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Music and Healing Rituals

Gemma Perry and Vince Polito

Many cultures around the world believe that music can be used for healing. When music is used in this way, it is usually part of a ritual or religious event that is highly significant to the culture in which it is found. Global traditions have used music in rituals to cure illnesses, enhance spiritual development, prevent future diseases, and treat psychological disorders. Ritualistic uses of music for healing typically take the form of chanting. Chanting is a type of singing that is usually performed in groups, is often repetitive, and can have symbolic or narrative meaning. In most contexts in which chanting occurs, ritualistic music is treated with an attitude of reverence as there are often strong beliefs about its religious or spiritual effects. In many cultures, chanting is considered a spiritual practice that can facilitate healing and assist practitioners to enter deep states of meditation.

Musical Beliefs and Traditions

Beliefs about the effects of music and its power to heal vary from culture to culture, and different traditions use music in a range of ways to bring about change in people's lives. Common to all such traditions, however, is a strong association between participation in musical ritual and positive psychological and physiological benefits.

Native Americans

Musical rituals are an important part of many traditional Native American cultures, however, there are diverse languages, beliefs, and ceremonies across these traditions and chanting practices vary considerably from tribe to tribe. Commonly, Native American people use singing and chanting in a range of rituals as a form of prayer. Rituals can incorporate sounds from within nature as well as instruments, such as drums and rattles, along with ceremonial dance. Songs are used to invoke elements of the natural and spiritual world, to offer promises, and to ask for guidance and healing. There are specific ceremonies for healing sickness, connecting to spirit beings, initiation, restoring harmony in relationships, success in growing crops, hunting, changing weather patterns or expressing gratitude to nature. It is believed that songs sung in a sacred setting can be heard by ancestors and nature spirits and that these can offer inspiration, fortune and healing.

Indigenous Australians

Indigenous Australians lived in Australia for thousands of years prior to the arrival of westerners. There are hundreds of distinctive indigenous cultures and languages across the continent. Indigenous Australians use music rituals such as chanting to connect to the land and the spirit world in order to calm the mind, maintain social health and strengthen community. It is believed that chanting ceremonies, along with sacred objects and body painting, put individuals and groups in direct contact with the Ancestral world. According to these traditions, ancestors can take natural forms such as rocks, trees and rivers, so these chanting practices are also a way for people to connect with country. Indigenous Australians encode and pass on detailed cultural, geographic and historical traditions in chants known as 'song lines.' These songs are vital for survival in this tradition as they provide a means of traversing the vast landscape. Navigating the land through song is done by chanting stories which record pathways across the country and the sky. By singing these songs in sequence, people can navigate the land, finding water, food and protection from the environment. These songs are also used together with neighbouring communities for sacred ceremonies and trading. This makes music a fundamental part of Indigenous Australian culture, promoting connection with other tribes in the country, and strong social bonds. Music is also used in Indigenous Australian cultures for healing. Elders of the tribe learn particular sacred songs that are believed to have healing properties for their family group. These songs can only be

sung by initiated men or women and are used to treat sickness and disease or to counteract evil influences.

Islam

Islam is one of the major world religions with followers of this faith called Muslims. In the Islamic tradition, prayers are chanted daily as a reminder of an individual's connection and surrender to God. These chants have gestures to accompany them such as bowing down or placing the hands by the side or in front of the chest. There are five daily calls to prayer, which are a reminder for people to connect with God by chanting devotional phrases. These prayers are said to invoke the 99 attributes of God, which are qualities such as peace, kindness and justice. Focusing on these qualities assists the person chanting these prayers to feel God's love and compassion. The regularity of this activity means that this musical ritual is a highly learned and natural activity for practicing Muslims. This ritual is also a way of strengthening community bonds as people often gather in Mosques, promoting social connection through coordinated behaviour and the common interest of bringing their awareness to religious and spiritual beliefs.

Buddhism

Buddhism is the main religion of many countries in south east Asia, however, it is sometimes said to be a philosophy rather than a religion. It emphasises that everyone has the capacity to reach 'enlightenment' - said to be a state of consciousness beyond the disturbances of the mind and the ego. There are two basic principles of Buddhism; the interdependent nature of all things and the practice of non-violence which is the behaviour that stems from the belief system that nature is interdependent. Although there are many different Buddhist traditions, chanting is a common practice. Chanting is used as part of formal religious rituals and also as a tool to prepare the mind for meditation. Chanting in Buddhism typically takes the form of

reciting sections from Buddhist sacred texts, known as sutras. In some Buddhist traditions, repetitious chanting is used to focus awareness entirely on a spiritual symbol. Buddhists believe that these symbols can enhance the effects of chanting and have positive influences on their lives. Buddhism also acknowledges many psychological benefits of chanting and it is believed that the practice can heal, protect, increase emotional stability, patience, inner strength and peace. In Buddhist traditions, ignorance, attachment and hatred are said to be the three poisons of the human psyche and chanting is believed to be one of the practices that can eradicate these disturbances of the mind, which is said to lead to enlightenment.

