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Listening to Sad Music: a Narrative Review

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Abstract

As noted in the tragedy paradox, the enjoyment of negative emotions evoked in artworks is a phenomenon acknowledged from ancient times to the present. Sad music listening induces a diverse range of emotional responses in the listener: some would experience pleasure, while others find it unpleasant; hence, this review aims to categorise sad music listening from the philosophical, psychological, sociological, and scientific perspectives. This review includes studies of journal articles, review articles, books, and book chapters from 2010-2022. The philosophical perspective reviewed the paradox of the attraction towards sad music. The psychological perspective reviewed the empirical studies that examined various factors contributing to enjoying sad music. The sociological perspective reviewed how sad music can be used to create a social connection. The scientific perspective reviewed the biological effects of sad music listening. Many of the studies found are related to the psychological perspective, in which sad music can induce diverse emotions, and there are several factors that contribute to the enjoyment of sad music. As more scientific research has been emerging in recent years, future research can explore the brain correlates and hormonal stimulation in various individual differences to consolidate why some people enjoy sad music while others do not.

Keywords: music listening; sad music; narrative review; emotion

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INTRODUCTION

People usually avoid sadness in their daily lives because of its unpleasant emotion. Sadness is one of the six basic emotions (Ekman, 1992) and has low valence and low arousal, as placed in the circumplex model of effect by Russell (1980). Sadness affects changes in human behaviour and cognitive processes, and it is associated with other negative emotions that range in varying degrees, from low and distress to grief and anguish (Arias et al., 2020). Nevertheless, sadness is inevitable and can actually be useful in life. Lomas (2018) suggested sadness as a form of protection, caring, and a means of life fulfilment. On the other hand, sadness experienced in fictional works is known to be enjoyed.

Thus, the tragedy paradox describes the enjoyment of negative emotions evoked in artworks such as sad stories, sad films, and sad music. Aristotle presented the concept of catharsis, which is a popular view for solving this paradox. Many philosophers have also debated why people enjoy listening to sad music (Davies, 1997; Eaton, 1982; Levinson, 1990). They have divergent discourses between cognitivists and emotivists on whether music-induced

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emotions are real (Kivy, 2002; Konečni, 2008; Levinson, 1990). It was only during the recent decade that scholars began to empirically investigate the phenomenon of sad music listening, particularly discussing why people enjoy the negative emotions evoked. Many researchers in the field of music psychology and music and emotion have contributed to the study of sad music prolifically since 2010 (e.g., Annemieke van den Tol, 2013, 2015, 2016; Emery Schubert, 2011a, 2011b, 2013, 2015, 2016, 2018; Jonna Vuoskoski, 2012a, 2012b, 2015, 2016, 2017, 2018, 2021; Sandra Garrido, 2011a, 2011b, 2013, 2015, 2017, 2018; Tuomas Eerola, 2012a, 2012b, 2015, 2016a, 2016b, 2016c, 2017, 2018, 2021).

Studies of sad music have shown the enjoyment that is associated with when people listen to it (Garrido & Schubert, 2011a, 2013; Kawakami et al., 2013; Vuoskoski et al., 2012). They reported feeling pleasure, blithe, nostalgia, and comfort (Kawakami et al., 2013; Peltola & Eerola, 2016; Taruffi & Koelsch, 2014). Sad music can provide psychological benefits that help relieve their negative mood, or they find pleasure in the aesthetic appeal of the music (Taruffi & Koelsch, 2014; Van den Tol & Edwards, 2013). However, several studies have revealed the prevalence of negative experiences in sad music listening; for instance, the music may evoke painful memories in the listener, which causes them to feel even worse or to avoid the music (Peltola & Eerola, 2016). Sad music could also induce negative emotions such as sadness, anger, and anxiety (Eerola et al., 2015; Peltola & Eerola, 2016). Individual differences play a significant role in the enjoyment of sad music: Some may enjoy and benefit from listening to sad music, while others may not feel better after listening to it (Garrido & Schubert, 2011a, 2013; Eerola et al., 2015, Sachs et al., 2021). The psychological studies also highlight that some people listen to sad music for social purposes, either to feel closer to their loved ones or to act as a friends because they feel emotionally supported by the lyrics (Van den Tol & Edwards, 2013).

Researchers have recently examined the scientific aspects of sad music listening, such as how sad music affects brain and hormonal activity (Eerola et al., 2021; Ladinig et al., 2021; Taruffi et al., 2021). The popular theory by Huron (2011), who proposed the role of prolactin that causes pleasure when listening to sad music, was empirically tested, but the results were not consistent (Eerola et al., 2021; Ladinig et al., 2021). This shows that listening to sad music may have biological effects, but whether it causes enjoyment remains unclear.

When defining sad music, Juslin and Laukka (2004) described the following musical features: minor mode, slow tempo, low pitch, low dynamics, dissonance, descending pitch, and small intervals. These features resemble vocal expressions of sadness in humans, including low pitch, quiet dynamics, and darker timbres (Huron, 2011). In some studies of sad music, the researchers carried out listening experiments on unfamiliar sad music that were chosen by the researchers themselves (e.g., Eerola et al., 2016; Kawakami et al., 2013; Vuoskoski & Eerola, 2012, 2017; Xu et al., 2021). They evaluated the music before the experiment to ensure it conveyed sadness. However, most studies of sad music allowed their participants to define it based on their understanding, either through perceiving or feeling the sadness (e.g., Garrido & Schubert, 2015; Larwood & Dingle, 2022; Peltola & Eerola, 2016; Sachs et al., 2015; Taruffi & Koelsch, 2014; Van den Tol & Edwards, 2013). The participants were able to make their own interpretations of sad music based on the musical features, the content of the lyrics, or any past associations. This means that its typical characteristics do not solely define sad music.

The existing literature has shown that listening to sad music can be pleasant or unpleasant. The phenomenon of sad music listening is multifaceted; hence, this narrative review aims to categorise from the philosophical, psychological, sociological, and scientific perspectives to explain the diverse responses towards sad music.

