a standardised 0-100% scale for western populations within Europe and America [8]. This subjective wellbeing is the direct determinant of an individual's own perception of the inherent quality of the life that they lead. In accordance with psychology, changes in the subjective wellbeing of humans can be accurately defined through the SWB Homeostasis Theory [4]. This theory dictates that when any external situation or stimuli threatens the set levels of subjective wellbeing below the general levels, the psychological processes within the human immediately deploy the utilisation of various internal and external resources at the disposal in order to establish some modicum of stabilisation and regulation that can restore and recover the reductions within the level of subjective wellbeing to normal set standards. These external resources can comprise of factors such as power, relationships and money while internal resources can be entirely based upon cognitive processes that reaffirm and reassure the self-worth of the individual and capitalise upon the fact that the negative situation or circumstances that have prompted these drops within the levels of their subjective wellbeing are just temporary events [9]. These internal resources are directly linked to the psychological imperatives of perceived control over a situation, optimism, and self-esteem. These coping mechanisms and restorative processes can be automatically deployed by the brain in order to effectively and instantaneously mitigate any potential factors that can threaten the subjective wellbeing. These processes can also be initiated in a deliberate manner through specially designed or facilitated modalities [10].

Music can serve to be a viable candidate for these facilitated processes or the restoration of subjective wellbeing. This viability is anchored within the inherent ability of music to evoke feelings of happiness, optimism, and empowerment as substantiated through scientific research. The widespread advent of technology in form of technological gadgets and mobile devices has further increased the accessibility and utility of music in daily lives [11]. This accessibility has intrinsically integrated music within the daily lives of people up to a degree that it is improbable and unavoidable to spend a single day without engaging in some form of musical intervention. Engagement with music in daily life comprises of both active indulgence and passive listening. Extant research literature indicates that there is a positive association between the subjective wellbeing and all modes of engagement with music. This positive association was found to hold true in the cases of people who partake into listening to music, who play instruments, who are involved in composition of music and those who undertake active participation in music festivals and music events [4]. This research has

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also dedicated a significant amount of focus towards the investigation of how adults and adolescents utilise music as a restorative process for their subjective wellbeing and happiness. It was determined that some individuals utilised music to act as a sort of diversion that allowed them to divert their attention away from a stressful or unpleasant event. These studies indicate that active participation within music has a substantially higher impact on the happiness and subjective wellbeing of individuals (Ibid.). Active participation within music possesses both physical and cognitive benefits that substantiate the levels of subjective wellbeing. Hence it can be readily concluded that there is a highly substantial body of research literature present with respect to the association of music with happiness in individuals [12].

This resultant positive impact of music upon the happiness and mental wellbeing of human beings can be directly attributed towards the social factor of engagement within music. It has been well established within the previous paragraph that there is a positive association connected with individual indulgence within music with respect to a positive impact on the emotional regulation and physical health of that individual [13]. However, this body of research also suggests that listening to music in a social setting with other people can lead to strong positive experiences and strong positive social experiences. Hence it can be established that social experiences and interaction can have a complementary impact on the positive impact of music on subjective wellbeing and happiness. The ability of music to evoke affective and cognitive responses within the bran can allow it to activate certain response centres of the brain by activating certain neurological pathways in the process [14]. Research has determined that people who struggle with the development of anxiety during certain stressful tasks like the performance of critical jobs or participating in academic tests or exams tend to have reduced levels of subjective wellbeing, which can be equated to unhappiness in broad terms. This unhappiness and stress can be effectively countered through listening to music during the performance of these stressful tasks. Listening to music within these situations leads to the development of multiple chemicals like dopamine and cortisol that effectively works towards the mitigation and reduction of stress in these situations thereby regulating the emotions and moods through induction of feelings of pleasure and joy [15].

3. How Does Music Make People Happy? Rational and Emotional Perspectives

This chapter will be based on a series of studies and publications that provide the most important insights into the subject within this field of research.

3.1. Relational Insights given by Authors

The previous section allowed for the establishment of a substantial understanding with respect to the rewarding nature of listening to music and how it can potentially play a vital role within the regulation of emotions and feelings [15]. The human brain has a particular mode of processing acts which are considered to be rewarding. The structures and parts of the human brain that are responsible for the mediation of music are segregated, both anatomically and functionally. This segregation allows for the human brain to differently process the perception and pleasure of music. This leads to a mediation process within the human brain about processing of these rewarding activities as these are directly connected to the mesolimbic system and its dopaminergic activity [16]. Music has the status of being abstract neurological stimulus that directly activates this dopaminergic activity of the brain. Various scientific studies have elaborated through the use of neurological imaging techniques that music can elicit intense emotional and affective responses within the human brain. These studies have indicated that pleasurable listening of music directly evokes the ventral striatum of the brain which alludes to the involvement of dopaminergic activities [15]. This region and other mid brain regions that house emotional receptors are controlled and regulated by dopamine in a neurochemical manner. These

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regions are also activated through other rewarding activities, such as partaking in good food and making money. These rewarding activities elicit pleasurable feelings within the human mind. This dopamine regulated region then goes on to interact with other emotional centres of the brain like the amygdala along with certain cortical networks. This system cumulatively creates a highly viable and ideal circuit for initiating and controlling the reward related responses of the human brain and encoding memories [17].

