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Effective Manipulation Through Music

## **Abstract**

The evidence offered in this paper clearly answers the question of the effectiveness of music as a means to manipulate others in order to benefit the manipulator(s). The employment of music in this matter is evident in several areas, discussed in detail throughout the paper. Research in these areas, music in the workplace, music in advertising, and music as torture, uphold the argument that music serves as an effective tool in influencing the mind and body while also offering counter-arguments, solidifying an unbiased view.

It comes as no surprise that in a world of high demands, greed, and consistent international discourse, manipulation is a practice frequently used by employers, advertising executives, and government officials with the intention of tricking workers, a targeted audience, or even entire national populations. The desired effect of this trickery is in the best interest of these authorities, and may even exploit those who are tricked. After all, a definition of manipulation is skillful, artful management or influence, especially in an unfair manner.

However, another definition of manipulation describes it as the act of adapting or changing in order to suit one's purpose or advantage. Many forms of therapy employ the practice of manipulation to improve the mental state of a patient, to influence their thoughts and behaviors in order to fit the norm. Self-manipulation is even a common practice in the everyday lives of people everywhere: encouraging one's self a few minutes before an important interview or even simply attempting to inspire joy when feeling blue.

Whether derived from greed or trickery, self-encouragement or the pursuit of normality, manipulation appears to be an effective process in reaching a desired outcome. The effectiveness in manipulating people can be seen through a psychological and physiological perspective; objects of manipulation have been found to respond physically as well as begin to possess altered

thoughts and opinions. Influencing the *mind*, especially, is a delicate, complex process, possibly as intricate as the human brain itself. What, then, might be a powerful tool in manipulating the body *and* the mind? It must possess the ability to find its way through the complexities of the brain, and once there, influence the outputted emotions and perhaps even thoughts or behavior. English poet and playwright John Dryden answers this question with his famed exclamation, “What passions cannot *music* raise and quell” (Grant 183)?

John Dryden’s statement would certainly stir up a lively debate among the scientific and psychological community for there exist many fine lines on the subject of music’s correlation with human emotions. In an article in the *Journal of New Music Research*, Klaus R. Scherer, a professor of psychology at the University of Geneva in Switzerland, begins by highlighting one of these fine lines: “The related notion that music *induces* or *produces* emotions in listeners also has a venerable history but its validity is still under debate” (Scherer 239). He emphasizes limitations put on the study of the subject, such as the need to overly simplify complex emotions and the difficulty in differentiating between the very similar terms ‘emotions’ and ‘feelings.’ Care must be taken when experimenting with such a complicated subject, ultimately raising the question, is the music truly inducing emotion or merely conveying it? How realistically effective, then, is this practice of musical manipulation?

Another fine line exists in the form of supplementary components to music, most notably its lyrics, if it has any. With the existence of such minor complications, it is important to acknowledge some definitions as well as recognize some assumptions being made before proceeding with the contents of this paper. Following the outline of University of Göttingen professor MJ Grant’s article entitled “Music and Conflict: Interdisciplinary Perspectives,” the term ‘music’ in this paper may be in reference to “all types of music, all forms of musical

activity, and all expressions of this activity,” for music is a “specific but rarely isolated form of human communication and interaction” (Grant 184). Drawing focus back to the factor of music’s lyrics, a piece of music and its accompanying lyrics, especially in this case, must be considered a *single* rather than *separate* entity, for the lyrics alone cannot simply be categorized under verbal language in the same way in which poetry cannot. Grant continues, “Lyrics – whether in song or in poetry – generally differ in structure, performance, and impact from other forms of language, just as rhetoric and oratory also lay claims to being understood ‘musically’” (Grant 184).

The purpose of this paper is to explore the role that music, an enduring and beloved art form, has played in the manipulation of human emotions, even emphasizing its effectiveness in achieving various desired outcomes. Though the use of music in self-manipulation is recognized, the paper mainly focuses on the manipulation of others to benefit oneself. The first section introduces music’s ability to stir emotions, followed by a framework composed of a collection of varying fields in which differing uses of said manipulation are employed, including those already mentioned: music in advertising and entertainment, in the workplace, and in times of war, specifically its role as an instrument of torture. Skeptics maintain that research in this field is limited and that the credibility of the studies already conducted is debatable. However, the evidence offered in this paper upholds the argument that music possesses the ability to stimulate human moods and even behavior as well as the ability to function with direct correlation to human physiology, making it an effective tool in control and manipulation.