METHOD

The narrative review is employed as the research methodology to summarise and critically analyse previous literature on a topic, discover any research gaps, and conclude based on the findings (Baker, 2016; Onwuegbuzie & Frels, 2016). The analysis of studies in a narrative review can be chronological, conceptual, or thematic (Grant & Booth, 2009). Therefore, the categorisation and organisation of the studies used in this review are conceptual, including philosophical, psychological, sociological, and scientific perspectives.

Search Strategy

The relevant literature was searched using the following online databases: Google Scholar, SAGE, JSTOR, ScienceDirect, and APA PsycNet. Several articles were also found in the PLOS ONE and Frontiers journals. The search strategy implemented the following primary keywords: sad music, individual differences, and pleasure. Secondary keywords that were related or synonymous with the primary keywords include sadness, music-induced sadness, listening, review, tragedy paradox, rewards, and mood regulation. These terms were also combined: sad music listening, sad music paradox, sad music review, and sad music individual differences.

Inclusion and Exclusion Criteria

Studies selected based on the relevant keywords were included with the following criteria: (1) publications of peer-reviewed academic journals, review articles, books, and book chapters; (2) written in the English language; and (3) empirical research or review articles within the publication date of 2010-2022. The exclusion criteria include studies that were published in a foreign language other than English or if the full text was not available in English.

RESULT AND DISCUSSION

The literature search identified 28 articles, reviews, books, and book chapters, as listed in Table 1 below. Among the 28 sources found, a large body of literature was examined from the psychological perspective, with 50%; however, 17.9% of the studies relating to the scientific perspective have emerged more in recent years. Studies from a philosophical standpoint comprised 25%, while the literature from the sociological perspective had the least, with 10.7% (see Table 1). One study has an overlap between the psychological and sociological perspectives.

Table 1. Categorisation of Studies on Sad Music

Categorisation of studies on sad music	Number of studies	Percentage (%)
Philosophical perspective	7	25
Psychological perspective	14	50
Sociological perspective	3	10.7
Scientific perspective	5	17.9

Philosophical perspective

The phenomenon of the tragedy paradox illustrating the enjoyment of art that expresses negative emotions has been a fervent discussion since the times of Aristotle. This led to subsequent debates by philosophers to uncover why people like sad music and whether people experience music-induced emotions.

Three studies discussed the reasons for the tragedy paradox (Destrée, 2014; Levinson, 1990; Schaper, 1968). The most common explanation given when solving the paradox is through catharsis, where pleasure is gained when feelings of pity and fear are purged through the spectator. Schaper (1968) indicated that the experience of catharsis in a work of art is a transformation of what real-life pain would be like into a satisfying feeling. Nevertheless, Levinson (1990) argued that catharsis cannot entirely solve the paradox because it implies that one would have to undergo feelings of pity and fear for them to be

purged later. He added that not everyone may listen to sad music when feeling negative, although this differed from studies that indicated that people listen to sad music when feeling sad (Peltola & Eerola, 2016; Taruffi & Koelsch, 2014; Van den Tol & Edwards, 2013). Destrée (2014) argued that mimesis, or imitation, could provide a clearer explanation for the tragedy paradox. It was mentioned in *Poetics* by Aristotle that a tragedy plot can be based on real-life people or events; thus, it can be said that a tragedy is a representation of actual historical situations that cause the spectator to feel real emotions of pity and fear while being aware that the events are not happening in real-time. Destrée then proposed that the pleasure gained by the spectator stems from the experience of feeling pity and fear in a non-threatening environment. Similarly, Taruffi and Koelsch (2014) found that the "reward of no 'real-life' implications" (p. 4) is correlated with pleasure because the sadness in the music does not come from actual life circumstances.

Four studies discussed the paradox of the enjoyment of sad music (Davies, 1997; Eaton, 1982; Garrido, 2017; Levinson, 1990). Levinson (1990) proposed eight rewards gained from listening to sad music. Some rewards are related to the sadness in the music, which has no real-life consequences. Therefore, the listener can understand and acknowledge the negative emotions safely and use it as an opportunity to be more equipped for adverse circumstances in the future. Other rewards describe how the listener empathises with the emotions in the music to the point of imagining that the emotions are their own. This imagination also allows the listener to share the emotional experience with the composer of the music. Alternatively, Davies (1997) looked into the overall perspective of enjoyment in music listening. He proposed that the understanding and appreciation of music brings pleasure, which applies to the full spectrum of listening to both happy and sad music. Eaton (1982) argued that people enjoy sad music because of the ability to be in control while listening. Garrido (2017) pointed out that these explanations are based on the personal perceptions of the philosophers themselves and not empirically investigated, while also highlighting the need for further exploration into the underlying mechanisms that influence the different emotional responses towards sad music.

Two studies discussed the musical induction of emotions based on different perspectives (Kivy, 2002; Levinson, 1990). On the one hand, the cognitivists advocate that music does not induce real emotions; therefore, one does not feel actual sadness when listening to sad music. Kivy (2002) argued that the beauty of the music arouses the listener to a state of being moved, in which they are mistaken for feeling the music's emotions. For example, sad music moves the listener through the beauty of its sadness. In contrast, emotivists believe that music induces emotions in the listener. Levinson (1990) claimed that the perception of emotions in music interrelates with the emotional responses towards it. When the listener perceives the sadness in the music, they would respond by feeling sad. The results of the empirical research on sad music show an inclination towards the emotivists' claims (e.g., Garrido & Schubert, 2015; Peltola & Eerola, 2016; Taruffi & Koelsch, 2014; Vuoskoski & Eerola, 2012).

Psychological perspective

The preference and liking of sad music are influenced by the following psychological factors organised in this review: individual differences, the reasons for listening, situational factors, and emotional responses.

