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Subterfuge in Popular Music and Music Therapy

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Abstract

Background: Music is a useful tool as an adjunct in therapy for caution may need to be exercised when popular music is used for purposes that extend beyond their original intention. For example, music has been found to be useful in the treatment of individuals with substance use disorders. However, there are many songs with hidden meanings which may complicate use of a specific piece. The song *The Weight* (released 1968), by the group The Band active from 1968-1977, and again 1983-1999, is used as an example of a song that utilizes subterfuge-superficially indicating one set of meanings, while hiding a dramatically different set of intended meanings. Such songs offer an interesting challenge to therapists utilizing music as a therapeutic vehicle.

Introduction

Music is important across all human cultures, and its roles have varied across geography and time. In medicine, the use of music as a therapeutic tool has occurred for centuries [1,2]. The science of music therapy and grown into a powerful, objective too. Investigations into how to best use music and the variables associated with its potency in modifying human emotions and behavior continue. While associations between types of music and certain behaviors are common, understanding the nature of these relationships has been more challenging. This is related to the multiple and varied aspects of music and the wide range of its effects. The relationship between music and possible human behaviors becomes even more complicated when purposeful deceit is incorporated within the musical piece. In this paper we will investigate one example of this, and explore possible consequences specifically within the realm of substance use behaviors.

Music and drug use

There is a strong association between music and drug use, particularly among young people. This is likely related to profound psychological, emotional, and cognitive effects of both music and psychoactive substances. Frequently, the association is part of a broader set of social actions that are generally described as "partying" but can also be individual and private. Studies have focused on activities such as 'raves' because of their popularity and public nature. Raves incorporate social interactions, music, and drug use as central features [3]. They are popular with younger members of society because of the fellowship they provide as well as the powerful effects of music, social interactions, and drug use. But other associations of music and drug use are common, but much more variable than some of the shared experiences of raves [4]. For example, attempts to associate specific music types with substance use frequently lead to positive associations which appear to be



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culturally specific and temporally variable [5,4]. Attendance of concerts and music festivals, which create a significantly different social environment than raves, is also associated with drug use. The frequency of drug use has been documented with self-report, toxicological screening [6,7], drugs in wastewater [8,9], and even drug-related emergency department visits [10] all associated with local music festivals. But emotional and cognitive effects of music are frequently more personal and the day-to-day associations might be overall more important and formative for individuals.

Prior to initiating this scientific discussion, it is important to understand the limits of our investigative tools. When attempting to relate a specific genre of music to a specific behavior, the statistical approach is important. One example is that many studies examining lyric composition with substance use behaviors utilized continuous variable analyses rather than categorical analyses. This can lead to erroneous associations, since if a specific genre of music had a large number of references to substances, it will always appear to be related to the measured variable substance use, independent of the actual relationship. On the other hand, if the genre is treated as a categorical variable, then the frequency of references to drugs would not play a role. This particular caution is observed in the following discussion of music-drug associations.

In America and Western cultures, popular music appears to reflect trends of thought and behavior in society [11-13]. This is particularly true for young people [14] who frequently rate music as their number one leisure-time activity [15]. Given music's central role in young people's lives, it is logical to examine its association with alcohol and drug use. The subject of music lyrics is easier to examine and quantify than other aspects of music. For that reason, lyric content has been a common approach. For example, an analysis of lyric content of the 25 most popular rap songs between 2006 and 2018 (n = 325) revealed that 72% contained references to one or more substances of abuse [13]. Similarly, a content and trend analysis of Billboard's top 10 songs, 1999-2018 (n = 3633), found that mention of alcohol use occurred in 4.7% of the songs [16]. In fact, lyrical content of popular music that references drug use has been increasing consistently over the last 40 years [11], and the context has increasingly put alcohol and drugs in a positive light. This later point is of interest since when specific artists' output is examined, their context is generally progressively more negative, in line with the natural history of substance use disorders [17]. In other words, as the consequences of alcohol or drug misuse take their toll on the artist, the music they create reflect that pain.