Swedish psychologists Patrik N. Juslin and Petri Laukka reveal the significant facets to the study of music’s effect on human mood and behavior in their article in the *Journal of New Music Research*. They recognize the difference between *expressed* and *induced* emotions, emphasizing the significance of the induced: “Emotions *induced* by music...are more determined by the

nature of the appraisal of the musical event and the specific reasons for engaging with the music in a particular situation” (Juslin 224). Juslin and Laukka refer to the case studies of Becker, Gabrielsson, and Sloboda, research that concluded *enjoyment* as one of the most commonly felt emotions when listening to music, supporting the claim that enjoyment is “the most frequently cited reason for listening to music” (Juslin 224). The popularity of the use of music to induce enjoyment speaks volumes of its effectiveness.

In the book, *This is Your Brain on Music: The Science of a Human Obsession*, author Daniel J. Levitin examines the human brain as well as the structures of varying compositions, finding the correlations between the two. He explains that there are consistent patterns in music, specific arrangements of chords, notes, and rhythms that satisfy our ears, a satisfaction that often, in agreement with Juslin and Laukka, leads to the pursued feelings of joy. Levitin sums up music’s ability to affect our emotions: “Composers imbue music with emotion by knowing what our expectations are and then very deliberately controlling when those expectations will be met, and when they won’t. The thrills, the chills, and tears we experience from music are the result of having our expectations artfully manipulated by a skilled composer and the musicians who interpret that music” (Levitin 111). Not only does Levitin explain the power of music in influencing our emotions, he also refers to a clear use of music in manipulation. He cites the violation of rhythmic expectations as a popular example of musical manipulation, such as the momentous, surprising pauses in Elvis Presley’s song “Hound Dog” (Levitin 113). Though other topics were chosen for the in-depth discussions of this paper, Levitin’s allusion to the composers themselves emphasizes music’s potential. The ones who handle the music itself may be regarded as the ultimate manipulators as they know specifically how their medium of choice will affect its listeners.

Anthropological evidence suggests that within human societies, the implementation of music in the workplace dates as far back as to the time of the earliest hunter-gatherers. Simply known as “work songs,” these chants are commonly associated with sea shanties and agricultural workers but can be linked to other fields of work that involve similarly repetitive, often rhythmic physical tasks. The practice, as well as the use of background music in the workplace, is believed to increase productivity by maintaining an adequate pace with which to work, upholding the unity of a team of workers, and even relieving stress, leading to its deliberate application in factories, offices, and other professional environments. Though the popularity and longevity of such a practice may seem sufficient in proving its effectiveness, it is worth recognizing the existence of the studies conducted on music in the workplace spanning the 20<sup>th</sup> century.

In an article that explores the use of music in factories, author Keith Jones refers to numerous studies. The earliest, closely examined, “scientifically testable” one is the 1937 report by Wyatt and Langdon. It illustrates a twenty-four week experiment conducted on twelve British factory women listening to varying forms of dance music while they worked the assembly line. The researchers were able to prove their theory: music’s effect is “primarily one of psychological stimulation which relieved the boredom of this repetitive task, arguing that it alleviated ‘awareness of monotonous conditions’ without distracting visual and cognitive attention” (Jones 727). According to their research, the playing of music increased product output anywhere between 6.2% and 11.3%. The recording of such quantitative data is what sets this experiment apart from earlier, similar studies.

The effectiveness of music in increasing productivity is best summed up by Harold Burriss-Meyer, formerly the Theater and Sound Research Director at the Stevens Institute of Technology. Burriss-Meyer’s successful experiments were conducted with the clear objective of

enhancing the productivity of workers and allowed him to conclude that physiological stimulation can influence emotions and vice versa. In this summary of the outcomes of his studies, he states several ways in which music can successfully influence the body and the mind, much to the advantage of employers:

“By auditory stimuli we can control metabolism. We can increase or decrease muscular energy. We can increase respiration. We can increase or decrease pulse rate... We can change the threshold of sensory perception, and this is very important in precision work. We can reduce, delay or increase fatigue. By the control of these phenomena it is possible to establish a physiological basis for the generation of emotion” (Jones 729).

Among the most familiar uses of music as a manipulative tool is found in advertising. In this day and age, in Westernized societies it is nearly impossible to survive an entire day without the bombardment of advertisements and commercials of various forms. Some manipulative schemes found in these commercials may be obvious, such as the use of misleading marketing terms that artificially enhance a product’s value, or the bright, colorful image of a goofy cartoon character to entice younger audiences, while others may simply appear as a vague accessory. Consider the music played in a restaurant or in a store at the shopping mall. What may seem, at first, merely an element of style or auditory decoration can, in actuality, be an intentional marketing mechanism employed by an advertising executive or store manager with hopes of inspiring an increase in consumer purchases.