Individual differences

Seven studies investigated the role of individual differences that influence whether one enjoys sad music (Eerola et al., 2016; Garrido & Schubert, 2011a, 2013, 2015; Sachs et al., 2021; Vuoskoski & Eerola, 2017; Vuoskoski et al., 2012). Trait absorption is associated with the enjoyment of sad music because these individuals find pleasure

in the negative emotions in the music (Garrido & Schubert, 2011, 2013) and in regulating positive feelings (Sachs et al., 2021). Individuals with trait empathy also enjoy sad music and exhibit strong emotional responses (Vuoskoski et al., 2012). Due to their ability to understand and relate to the emotions expressed in the music, they also feel pleasure when listening to unfamiliar sad music (Eerola et al., 2016; Vuoskoski & Eerola, 2017). Garrido and Schubert (2013) observed that those with trait reflectiveness gain psychological benefits from listening to sad music by reappraising their life situation and purging their sadness. Similar to the trait of empathy, they can also relate to the music's sadness, knowing that they are not alone in feeling sad (Garrido & Schubert, 2015). Some studies found trait rumination is associated with habitual listening to sad music because of the attentional bias toward negative stimuli. Garrido and Schubert (2013) found that ruminators listen to sad music to connect with it and experience catharsis, but this did not indicate any enjoyment. However, a recent study by Sachs et al. (2021) found that ruminators experience positive and negative emotions when listening to sad music for catharsis. They also reported that ruminators enjoy sad music to strengthen positive emotions. This raises more discussion in future research on whether ruminators are aware of adaptive listening strategies despite their constant negative thinking.

Reasons for listening to sad music

Four studies examined the reasons for listening to sad music (Eerola et al., 2015; Peltola & Eerola, 2016; Taruffi & Koelsch, 2014; Van den Tol & Edwards, 2013). People listen to sad music because it is congruent with their mood (Hunter et al., 2011). Van den Tol and Edwards (2013) identified this listening strategy as "connection" (p. 447) because the emotions or lyrics in the music reflect the mood or situation of the listener. This strategy is paired with the function of sad music to "(re-) experience affect" (p. 449), which allows them to be in touch and intensify their emotions, leading to catharsis. Peltola and Eerola (2016) reported participants who were grieving experienced catharsis while listening to sad music. They find relief in letting out the pain and sorrow, which is in line with the "(re-)experiencing affect" function to regulate mood. People also listen to sad music to reminisce about memories, and both positive and negative effects are reported. While some felt nostalgia and a closer bond with their loved ones (Van den Tol & Edwards, 2013), others were reminded of painful memories that caused them to feel worse after listening (Peltola & Eerola, 2016). Listening to sad music can provide social or emotional support to the listener during difficult periods of life. As if speaking to the listener, sad music can act as a comforting friend, which makes the listener feel understood and less lonely (Van den Tol & Edwards, 2013). Likewise, Taruffi and Koelsch (2014) noted that the consolatory function of sad music creates a virtual social bond with the listener by sharing the same mood, resembling an act of empathy. Their findings also noted that providing consolation is one of the prevalent and unique uses of sad music, in comparison to happy music, where people use it more for entertainment purposes or to elevate their energy level during physical activity. Some people use sad music to think more rationally or to understand a certain perspective (Van den Tol & Edwards, 2013). This cognitive purpose of sad music allows the listener to ponder on their life events and reorganise their thoughts, as demonstrated in those with high reflectiveness. Others have reported listening to sad music as they are attracted to the music's aesthetic or emotion itself, as shown in those high in trait absorption. Peltola and Eerola (2016) described the participants who engage in sad music as experiencing aesthetic pleasure and found it enjoyable because the sadness in the music is fictional; hence, they would not have to face it in reality.

Situational factors

Four studies examined the situatio-

nal factors by which people listen to sad music (Eerola & Peltola, 2016; Hunter et al., 2011; Sachs et al., 2021; Taruffi & Koelsch, 2014). It is known that people in a sad mood would engage with sad music and show a liking towards it as the emotions expressed in the music are congruent with their current mood (Hunter et al., 2011). Studies of sad music corroborated that people frequently engage with it during difficult periods of life such as trauma, failure, loss, death, illness, or separation from loved ones. Taruffi and Koelsch (2014) also identified other common situations, including loneliness or homesickness before bedtime, travelling, and being in nature. Eerola and Peltola (2016) specifically explored memorable experiences involving sad music, and while most encounter such experiences during times of distress, it is also revealed that people hear sad music in unforeseen situations, such as in public spaces or hearing through the radio. Although most of these experiences take place in private settings, sad music listening also occurs in the presence of others, such as in concerts or during intimate moments with loved ones. Sachs et al. (2021) found a link between personality traits and situational factors. Those associated with fantasy listen to sad music when they miss someone or while going through a breakup and experience strong emotions to release their negative feelings. Meanwhile, those high in openness to experience listen to sad music during a party or a gathering with friends. This shows that different personality traits have different ways of coping with adverse situations, which serve implications for music therapy.

Emotional responses

Five studies investigated the emotional responses towards sad music (Eerola et al., 2015; Eerola et al., 2016; Kawakami et al., 2013; Peltola & Eerola, 2016; Vuoskoski & Eerola, 2017). Listeners have indicated feeling pleasurable emotions while listening to sad music, such as blithe, peacefulness, romantic, tenderness, transcendence, and being moved (Eerola et al., 2016; Kawakami et al., 2013; Taruffi & Koelsch, 2014). Reports of positive emotions are usually associated with unfamiliar sad music (Eerola et al., 2016; Kawakami et al., 2013). The results from Eerola et al. (2016) revealed mostly positive responses towards sad music, which includes "relaxing sadness" and "moving sadness" (p. 4). Individual differences were further investigated, and a significant correlation was found between trait empathy and "moving sadness." This suggests that those high in empathy can identify with the sadness in the music and be immersed in it, which elicits a strong, emotional response that causes them to enjoy sad music. Kawakami et al. (2013) suggested that the pleasure felt in listening to sad music is due to the vicarious nature of the sadness in the music. Although the listener may feel sad, they would also feel pleasure because the music-evoked sadness is non-threatening and does not have extramusical associations.