Hinduism

Hinduism is the most common religion of India and Nepal. Hindus worship many different deities depending on social traditions, location and family history. These deities are all representative of qualities that are present within the universe. Similarly, to Buddhist traditions, Hindu chanting practices are believed to lead to peace and liberation from disturbances of the mind. Hindus believe that devotional practices, such as chanting sacred sounds, called mantras, can bring physical and psychological healing. Chanting in Hinduism can be directed towards specific deities, which each have specific characteristics or traits. Different rituals are designed to worship particular deities, each with their own sounds, chants, and associated symbology. By chanting to deities in this way, it is believed that these spiritual forces can intervene and influence the lives of the chanter. For example, families may engage in chanting ceremonies for healing, strength, abundance, clarity or overcoming worldly desires. These chanting ceremonies often occur in temples, along with other practices such as fire ceremonies, or the washing of an idol, along with offerings of fruit and flowers. Other musical practices within Hinduism involve call and response chanting in groups, whereby someone 'leads' the chanting and a group responds. This method of chanting, called

kirtan, is often associated with a spiritual concept or deity. Kirtan can be quite ecstatic and is often accompanied with body movements such as dancing and clapping.

Secular Western Culture

Chanting has also made its way into some aspects of Western culture and popular music. George Harrison from The Beatles included chanting from various traditions in his songs. One example is in "My Sweet Lord" where he sings "Hare Krishna, Hare Ram" from the Hindu tradition and "Hallelujah," which was originally from the Hebrew bible and now used in Christian prayer. Chanting also sometimes takes place in quasi-ritualistic settings amongst large crowds of people at emotionally charged events such as sporting contests. In these settings chanting may be used as a way of building group identity at the national level (e.g., "U-S-A, U-S-A") or more locally, through chants or songs associated with specific sporting teams.

In summary, chanting and musical rituals are used widely across many different cultures. Although the specific sounds and musical practices may differ, there are also some striking similarities. In most cultures ritualistic music involves repetition and group participation. Also common across cultures is the belief that music can provide psychological and physiological benefits such as healing, personal and spiritual development, and social connection.

What Does Science Say?

Do these beliefs and claims about the effects of chanting practices make sense from a scientific perspective? Although many of the specific beliefs associated with musical rituals refer to spiritual concepts outside of the realm of science, it is possible to investigate the effects that musical practices such as chanting have on physical and mental processes. It turns out that it is not just a coincidence that so many traditions use chanting for spiritual and

psychological development. There is growing scientific evidence showing that chanting can reduce stress, alleviate depressive symptoms, improve attention, increase altruism, alter neurology and even induce altered states of consciousness. Despite the many different traditions that use chanting in various ways, there are some fundamental commonalities in chanting practices that can lead to physiological and psychological changes. Some of the mechanisms that explain why and how chanting works are outlined below.

Breathing

A direct consequence of chanting is that making rhythmic sounds effects the physiology of breathing. The regular pattern of inhalation and exhalation influences the parasympathetic nervous system and can promote feelings of relaxation. These altered breathing patterns have been found to occur across traditions. In one study Italian researchers found that chanting a Roman Catholic prayer (*Ave Maria*) and a chanting Buddhist mantra (*Om Mane Padme Hum*) had the same effect on breathing. Both chants slowed breathing to 6 respirations per minute, a rate which has been found to have positive effects on respiratory and cardiovascular functioning. Respiration at this slower rate also reduces stress and increases heart rate variability, which is useful for the management of cardiovascular disease.

Vocalising sounds that create slow, rhythmic breathing also directly influences the vagus nerve. When the vagus nerve is engaged, a stress hormone called cortisol decreases. High levels of cortisol can lead to serious health issues such as chronic stress, depression or panic disorder. In this way, practices such as chanting that can help maintain lower levels of cortisol can be beneficial for overall health and well-being.

Focused Attention

Chanting can also influence the mind by decreasing the frequency of ruminative or negative thoughts. This occurs by focusing attention exclusively on the sound that is being chanted.