In an article about music, mood and consumer purchases, university professors Judy and Mark Alpert examine past research on the subject, the majority of which support the claim that

music can manipulate customers, increasing purchases and ultimately revenue. They mention two studies conducted by R.E. Milliman in the 1980s. His research concluded that slow tempo instrumental music played in the background is ideal both in supermarkets and in diners, for it greatly slows the pace of the customers in traffic as well as in food consumption, allowing the customer more chances to further peruse the aisles and menus (Alpert 115).

Alpert and Alpert make note of a concern already mentioned earlier in this paper, that “emotions *induced* by music...are more determined by the nature of the appraisal of the musical event and the specific reasons for engaging with the music in a particular situation” (Juslin 224). They suggest, “since many commercials are viewed in situations which involve consumers who are interested in the programs, and not in the commercials, the audience may be largely comprised of potentially uninvolved, non-decision-making consumers rather than cognitively active problem-solvers” (Alpert 115). According to the two authors, this is the reason why “emotionally arousing components,” in this case, music, are used to directly or even indirectly tap into the subject’s emotions. This observation of the deliberate use of music in enhancing the effectiveness of an advertisement emphasizes music’s ability to draw in its listener.

Judy and Mark Alpert utilize two separate studies in order to support the claim that, although there exist many outside factors and complications in examining music and human emotion, music in general tends to indeed influence mood and behavior: “An illustration of music’s power to affect subjects’ emotional responses was reported in a study by Rohner and Miller (1980), where sedative music showed a trend to decrease anxiety. Another study dealt with persuasion, among other variables. Subjects had greater affective arousal, persuasion affect and attitudinal acceptance of the song’s message with guitar accompaniment than without guitar accompaniment (Galizio and Hendrick, 1972). Thus changes in the presentation of music

influenced subjects' responses" (Alpert 115). According to the study, intentionally persuasive music affects the level at which the subjects are persuaded. Some may argue that the latter study should not be taken into account, since the foundation of the influence appears to be rooted in the song's lyrics. However, in the study, it is important to recognize the isolation of the music. The exclusion and inclusion of the music itself proved to be a colossal factor in the perception of the song as well as in persuasion.

Worth noting are the details of Judy and Mark Alpert's own experiments on music's affect on mood and behavior involving greeting cards. Their study involved several steps to ensure clarity in the stimuli as well as strip away as many distracting elements as possible. The greeting cards depicted one of two very clear emotions: happy or sad. Equally explicit music accompanied the greeting cards. The combination of these four experimental components was then tinkered with. Prior to beginning the experiment, the subjects were informed that their feelings were of particular interest and then measured for their current state of emotion using a "warmth monitor" previously employed by researchers Aaker, Stayman and Hagerty in 1986. According to Alpert and Alpert, the monitor "provides a continuous sensitive measure of respondents' feelings during a commercial...their findings show good levels of reliability and validity" (Alpert 122).

The outcome of their experiments, however, seems to be less supportive in the argument of this paper. The study yielded very scattered results; no significant patterns were found that would allow the formation of a clear, credible conclusion in favor of music being effective or not effective (Alpert 124). Such unsatisfying results may be rooted in the preliminary steps taken before finally conducting the experiment. Perhaps by oversimplifying the emotions, as suggested by Scherer, and by allowing the subjects to be aware of what exactly was being sought after,



Alpert and Alpert limited the subjects' ability to truly connect with the music. Though their ideas and equipment were credible, they may have stripped away the essence of music's allure.

As previously mentioned, the most common reason music is listened to is to induce the feelings of pleasure and enjoyment. However, other, much less pleasant emotions have been known to be the desired outcome of musical manipulation. In times of discordance among groups of people, music can often be a useful tool on the battlefield and in interrogation. Its use in war dates as far back as 202 BC, when Hannibal's army met with the Romans for battle. Both parties exchanged war-cries, attempting to terrify and intimidate the enemy, but the louder and more unified the cry, the more effectively frightening (Cloonan 29). The remainder of this section of the paper, however, will be devoted to a less archaic wartime strategy of manipulation: the use of music as torture.