While some people enjoy the sadness in sad music, some feel sadness and other negative emotions, which makes the listening experience unpleasant. Eerola et al. (2015) reported that 10-17% of their participants gave high ratings for statements describing that listening to sad music makes them tired or anxious. The study highlighted the negative attitudes towards sad music, which was not thoroughly explored as earlier studies had used convenience samples of participants who showed interest in the topic of sad music (e.g., Garrido & Schubert, 2013). Peltola and Eerola (2016) further revealed the prevalence of negative experiences relating to sad music listening. They found three themes relating to the listening experiences of sad music, and the negative themes were reported by 66% of the participants. The theme of "grief" (p. 90) describes extremely negative experiences where people feel anger, anxiety, despair, and guilt because sad music induces painful memories or unwanted thoughts of loss and death, hence making it unbearable or unpleasant. A few participants reported feeling cathartic grief when they allowed themselves to be lost in the music,

which acknowledges the power of music to alleviate painful feelings and provide relief and comfort. "Melancholia" (p. 93) depicts mildly negative experiences with emotions such as sadness, disappointment, tiredness, and depression. Typically, these experiences were reported when sad music evoked good and bad memories in the listener, which did not necessarily result in a pleasant listening experience, but rather, the listener felt mixed emotions of bittersweet nostalgia. This notion contrasts with Kawakami et al. (2013), who reported pleasure in the ambivalent response towards sad music. The difference in the results may be that Kawakami et al. used unfamiliar sad music in their study, whereas Peltola and Eerola conducted an open-ended survey on the experiential level of sad music listening, where it is more likely that people engage with familiar sad music. This indicates that the extent to which the listener is familiar with sad music affects their emotional response towards it.

Sociological Perspective

Music as a social stimulus has the power to unite people within a culture or across different cultures to create a sense of belonging in society. To date, relatively little research has focused on the sociological perspective of sad music listening, but there is an overlap with the findings from the psychological studies.

Two studies investigated social-related reasons for listening to sad music (Eerola et al., 2018; Van den Tol & Edwards, 2013). Van den Tol and Edwards (2013) observed that some people listen to sad music to gain a social connection with their loved ones or to be encouraged by the message of the lyrics. A review by Eerola et al. (2018) identified that sad music can be a social surrogate that acts as a virtual person or friend to connect with the listener. This is apparent in songs with lyrics, as the listener can comprehend the message in the music. As the listener identifies with the lyrics, one may feel emotionally supported by the music and experience pleasure. Sad music can also evoke nostalgia when people recall pleasant memories with their loved ones, which causes them to feel pleasure.

One study investigated how the response of being moved towards sad music could give rise to prosocial behaviour (Vuoskoski & Eerola, 2017). They conducted a listening experiment of unfamiliar sad music and identified that feelings of being moved as a pleasurable response towards sad music, which is observed in those with trait empathy. They further suggested that being moved is an emotion that gives rise to the prosocial behaviour of helping others, as supported by Menninghaus et al. (2015), who found that the feelings of being moved are elicited when exposed to fictional artworks including music, which promotes social bonding and helping behaviour and is displayed in those with personality traits of empathy and openness to experience.

Scientific Perspective

In more recent years, there has been a growing interest among scholars of biological psychology in examining the scientific aspects related to sad music listening. Studies in neuroscience and endocrinology investigate how sad music affects brain and hormonal activity.

Two studies were related to neuroscience: Sachs et al. (2015) inferred that the pleasurable response towards sad music involves a combination of neural processes. In processing real-life and music-induced sadness, four common brain regions are activated: the caudate nucleus, hippocampus, parahippocampal gyrus, and amygdala. The hippocampus and parahippocampal gyrus also recognise negative qualities in the music, such as minor mode, dissonance, and low arousal. When the musical properties, learned associations and emotional expression of the music are assessed, the frontal lobe cortices and the anterior cingulate cortex are activated in the process of aesthetic judgement to determine the beauty or expressivity of the music. The brain also undergoes reward processing as it is known that sad music

provides certain psychological rewards or benefits, such as connecting with one's emotions or purging negative emotions. Taruffi et al. (2021) specifically examined the neural responses towards sad music in trait empathy and found that the areas of the brain involved in generating feelings of compassion, social cognition, and mental imagery were activated. These results show that empathic individuals feel positive in listening to sad music, which concurs with previous studies that demonstrated the ability of empathic individuals to understand the emotions in the music, as well as the capacity to shift themselves into its narrative and build mental images based on it (Sachs et al., 2021, Vuoskoski et al., 2012).

Three studies were related to endocrinology: One study proposed the prolactin theory to explain the pleasure of sad music. (Huron, 2011). When one is sad while listening to sad music, their body responds by releasing the hormone even though they are not in actual psychological pain. The consoling effect of prolactin is what makes the listening experience pleasurable. Huron's theory has been widely cited since. Still, it was not empirically investigated until Ladinig et al. (2021) decided to test out the theory in an experiment measuring prolactin levels in response to happy and sad music involving participants who enjoy and do not enjoy sad music. The results were inconsistent with Huron's theory: No significant increase in prolactin levels was reported in both groups of participants after listening to sad music; instead, there was a great decrease in pleasure compared to the increase in pleasure after listening to happy music. An explanation that the authors suggested for these insignificant results could be attributable to the use of familiar sad music chosen by the participants, which could potentially induce feelings of genuine sadness instead of aesthetic sadness that is known to be evoked by fictional works. Previous studies have demonstrated that people feel negative emotions when listening to familiar sad music due to the evocation of distressing memories or reminders of tragic events (Peltola & Eerola, 2016; Van den Tol & Edwards, 2013) whereas sadness as an aesthetic emotion is enjoyed usually when listening to unfamiliar sad music (Kawakami et al., 2013; Vuoskoski & Eerola, 2017). Likewise, the findings from Eerola et al. (2021) did not support Huron's theory. They conducted a listening experiment using unfamiliar sad music and examined the changes in prolactin and oxytocin levels in 62 adult women with high and low empathy. The participants with high empathy, who reported a stronger emotional response and increased positive mood, exhibited a decrease in prolactin and oxytocin levels during the listening of sad music than those of lower empathy. This pleasurable response towards sad music activates the dopaminergic system, which in turn inhibits the secretion of prolactin.