Research has found that by mindfully chanting and focusing the mind on a single sound or phrase, an individual is better able to monitor thought patterns. This can encourage disengagement from automatic thoughts and lead to a reduction in uncontrolled mental content such as mind wandering. Practicing focused attention on a sound or phrase is an effective method of increasing mindfulness. This can lead individuals to become better at recognising thinking patterns and observing them, rather than becoming emotionally involved in thoughts, which could otherwise result in distress. Increasing the capacity for focused attention in this way can be particularly useful for improving self-regulation to better manage habitual thought patterns.

Synchrony

Chanting typically involves making highly coordinated sounds in a social setting. The predictable, repetitive and rhythmic quality of this type of music often results in highly synchronised behaviour. Also, when people make music together, individuals become very focused on matching the sounds they are creating with those around them. This closely coordinated, synchronised behaviour can facilitate community bonding by creating a sense of social connection that promotes cooperation. These shared experiences also increase prosocial attitudes and can decrease feelings of loneliness and isolation. In particular, research has also shown that making synchronised musical sounds in groups leads to increases in altruism and can also improve the ability of groups to solve problems together. The predictability of rhythm and repetition helps individuals to synchronise together with musical sounds. This predictability is also part of what makes music enjoyable and gives enhances its capacity to alter mood. Chanting in a social setting has reliably been shown to elevate positive emotions and decrease depressive symptoms. For example, research has

found that group singing can influence neurochemistry by reducing levels of cortisol and adrenocorticotropic hormone, which lead to reductions in stress.

Altered State of Consciousness

In many traditions, chanting is used as a ritual tool that may lead participants to experience an altered state of consciousness. An altered state can occur when a specific environment or activity changes a person's perception and cognition in dramatic ways. In many ritual settings the environment is quite extreme, with a reduction in some aspects of sensation (for example, through darkness or limited movement) but with a very pronounced emphasis on intense, repetitive chanting (sometimes also accompanied by loud drumming, bright fires and other extreme perceptual stimuli). In these states, an individual may feel overwhelmed by positive emotions, and may feel at one with others, nature or the entire universe. Other common experiences of these states include feelings of alertness, timelessness, intense focus, increased self-awareness, and improved attention. These states can also have a longer-term healing effect on the individual. Often, following the experience of an altered state individuals describe a shift in perspective toward feeling more connected with others and with nature. Research has found that these changes can result in better health and wellbeing, as well as persisting improvements in behaviour, and attitudes.

Expectations

In addition to the direct physiological and social impacts discussed so far, there is another important way that chanting and musical rituals can lead to changes in psychological functioning. People's expectations about the rituals they perform may themselves have an effect. Musical rituals typically involve religious or spiritual mythologies that lead to beliefs or expectations. For example, a Hindu praying to the elephant god, Ganesha, may strongly believe that this deity will remove some problem they have been facing in life. This expectation may make them feel more relaxed and confident after chanting, and this change in emotional state will then influence their subsequent behaviour. In this way, the act of chanting leads to psychological changes that occur due to changes in a person's beliefs.

Engaging in musical rituals can also strengthen social norms and customs that shape behaviour. For example, a Buddhist who joins in a community chanting ritual takes part in a highly specific social interaction that may have a focus, for example, on compassion and loving kindness. In addition to explicitly chanting words related to these themes, participants may be expected to enact these qualities in their interactions with others during the ritual. In this way a person's beliefs and expectations about appropriate ways to behave are reinforced subtly and directly by taking part in the musical ritual. The combination of social expectations and the effect of taking on ritual roles can lead to beliefs that strongly impact participants' subjective experiences of the effects of these musical practices.

Conclusion

Music is an intricate part of highly meaningful rituals for many cultures around the world. In traditional settings these rituals can have a wide range of purposes, including trying to cure disease, traversing challenging landscapes, transcending ordinary states of consciousness, strengthening communities or healing the sick. In all these cases, music and chanting are believed to be an important tool for causing change in people's lives. Although many of the specific cultural beliefs associated with ritualised music cannot be directly tested by science, there is growing and reliable evidence that chanting can have physiological and psychological impacts. By changing breathing patterns, chanting impacts the parasympathetic nervous system to encourage relaxation, reduce stress and improve cardiovascular functioning. By providing a clear and repetitive target for focused attention, chanting can increase mindfulness and improve self-regulation of thoughts. By providing strong social cues for

synchrony, chanting can increase cooperation and feelings of connectedness. By triggering subtle and more profound alterations in a person's conscious state, chanting can have a lasting positive impact on attitudes. By providing a rich cultural context, chanting in ritualised settings can establish strong patterns of belief that train and influence positive behaviours. Understanding the mechanisms by which music engenders positive change across diverse cultures will point the way forward to a more complete science of music.

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