Music as a method of torture is not such a recent innovation, as it was common in concentration camps throughout history, most notably in those created by the Nazi regime. In the article *Music and Concentration Camps: An Approximation*, author Edkhard John discusses the varying uses of music in these death camps, providing excerpts from many of the songs themselves. The role of music ranged from inspiring hope and faith to the overwhelming inspiration of depression and fear. The names and excerpts of the songs mentioned in the following paragraphs are the English translations from their original German titles and lyrics.

According to the article, music was a major component to life in the ghetto, primarily as a means for the Nazis to taunt, tease, and even torture the prisoners. The lyrics "Although music is chronic here, many live in disharmony," found in a parody of the popular tune "And the Music Plays Along," reflect on the often contradictory use of music in the concentration camps. The

parody continues, “I love infernally all musical people for music delights, enchants, charms even the rogue’s heart. But music quickly becomes hell, if the band is present, and I’m quoting Shakespeare here: Much noise about nothing. (John 274)” What once was an art form that brought joy had become an instrument of torture, a tormenting contradiction.

According to the article some of the ways in which music was used to torture included mockery and self-abuse when groups or even single individuals were transferred to a concentration camp. Inmates were forced to greet new prisoners by singing “pleasant” welcome songs. All captives were also tortured with mandatory musical vocalizations. In the article, John shares the recollections of such harrowing experiences as told by Eugen Kogon, a Holocaust survivor: “the Jews were ordered to form special ranks and sing to the whole camp the so-called “Jews’ Song”, which Eugen Kogon describes as ‘a self-insulting piece of the worst kind’ ...” (John 275). Littered with demeaning lyrics such as “For centuries we have defrauded the [German] nation,” “we have always profited, lied and cheated,” “we are...known everywhere by our disgusting faces...if there is a race that is even meaner, it is surely related to us,” the songs were humiliating and damaged the spirits of the prisoners (John 276).

Referring back to the use of music in the workplace, prisoners were also forced to sing while they worked in order to establish a quick pace with which to perform their duties. The double time, translated roughly in German as “caracho,” would certainly yield higher productivity, just as the aforementioned experiments had, but the underlying motive was still torture. On top of already gruesome, physical responsibilities, the prisoners had to sing insulting music that also maintained what was considered a “brutal pace” (John 277).

Even more disturbing was the use of music to accompany physical punishments such as floggings and whippings. Kogon recalled that, “Sturmbannführer Rödl in Buchenwald actually went so far as to have an opera singer perform arias next to the *Bock*, where the beatings took place” (John 279). Another former prisoner of the same concentration camp illustrates a particular memory of music being incorporated into punishments; John describes it as “lunacy.” According to the former captive, Julius Freund, “The band remained at the gate and played beautiful Viennese music. We Viennese were glad and applauded. But our happy mood was quickly destroyed when a column of Jews marched into the now empty square, ...and surrounded by many Kapos with sticks in their hands” (John 279). He continues to describe the humiliating and excruciating punishments: spinning to the rhythm of a waltz “until they became dizzy and fell over,” made to hop like frogs, then whipped, both to the rhythm of the music. These activities were carried out in the style of an assembly line so that “many screamed with the pain of the blows; on the other side of the square the Jews continued to dance and hop” (John 279).

The experiments on music in the workplace and in advertising yielded numeric, factual results, causing the examples of music in concentration camps to be considered not hard evidence, and dismissed as lacking substance. However, it is important to recognize the vivid recollections of the former prisoners. The voicing of their opinions speak volumes on the effectiveness of such brutalities. By directly associating pleasant, well-liked music to the severely scarring abuse, the Nazis confused and agitated their prisoners while successfully destroying their hopes. Personal accounts from former captives prove that such contradictory musical practices belittled them, instilled fear, and established who held power (John 275).

In reference to a more recent use of music as torture, an article centered on the detention camps of the United States during the “War on Terror” includes personal experiences from former prisoners. The majority of their experiences only differ slightly; mainly, they suffered for hours in the dark with some sort of physical discomfort, or even pain, such as being handcuffed, all while being forced to listen to the same music repeatedly, often at a deafening volume. The author, Suzanne G. Cusick, further explains the motive behind the torture as a whole, but pays close attention to the use of music and its success: “While few narratives offer much musical detail, they constitute ample evidence that music and sound have been systematically used to harass, discipline, and in some cases “break” detainees for the entire duration of the so-called global war on terror” (Cusick 2).