Discussion

Figure 1 shows the categorisation from the philosophical perspective of sad music listening based on three concepts: tragedy paradox, enjoyment of sad music, and music-induced emotions. The tragedy paradox describes the enjoyment of sadness evoked in fictional works, in contrast to real-life sadness. This enjoyment can be explained through the opportunity for the catharsis of the feelings of pity and fear (Schaper, 1968) or the experience of mimetic representations of pity and fear in a safe environment (Destrée, 2014). Specifically, the enjoyment of sad music can be explained through the rewards proposed by Levinson (1990), the overall understanding and enjoyment of listening to music (Davies, 1997), or the ability to be in control of the listening (Eaton, 1982).

Thus, the concept of catharsis alone cannot account for the paradox of enjoyment of sad music. Although, commonly, people seek out sad music to connect and relieve their negative emotions, there are other reasons to consider, such as evaluating life situations or appreciating the beauty of the music (Van den Tol & Edwards, 2013). Not everyone can purge

their negative emotions effectively, ruminators may feel sadder after listening because of their maladaptive habit of being attracted to negative stimuli (Garrido & Schubert, 2013, 2015). Besides that, philosophers have debated whether music can induce real emotions in the listener or not. The empirical findings revealed that sad music induces emotions in the listener, which indicates their enjoyment of it (e.g., Eerola et al., 2016; Garrido & Schubert, 2015; Taruffi & Koelsch, 2014; Vuoskoski & Eerola, 2012).

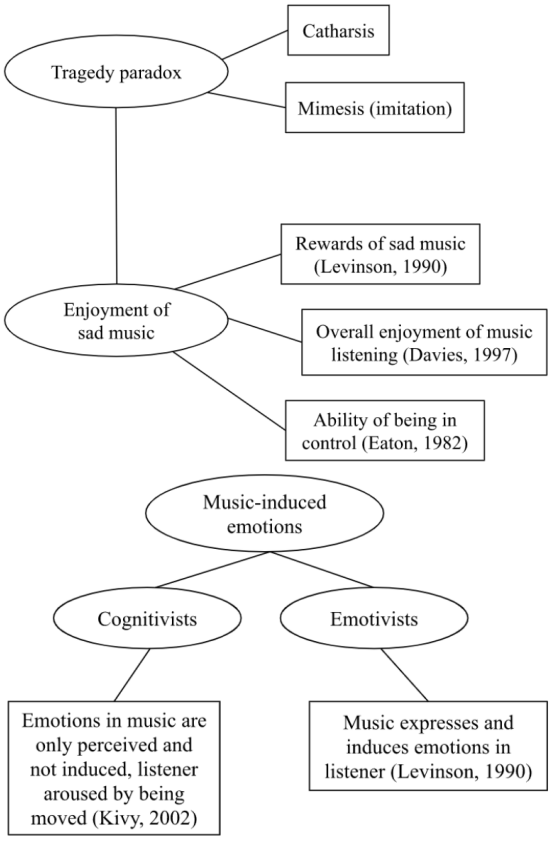

Figure 1. Categorisation from the Philosophical Perspective of Sad Music Listening

Figure 2 presents the categorisation from the psychological perspective with four factors that account for the enjoyment of sad music. The individual differences refer to the personality traits of absorption, empathy, reflectiveness, and rumination. Differences in personality traits also shape the liking and preference for sad music (Garrido & Schubert, 2011, 2013). Previous research has established that people listen to sad music to regulate their negative mood (Taruffi & Koelsch, 2014; Van den Tol & Edwards, 2013), though at times, one cannot achieve the desired outcome of improving their negative mood because of individual differences. Several mood regulation strategies such as connection, reminiscing memories, consolation and comfort, cognitive, and aesthetic appeal were identified. In general, people listen to sad music when feeling sad due to difficult life circumstances such as loss or failure, but it can also happen in less stressful situations, such as before going to bed or being surrounded by nature (Taruffi & Koelsch, 2014). Furthermore, there are unexpected encounters with sad music and experiences of sad music listening with other people, such as in a concert or with a loved one (Eerola & Peltola, 2016). Studies have not made clear if listening to sad music is commonly done privately or with others, although it can be assumed that people usually listen to sad music alone through the findings on situational factors.

Subsequently, listening to sad music induces positive and negative emotional responses, sometimes eliciting mixed emotions in the listener (Eerola et al., 2015; Kawakami et al., 2013; Peltola & Eerola, 2016). When sad music induces positive emotions, the listener finds pleasure in the music and enjoys it. However, the listener would find it disagreeable when sad music makes them feel negative emotions. Kawakami et al. (2013) revealed that sad music also induces mixed emotions: The listener feels pleasure because the sadness induced by the music does not affect them in reality, which is in line with enjoying sad music due to the "reward of no 'real-life' implications" (Taruffi and Koelsch, 2014, p. 4). Nostalgia is also reported when people listen to sad music to evoke memories (Garrido & Schubert, 2013; Taruffi & Koelsch, 2014; Van den Tol & Edwards, 2013), although the outcome may vary depending on individual differences (Garrido, 2017).