3.2. Advice Given by Researchers

Hence music can establish a certain interaction between the regions of the human brain that deal with reward responses and those dealing with the creation of memories. This neural mechanism is further substantiated when a human being establishes an effective connection between a certain musical event and important life events. This connection can be attributed towards cementing music as a vital source of dopamine generation within the human brain [18]. A study conducted as McGill University indicated that the activation of the autonomic nervous system presents a heavy increased within the density of the psychophysiological responses within the ventral striatum of the brain when that human being is subjected to hearing their favourite pieces of music [19]. Similar studies have shown a strong and significant positive correlation between activating these reward centers of the brain and increased dopamine production within these regions. These psychological processes also shed light on the ability of the human brain to dedicate or extract a certain modicum of value in response to the responses generated through music by virtue of interactional dynamics within the reward centres and auditory cortexes of the brain. Hence it can be readily established that within a rational and scientific perspective, music holds the ability to induce feeling of happiness within the minds of the human beings by virtue of a process of a dopaminergic neurotransmission within the ventral striatum of the human brain [19].

3.3. Emotional Insights Given by Authors

Aside from the rational and scientific perspective, the impact and efficacy of music in regulating the mood of individuals can also be accurately visualised through a thoroughly emotional perspective. It has been well established within the extant research literature that music is often utilised in a diverting capacity. Many individuals turn to music during certain stressful or unpleasant points or scenarios in their mind in order to divert there attention from the said problem through thorough immersion within the music and its melody to distract them from the unpleasant situation at hand [20]. A significant extant literature research body is also present based upon this emotional and immersive perspective of music. A similar effect was observed within an in depth analysis that was conducted on children going through painful medical procedures that involved the usage of needles like phlebotomies and vaccines. There is strong evidence present in literature regarding the efficacy of cognitive distractions produced by immersion into music and musical melodies and its ability to produce substantial mental distractions from pain, anxiety, and distress suffered by children during certain medical procedures. It has been determined that immersion of these children into music and musical melodies while undergoing medical procedures can serve as a highly effective source for reducing the levels of anxiety, pain and aggression that is associated by these children towards that particular procedure [20].

3.4. Emotional and Relational Evidence Generated by Practical Studies

An empirical study indicated that children who listened to musical melodies from their favourite animated movies were reported to be much more relaxed during the medical procedure, and had lower amounts of procedural anxieties [21]. Another study conducted indicated that the levels of procedural

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pain of the children who listened to classical music were significantly lower in comparison to those who did not listen to any kind of music [22]. Another systematic study published by Sittler conducted a randomised control group trial on adolescents receiving polio vaccinations [23]. It was determined that the group of participants in this research who were subjected to listening to music without any distraction reported having much lower pain levels in comparison to those who did not listen to any music. All of this extant evidence points towards the emotional impact of music. Almost all of the participants across multiple different studies conducted at different points in time indicate that there is a significant positive correlation present between reductions in the level of pain and anxiety and listening to musical melodies [19]. This is clearly indicative of the emotional immersive nature of music that evokes certain sensory responses which are communicated by the auditory cortex towards dopamine centres of the brain. These responses allow the human being to immerse him or herself within a highly rewarding and sensorily evocative experience that has immense emotional potential to distract the human mind by diverting its attention from a certain painful or stressful life scenario. Hence it can be readily declared that music is not only an artform, it is a highly viable coping mechanism that allows the human beings to effectively mitigate stress and divert their focus from negative feelings towards positive ones [2].

4. Conclusion

Through this highly elaborative discourse, it can be readily concluded that music can potentially affect the human brain in profound ways. Listening to music can directly evoke feelings and emotions pertaining to happiness. The general happiness and satisfaction from one's life can be accurately measured through the levels of associated subjective wellbeing of a human at any particular point in time. This particular value averages at a certain level which is representative of generalised life satisfaction in human beings which is directly proportional to happiness [2]. Negative and stressful events and circumstances in one's life can temper subjective well-being and cause it to fall below general levels. These drops can be effectively mitigated through listening to music. Listening to music restores the mental wellbeing and happiness of an individual through interactions between the auditory cortex and the ventral striatum of the brain which leads to enhanced levels of dopaminergic activity that is responsible for mood regulation and happiness in human beings [20]. Music has the ability to scientifically and emotionally immerse humans' psychophysiological thought processes.

This paper has aimed to provide a highly critical discourse on this research topics yet the findings generated are constrained within certain limitation regarding the scope of this study. Aspirant researchers within this research space should dedicate their efforts towards devising empirical frameworks that can be integrated with neurological mapping technologies like MRIs in order to generate statistical results that can deductively prove the ability of music to invoke happiness.

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