Musical content does have a connection with the behavior of the music listener. In one study of 1,380 teenagers (mean age = 15.47 years) who participated in the Health Behaviour in School Aged Children 2009/2010 Study, subculture variables, which included music preference, were stronger than parental bonds in predicting use of substances [18]. This is a reproducible finding [19]. Similarly, in a modeling study of nearly 3,000 middle school students, popular music content was significantly associated with initial, but not ongoing, use of alcohol or tobacco [20]. A lyric analysis of 5,955 songs from 2000-2017 showed an increase of reference to substance use of some 190% over that time period. But importantly, each 1% increase in lyric mention was associated with an 11% increase in incidence of cocaine use within the same year, and a 14% increase in cocaine mortality with a 2-year lag [12]. Despite these associations, most researchers believe that music may be a marker of subculture

affiliation and not causal to drug use [21,22]. That is, these types of associations may be secondary, so that an individual may have their own predispositions to substance use, and seek out peers and music that reflect these characteristics [23]. This view is supported by more recent findings that among adolescents, higher digital media utilization is associated with increase likelihood of initiating and increasing use of substances, which occurs as a function of their media utilization and independent of musical content [24].

Music content can also impact people that do not listen to it. For example, the Parents Music Resource Center (PMRC) was an organization that existed between 1985 and 1995 to try to place parental warning on music packaging due to negative, crude, violent, or otherwise undesirable lyrics [25].

The content of music has its origins with its creators. An analysis of 31 mainstream rock musician autobiographies found that the majority of writers revealed that they participated in some kind of substance treatment at some point in their lives [26]. Substance use is ubiquitous among musicians independent of the genre [27-30]. Transmission of the affiliation between music and substance use from the creator to the consumer of music is, perhaps, unavoidable.

Music in the treatment of substance use

Trance states or other Altered States of Consciousness (ASC) are gaining momentum in the treatment of a wide variety of psychiatric disorders [31]. In these treatment paradigms some instrument, pharmaceutical, technique, or a combination, are used to alter the state of consciousness of the individual with the intent of seeing an identified problem from a new perspective [32,33]. This experience is frequently described as 'mystical' [34] and can be labelled a 'release hallucination' [34]. The individual's new insight or revelation is then used to achieve a reduction of problematic symptoms. While this type of treatment has been achieving greater acceptance recently [31], the use of altered states as a treatment vehicle in individuals in psychiatric or psychological distress is not new [1,2]. Rituals, frequently using music, rhythms, and/or melodies, have been utilized for a variety of healing or inducting purposes into recorded history. Not surprisingly, the combination of psychedelics and music results in enhanced emotional response [36].

Historically, music plays a significant role in the induction of these ASCs [37,38]. This property may be related to innate neuronal wiring which produces a direct connection between aspects of music (such as pitch, tempo, repetition, rhythmic patterning, rhyme, and alliteration) and emotional state [39]. Music and its qualities are probably important to human survival since the neuronal connections for its processing are thought to occur prior to development of language [40]. It is believed that it is this primal, biologic basis of aspects of music perception that make them powerful in the induction of ASC and for aiding in recovery from psychiatric or psychological distress [39]. Music induced trances or ASC are actively used in a wide range of cultures as a form of healing or treatment of psychological distress [41,42]. While there remains resistance in Western, sciencebased society to accept the potency of music in inducing ASC or in healing [39,43], it is becoming clear that active involvement with music (e.g., singing) can serve as a potent adjunctive treatment in a wide variety of psychiatric conditions [44].

Mirroring the strong association of musical choice with substance use, is the use of music to treat individuals afflicted with substance use disorders [45]. Music has a powerful influence in general, and that power can influence behaviors in multiple directions. Neuroscience studies have found that music can activate a variety of brain structures which are associated with reward, motivation, and autonomic function [46]. Most patients in residential substance treatment will report that while music can increase their cravings, it can also put them in a state of mind to avoid usage, and that music is important in their recovery [47]. There are many advocates of the use of music in substance treatment, particularly for younger patients. Data from 299 American substance abuse treatment programs, found that 14.7% offered music therapy. Programs with a greater proportion of adolescents were more likely to offer music therapy." [48]. Active involvement of patients in the music therapy sessions as with lyric analysis, was more effective that use of music recreationally in sessions [49,50]. Researchers attempting to review the body of literature regarding the therapeutic use of music find that because of the large number of variables in music it is difficult to perform quantitative meta-analyses [51,52] . However, there are sufficient data to determine that the effects of music therapy are "additive, not independent." [51]. Review of qualitative studies finds that there are four themes that are identified as important in the process: emotional expression, group interaction, development of skills, and improvement of quality of life [52]. Therapists then use their awareness of these steps to guide their patients through the recovery process. There have even been exploratory studies to examine the use of hip-hop music to prevent initiation of substance misuse [53].

Given the important role of lyric analysis in music therapy [50] it becomes important to pay attention to lyrical content in treatment. Songs associated with previous use or those that mention the drug of choice of the patient may have negative impact on outcome [47]. The situation is expected to become more complicated if the substance use message is hidden, or purposely misrepresented.