It should be noted that the four factors are not mutually exclusive; they can be interrelated. Studies have shown seve-

ral relationships, such as how certain individual differences influence the emotional response towards sad music (Eerola et al., 2016; Garrido & Schubert, 2015; Vuoskoski et al., 2012) and the use of sad music (Garrido & Schubert, 2013; Sachs et al., 2021).

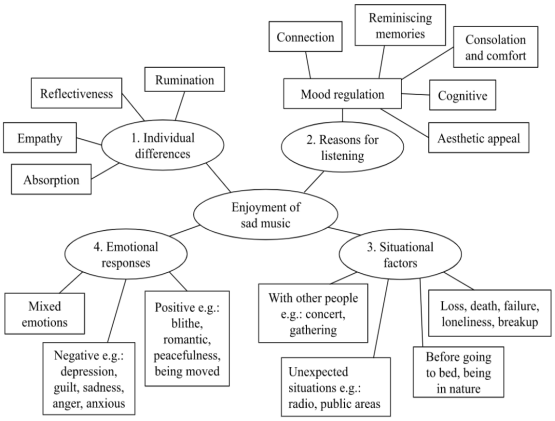

Figure 2. Categorisation from the Psychological Perspective of Sad Music Listening

Figure 3 shows the categorisation from the sociological perspective of sad music listening based on three concepts: social surrogacy, nostalgia, and feelings of being moved. Sad music allows one to feel closer to those they cherish when they are reminded of fond memories (Eerola et al., 2018; Van den Tol & Edwards, 2013). The listener can also gain a social connection with the music itself by identifying with the content of the lyrics, therefore, sad music acts as a virtual person or friend to provide emotional support or consolation to the listener (Hanser et al., 2016). The enjoyment of sad music is also attributed to feelings of being moved, and trait empathy further promotes this sort of strong emotional response towards sad music (Vuoskoski & Eerola, 2017). According to Menninghaus et al. (2015), being moved promotes social bonding and generates prosocial behaviour to help others, which is driven by trait empathy. The studies relating to the sociological perspective overlap with the psychological perspective in terms of the reasons for listening to sad music and the emotional response toward it.

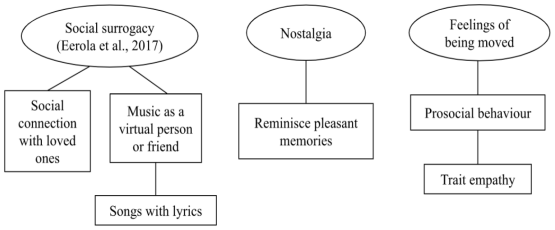

Figure 3. Categorisation from the Sociological Perspective of Sad Music Listening

Figure 4 displays the categorisation from the scientific perspective covering two branches of medicine: neuroscience and endocrinology. Sachs et al. (2015) reviewed that pleasurable music-induced sadness incorporates a combination of processes in the brain that involves recognition of the sadness in the music, the judgement of the beauty of music, and providing psychological benefits. In a specific study investigating neural responses in individuals with high trait empathy, Taruffi et al. (2021) found the activated brain regions during sad music listening involve generating compassion, mental imagery, and social cognition. Sad music also affects the levels of prolactin and oxytocin hormones, but the changes do not indicate any enjoyment, as shown in Ladinig et al. (2021) and Eerola et al. (2021). This contradicts Huron's (2011) popular theory who proposed that pleasure found in sad music is caused by a release of prolactin that has a comforting function. It is still unclear what hormones are stimulated in sad music listening. Eerola et al. suggested the stimulation of dopamine for the positive mood felt in highly empathic individuals, but their study did not test it.

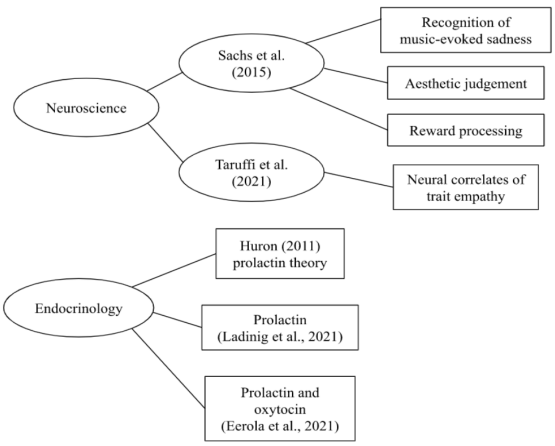

Figure 4. Categorisation from the Scientific Perspective of Sad Music Listening

CONCLUSIONS

This narrative review has organised sad music listening from four perspectives: philosophical, psychological, sociological, and scientific. The findings of the extant literature reveal a large body of evidence for the psychological aspect, where several factors affect an individual's response to sad music. The psychological studies also confirmed the philosophical claims on why one enjoys listening to sad music or whether one feels sad when listening to it. So far, few studies have focused on the sociological perspective, in which future research can explore sad music as a social stimulus. Subsequently, a diagram for each of the perspectives was created to categorise the different aspects of sad music listening.

These findings suggest that sad music induces real emotions, just as any other stimuli that evoke emotional arousal, through the participants' reports, emotional processing in the brain, and changes in hormone levels in response to the music. Considering that people have different personality traits, it is expected that there would be diverse responses towards sad music. The difference in personality traits also activates specific brain regions that indicate whether the listener likes or dislikes sad music. Sad music can even promote behaviour that intends to help others and benefit society, at least for those with high trait empathy. Furthermore, sad music has multiple strategies to regulate mood: The listener uses sad music to connect with the lyrics that match their emotional state or seek comfort and consolation because they want to feel understood in their current situation. Such rewarding strategies can potentially be functional interventions in palliative care or music therapy.

As sad music studies in the biological psychology field have been rising lately, future research could further investigate the brain correlates and hormonal stimulation in various individual differences such as absorption, reflectiveness, and rumination to consolidate why certain individuals enjoy sad music while others do not. Exploring the types of sad music that allow for a pleasurable or unpleasant response in the listener could further elucidate the enjoyment of sad music. Warrenburg (2020) identified two types of sad music: melancholic and grieving music. Melancholic music can induce positive or mixed emotions, whereas grieving music can elicit a negative response. Future research could investigate sad music as an intervention in music therapy and palliative care to help patients alleviate or purge their negative moods. Lastly, it was observed that the sociological perspective of sad music listening is always studied with the psychological perspective, so future research could consider the feasibility of studying the sociological perspective independently.

In conclusion, sad music can be enjoyable to some, but it also allows for past wounds to resurface.

REFERENCES

Arias, J. A., Williams, C., Raghvani, R., Aghajani, M., Baez, S., Belzung, C., Booij, L., Busatto, G., Chiarella, J., Fu, C. H. Y., Ibanez, A., Liddell, B. J., Lowe, L., Penninx, B. W. J. H., Rosa, P., & Kemp, A. H. (2020). The neuroscience of sadness: A multidisciplinary synthesis and collaborative review. *Neuroscience Biobehavioral Reviews, 111*, 199-228. https://doi.org/10.1016/j.neubiorev.2020.01.006

Baker, J. D. (2016). The purpose, process, and methods of writing a literature review. *AORNJournal, 103*(3), 265–269. https://doi.org/10.1016/j.aorn.2016.01.016

Davies, S. (1997). Why listen to sad music if itmakes one feel sad? In J. Robinson(Ed.), *Music and meaning* (pp. 242-253).Cornell University Press.

Destrée, P. (2014). Aristotle on the paradox oftragic pleasure. In J. Levinson (Ed.),*Suffering art gladly: The paradox ofnegative emotion in art* (pp. 3-27). PalgraveMacmillan.

Eaton, M. M. (1982). A strange kind of sadness.*The Journal of Aesthetics and Art-Criticism, 41*(1), 51-63. https://doi.org/10.2307/430823

Eerola, T., & Peltola, H.-R. (2016). Memorable experiences with sad music—Reasons, reactions and mechanisms of three types of experiences. *PLOS ONE*, *11*(6), 1-29. https://doi.org/10.1371/journal.pone.0157444

Eerola, T., Peltola, H.-R., & Vuoskoski, J. K. (2015). Attitudes toward sad music are related to both preferential and contextual strategies. *Psychomusicology: Music, Mind, and Brain 25*(2), 116-123. https://doi.org/10.1037/pmu0000096

Eerola, T., Vuoskoski J. K., & Kautiainen, H. (2016).Being moved by unfamiliar sad music isassociated with high empathy. *Frontiers inPsychology, 7* (1176), 1-12.https://doi.org/10.3389/fpsyg.2016.0117

Eerola, T., Vuoskoski, J. K., Kautiainen, H., Peltola, H.-R., Putkinen, V., & Schäfer, K. (2021). Being moved by listening to unfamiliar sad music induces reward-related hormonal changes in empathic listeners. *Annals of the New York Academy of Sciences*, *1502*(1), 121–131. https://doi.org/10.1111/nyas.14660

Eerola, T., Vuoskoski, J. K., Peltola, H.-R., Putkinen, V., & Schäfer, K. (2018). An integrative review of the enjoyment of sadness associated with music. *Physics of Life Reviews*, *25*, 100–121. https://doi.org/10.1016/j.plrev.2017.11.016

Ekman, P. (1992). An argument for basic emotions. *Cognition and Emotion*, *6*(3–4), 169–200. https://doi.org/10.1080/02699939208411068

Garrido, S. (2017). *Why are we attracted to sad music?*Palgrave Macmillan.

Garrido, S., & Schubert, E. (2011a). Individual differences in the enjoyment of negative emotion in music: A literature review and experiment. *Music Perception, 28*(3), 279-296. https://doi.org/10.1525/mp.2011.28.3.279

Garrido, S., & Schubert, E. (2011b). Negative emotion in music: What is the attraction? A qualitative study. *Empirical Musicology Review, 6*(4), 214-230. https://doi.org/10.18061/1811/52950

Garrido, S., & Schubert, E. (2013). Adaptive and maladaptive attraction to negative emotions in music. *Musicae Scientiae, 17*(2), 147-166. https://doi.org/10.1177/1029864913478305

Garrido, S., & Schubert, E. (2015). Moody melodies: Do they cheer us up? A study of the effect of sad music on mood. *Psychology of Music, 43*(2), 244–261. https://doi.org/10.1177/0305735613501938

Grant, M. J., & Booth, A. (2009). A typology of reviews: An analysis of 14 review types and assocrespondslogies. *Health Information and Libraries Journal*, *26*(2), 91–108. https://doi.org/10.1111/j.1471-1842.2009.00848.x

Hanser, W. E., Ter Bogt, T. F. M., Van den Tol, A. J. M., Mark, R. E., & Vingerhoets, A. J. J. M. (2016). Consolation through music: A survey study. *Musicae Scientiae*, *20*(1), 122–137. https://doi.org/10.1177/1029864915620264

Hunter, P. G., Schellenberg, E. G., & Griffith, A. T. (2011). Misery loves company: Mood-congruent emotional responding to music. *Emotion*, *11*(5), 1068–1072. https://doi.org/10.1037/a0023749

Huron, D. (2011). Why is sad music pleasurable? A possible role for prolactin. *Musicae Scientiae, 15*(2), 146–158. https://doi.org/10.1177/1029864911401171

Juslin, P. N., & Laukka, P. (2004). Expression, perception, and induction of musical emotions: A review and a questionnaire study of everyday listening. *Journal of New Music Research, 33*(3), 217-238. https://doi.org/10.1080/0929821042000317813

Kawakami, A., Furukawa, K., Katahira, K., &Okanoya, K. (2013). Sad music inducespleasant emotion. *Frontiers in Psychology,4*(311), 1-15.https://doi.org/10.3389/fpsyg.2013.00311

Kivy, P. (2002). *Introduction to a philosophy of music*. Clarendon Press.