There are no shortages of songs about alcohol and drug use [54] and, as previously mentioned, mixing music with drug use is common both among the listeners [55,56] and performers [29,57,26,58]. Similarly, there are no shortages of works of art that specifically mislead observers to arrive at a desired outcome [59,60]. *The Weight* is a popular song that was initially released in 1968. It became popular after its utilization in the movie, *Easy Rider*, in 1969. It adequately highlights the use of deceit and the effort required for the distinction between the apparent and the true meaning of a song.

Music of the late twentieth century

While consideration of a song from 1968 seems strange, music from that era is relevant in American society today. In general, individuals' preference for popular music is the music that was popular during their adolescence and early adulthood [61,62]. Additionally, adult individuals generally like the music listened to by their parents during the time that their parents were adolescents and early adults [63]. In a study of nearly 2000 individuals born between 1928 and 2001, music of the 1940s, 1960s, and 1980s was preferred [63]. Among a representative sample of 643 Americans, found that people born after the year 2000 easily recognized songs from 1960 through 1990 [64]. In a survey of 17,000 Americans, the decades of 1970s-1980s are felt to be the source of the "best music" [65]. These decades, with peaks around 1964, 1975, 1983-1991 have been proposed to be a highly creative period in popular music when the structure of music is considered (harmonic and timbral properties)

[66,64]. This diversity blossomed despite consolidation within the media industries in the second half of the twentieth century [67] due to a business model that favored diversity [68]. However, independent of these trends, the widespread recognition of some of these late twentieth century songs, like *The Weight*, makes their use in understanding effects of popular music easier.

Search for meaning

Attempts to understand overt and hidden meanings of artistic endeavors are common in our society [69]. It is important to note that our evolutionary history created a brain that always attempts to make sense of perceived information, even if that information is incomplete and even if our interpretation is inaccurate [70]. This is the reason that we are sometimes susceptible to illusions [71]. While the term 'illusion' is generally associated with visual phenomena, the most common illusion in humans is auditory-hearing one's name being called, usually in a noisy, crowded place. The search for meaning in an abstract work of art is part of this same phenomenon [69]. Search for meaning in music or song is similarly important. The irony is while the search is for the intended meaning of the artist, individually nearly always find a personal, private meaning [72]. Indeed, the meaning of music is generally not related to the semantics of content of language, but to the bodily and emotional experience of the individual [73]. These individual meanings must be taken into account when making generalizations.

Nonetheless, music is generally created as a reflection of the artists' knowledge and experience, and those variables are known to change over time [26]. Thus, it is reasonable to speak about the "intended meaning" of any piece of art. In music, the intention of the composer is frequently to induce a specific emotion in their listener [74]. In other words, composers frequently get more of the intended meaning through 'structural elements of music and various compositional techniques' than through lyrics [74]. Furthermore, scholarly work on lyrics is generally more limited than other aspects of music [75]. Nonetheless, it is important to note that Bob Dylan received the Nobel prize for literature, for the lyrics of his songs; lyrics do matter. As popular music became more diverse over the last decades of the twentieth century, the lyrics of the most popular songs became simpler [76], indicating that lyrics play an important role to the listener.

When lyrics are examined in detail in their proper context (e.g., Kate Bush's Running Up that Hill, [76] it is discovered that it is the interplay between words and music and how they are perfomed, that transmit the complete meaning of the song [77]. Furthermore, this type of analysis stands in stark contrast to the more simplistic analyses that can be found on the Internet [77]. This analysis of *The Weight* will be much simpler and focus exclusively on the literal meaning of the lyrics.

The Weight

The Weight is a song that was recorded by Capital Records and the Band in 1968. In 1969 the song and the group achieved notoriety when the song was featured in the movie, *Easy Rider*. Because to references to the Devil, Nazareth, and Moses, the meaning of the song has traditionally been interpreted as religious, alluding to Jesus' parents unable to get a bed in Bethlehem (although the song says Nazareth), and the use of other Biblical references including the Devil, Moses, and judgement day (e.g., https://www.songfacts.com/facts/the-band/the-

weight). Robbie Robertson, who claims to have written the song alone, denied this on multiple occasions, asserting instead that no deeper or hidden meanings, but rather the song is about people dumping their issues on [78]. While interpretations of the meaning of *The Weight* crowd the Internet there has not been any scholarly effort to understand the song.