Konečni, V. J. (2008). Does music induce emotion? A theoretical and methodological analysis. *Psychology of Aesthetics, Creativity, and the Arts, 2*(2), 115–129. https://doi.org/10.1037/1931-3896.2.2.115

Ladinig, O., Brooks, C., Hansen, N. C., Horn, K., & Huron, D. (2021). Enjoying sad music: A test of the prolactin theory. *Musicae Scientiae*, *25*(4), 429–448. https://doi.org/10.1177/1029864919890900

Larwood, J. L. & Dingle, G. A. (2022). The effects of emotionally congruent sad music listening in young adults high in rumination. *Psychology of Music, 50*(1), 218-229. https://doi.org/10.1177/0305735620988793

Levinson, J. (1990). Music and negative emotion.In J. Levinson (Ed.), *Music, art, andmetaphysics: Essays in philosophical aesthetics*(pp. 306-335). Cornell University Press.

Lomas, T. (2018). The quiet virtues of sadness: A selective theoretical and interpretative appreciation of its potential contribution to wellbeing. *New Ideas in Psychology, 49*, 18–26. https://doi.org/10.1016/j.newideapsych.2018.01.002

Menninghaus, W., Wagner, V., Hanich, J., Wassiliwizky, E., Kuehnast, M., & Jacobsen, T. (2015). Towards a psychological construct of being moved. *PLOS ONE*, *10*(6), 1-33. https://doi.org/10.1371/journal.pone.0128451

Onwuegbuzie, A. J., & Frels, R. (2016). *Seven stepsto a comprehensive literature review: Amultimodal and cultural approach*. SAGEPublications Ltd.

Peltola, H.-R., & Eerola, T. (2016). Fifty shades of blue: Classification of music-evoked sadness. *Musicae Scientiae, 20*(1), 84–102. https://doi.org/10.1177/1029864915611206

Russell, J. A. (1980). A circumplex model of affect.*Journal of Personality and Social Psychology,39*(6), 1161-1178.https://doi.org/10.1037/h0077714

Sachs, M. E., Damasio, A., & Habibi, A. (2015). The pleasures of sad music: A systematic review. *Frontiers in Human Neuroscience, 9*(404), 1-12. https://doi.org/10.3389/fnhum.2015.00404

Sachs, M. E., Damasio, A., & Habibi, A. (2021). Unique personality profiles predict when and why sad music is enjoyed. *Psychology of Music*, *49*(5), 1145–1164. https://doi.org/10.1177/0305735620932660

Schaper, E. (1968). Aristotle's catharsis and aesthetic pleasure. *The Philosophical Quarterly, 18*(71), 131–143. https://doi.org/10.2307/2217511

Schubert, E. (2016). Enjoying sad music: Paradox or parallel processes? *Frontiers in Human Neuroscience*, *10*(312), 1-8. https://doi.org/10.3389/fnhum.2016.00312

Schubert, E., Halpern, A. R., Kreutz, G., & Garrido, S. (2018). Attraction to sad music: The role of imagery, absorption, and rumination. *Psychology of Aesthetics, Creativity, and the Arts*, *12*(3), 251–258. https://doi.org/10.1037/aca0000160

Taruffi, L., & Koelsch, S. (2014). The paradox of music-evoked sadness: An online survey. *PLOS ONE, 9*(10), 1-17. https://doi.org/10.1371/journal.pone.0110490

Taruffi, L., Skouras, S., Pehrs, C., & Koelsch, S. (2021). Trait empathy shapes

neural responses toward sad music. *Cognitive, Affective, & Behavioral Neuroscience*, *21*(1), 231–241. https://doi.org/10.3758/s13415-020-00861-x

Van den Tol, A. J. M. (2016). The appeal of sadmusic: A brief overview of currentdirections in research on motivations forlistening to sad music. *The Arts inPsychotherapy, 49*, 44-49.https://doi.org/10.1016/j.aip.2016.05.008

Van den Tol, A. J. M., & Edwards, J. (2013). Exploring a rationale for choosing to listen to sad music when feeling sad. *Psychology of Music, 41*(4), 440–465. https://doi.org/10.1177/0305735611430433

Van den Tol, A. J. M., & Edwards, J. (2015). Listening to sad music in adverse situations: How music selection strategies relate to self-regulatory goals, listening effects, and mood enhancement. *Psychology of Music*, *43*(4), 473–494. https://doi.org/10.1177/0305735613517410

Van den Tol, A. J. M., Edwards, J., & Heflick, N. A. (2016). Sad music as a means for acceptance-based coping. *Musicae Scientiae, 20*(1), 68–83. https://doi.org/10.1177/1029864915627844

Vuoskoski, J. K., & Eerola, T. (2012). Can sad musicreally make you sad? Indirect measures ofaffective states induced by music andautobiographical memories. *Psychology ofAesthetics, Creativity, and the Arts, 6*(3),204–213. https://doi.org/10.1037/a0026937

Vuoskoski, J. K., & Eerola, T. (2017). The pleasure evoked by sad music is mediated by feelings of being moved. *Frontiers in Psychology*, *8*(439), 1-11. https://doi.org/10.3389/fpsyg.2017.00439

Vuoskoski, J. K., Thompson, W. F., McIlwain, D., & Eerola, T. (2012). Who enjoys listening to sad music and why? *Music Perception*, *29*(3), 311–317. https://doi.org/10.1525/mp.2012.29.3.311

Warrenburg, L. A. (2020). Redefining sad music: Music's structure suggests at least two sad states. *Journal of New Music Research 49*(4), 373-386. https://doi.org/10.1080/09298215.2020.1784956

Xu, L., Zheng, Y., Xu, D., & Xu, L. (2021). Predicting the preference for sad music: The role of gender, personality, and audio features. *IEEE Access, 9*, 92952–92963. https://doi.org/10.1109/ACCESS.2021.3090940