The chorus in *The Weight* goes as follows: "Take a load off Fanny, take a load for free/Take a load off Fanny, and you put the load right on me." "Fanny" probably has her origin in *Short Fat Fannie* a song that Levon Helm enjoyed playing (https://www.youtube.com/watch?v=6jxsCvZoQs4) and which was frequently directed at a woman, Cathy Evelyn Smith, who was an associate of both an early band (the Hawks) and the Band, and who is reputed to have helped the Hawks band members out of a drug charge [78] but who is best known for injecting John Belushi with a fatal dose of heroin and cocaine 1982 [79].

Given the relationship between Cathy Smith and drug use by the Band members, it is highly likely that taking the load of Fanny may have to do with drug use. "Load" was a street word for a combination of glutethimide and codeine that was introduced as a substitute for heroin in the latter part of the twentieth century [80]. Apparently, the narrator is getting the "load" from Fanny for free.

The song begins with a person who is tired and looking for a "bed"-possibly a bed for treatment of substance abuse. Unable to find a bed, he "picked up my bags, I went looking for a place to hide." Bags are how drugs of abuse are generally sold [81], and so the narrator has taken his drugs and is searching for a place to use them. Later, at the end of the song, the narrator's "bag is sinking low, and I do believe it's time/To get back to Miss Fanny," presumably to get more drugs. Similarly, when Crazy Chester offered to "fix your rag" he was probably referring to saturating a cloth to allow the narrator to engage in huffing [82]. Less clear references to drugs include Carmen's assertion in the first stanza, that she has to go, but the Devil can stay, or "Luke's [Jimmy Ray "Luke" Paulman] waiting on the judgment day" which may allude to the drug charge that involved Cathy Smith [78].

The choice of using *The Weight* in a counterculture movie such as *Easy Rider* [83] was unlikely to be accidental. Certainly, Peter Fonda and Dennis Hopper who wrote and produced and directed the movie, would have been aware of the message of *The Weight*. This is supported by their choice of the movie title; in the heroin subculture of the 1970s, the term 'easy rider' referred to a male addict supported and cared for by the female partner [84]. The movie highlighted and romanticized the drug scene. It utilized a song that did the same.

Occult drug references in music

Hidden reference to drugs in music is certainly not unique to *The Weight*. However, The Weight may misrepresent itself as a religiously infused song, which may make it more acceptable. Music with more overt negative messaging have had mixed study outcomes and it appears that predispositions play a larger role in behavior than music lyrics [85-87]. This is supported by data showing that there is no effect of subliminal messages in music on behavior in normal controls [88,89]. But individuals with substance abuse are impaired in their ability to process music and other auditory stimuli [90] and so may respond to music differently than normal controls. Furthermore, drugs, like cannabis, may alter how the brain responds to music [91]. Mu-

sic may be reinforcing in the same way as drugs reinforce their use [92]. While music can be used to help individuals with substance use [49,93], it can also increase risk of recurrence particularly if the song is associated with previous use or mentions their drug of choice [47].

Additionally, different forms of media are different. Music tends to mention drugs more than movies [94]. Among music, rap music is more drug infused; 63% of rap songs mention illicit drug use and less than 19% mention consequences [94]. In general, 18% of songs and 22% of movies feature illicit drug use [94]. However, it is more difficult for visual media to misrepresent the topic.

Conclusions

Popular music can be a useful tool in music therapy and medicine. Its utility and importance, particularly in young people, is well-documented. However, as with most tools, the judicious use of the tool makes a difference. Therapists and teachers need to be aware of both the overt message of popular songs, and, on occasion, the covert message that is intended by the artist. In The Weight, Robbie Robertson not only creates deceptive words, but continued that deception in public discussion of the lyrics where he never reveals the actual meaning of the words, and simply focuses on the literal meaning of the words (e.g., https://www.songfacts.com/facts/the-band/the-weight).

The ability of listeners of songs like The Weight to dispel the literal meaning is limited. The song superficially appears to be about a Christ-like individual. Some individuals are able to see the actual intended meaning (the song was included on the soundtrack of Easy Rider). A similar example, occurred with Bruce Springsteen's Born in the USA, which was claimed by both political parties as espousing their message [95]. The song became very popular and was played repeatedly on radio stations after the September 11th terrorist attack on the Twin Towers; and while the song is about being proud to be American, it is also about discontentment. In this regard, it is interesting to note that ambiguity appears to increase appreciation in art [96]. It is important to understand that songs with subterfuge can have unexpected effects both individually, socially, and psychologically [97]. Songs, like The Weight, can be used as vehicles for learning [98,99] and accepting uncertainty when working with music.

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