It can be argued that in actuality, other factors hold sole responsibility for “breaking” prisoners, but it is important to recognize that the detainees themselves considered the music as the more vexatious element to their interrogation. Moazzam Begg, a Pakistani-Englishman who had been held at both Guantánamo Bay in Cuba and Bagram in Pakistan, explained that because of the darkness and immobility, the sense of hearing replaced sight and touch; the ears became more alert and sensitive, and therefore, grew much more vulnerable to sound (Cusick 5).

In another article centered on the same subject, Cusick herself recognizes a possible counter-argument: “The use of music as a weapon is perceived to be incidental to the use of sound’s ability to affect a person’s spatial orientation, sense of balance, and physical coordination” (Music as Torture). She explains that sound possesses such powers, and that *any* sound or noise, not necessarily music, played at an appropriately loud volume would prove to be effective, especially given the vulnerable state of the prisoners’ ears. However, worth noting is the specific choice in music. This detail clearly separates the physiological effects of merely

noise and sound from the psychological effects of music. According to Cusick, “theorists of battlefield-use emphasize sound’s *bodily* effects, while theorists of the interrogation room focus on the capacity of sound and music to destroy *subjectivity*” (Music as Torture).

In both of her articles, Cusick offers examples of the music used in these detention camps: hip-hop, rap, Metallica, AC/DC, Marilyn Manson, Britney Spears, and even Barney’s “I Love You” song. It is perhaps easy to assume that the heavy metal music’s effectiveness lies in its heavy, pounding drums and its inherent loudness, despite the volume level. What, then, is the explanation for the other genres and artists? Levitin provides an answer in his book referring to our brains’ ability to formulate patterns and establish our familiarity to certain styles. In the case of Americans, especially, “Westernized” music is the standard: “Our musical schema for Western music includes implicit knowledge of the scales that are normally used. This is why Indian or Pakistani music, for example, sounds ‘strange’ to us the first time we hear it. It doesn’t sound strange to Indians and Pakistanis, and it doesn’t sound strange to infants (or at least not any stranger than any other music)...By the age of five, infants have learned to recognize chord progressions in the music of their culture – they are forming schemas” (Levitin 116).

Certainly, Levitin’s explanation can be understood in the reverse order and applied to the case of middle-eastern detainees: Westernized music “sounds strange” to Indians or Pakistanis because it is unfamiliar to them. Begg’s more detailed recollections of his experience clearly support this argument: “In a sense the music didn’t bother me. I’d grown up in Britain, I knew what it was. But Afghan villagers, Yemenis, these guys were dazed, dazzled and confused, bewildered, completely out of it” (Cusick 7). The repetition of music may have been irritating to Begg, a Westernized man, but to the others, the repetition of unfamiliar musical patterns proved to be immensely disorienting. The addition of deafening volumes completes the tortuous act.

When considering music's correlation to the body and the mind, it is important to recognize the complexities of such a topic. Thus, the answer to the question about music's effectiveness in manipulating others cannot always be a clear yes or no. However, the arguments offered in this paper support the claim that as a whole, music possesses the power to influence the body, the mind, and sometimes both. The evidence proves such effectiveness, explaining why music's abilities have been exploited in varying disciplines: a greedy corporate head looking to increase productivity in the workplace, an insatiable advertising executive looking to increase sales on a brand new toy, an evil Nazi attempting to establish authority in a concentration camp, a U.S. soldier attempting to draw out answers from a detainee. Whoever the manipulator, music is likely to be their weapon of choice.

## Works Cited

- Alpert, Judy I., and Mark I. Alpert. "Music Influences on Mood and Purchase Intentions." *Psychology & Marketing* 7.2 (1990): 109-33. Print.
- Cloonan, Martin, and Bruce Johnson. "Killing Me Softly with His Song: An Initial Investigation into the Use of Popular Music as a Tool of Oppression." *Popular Music* 21.1 (2002): 27-39. Print.
- Cusick, Suzanne G. "Music as Torture/Music as Weapon." *Revista Transcultural De Musica/Transcultural Music Review* 10.11 (2006). Print.
- Cusick, Suzanne G. "Music in the Detention Camps of the "Global War on Terror"" *Journal of the Society for American Music* 2.1 (2008): 1-26. Print.
- Grant, M.J., Rebecca Möllemann, Ingvill Morlandstö, Simone C. Münz, and Cornelia Nuxoll. "Music and Conflict: Interdisciplinary Perspectives." *Interdisciplinary Science Reviews* 35.2 (2010): 183-98. Print.
- John, Eckhard. "Music and Concentration Camps: An Approximation." *Journal of Musicological Research* 20 (2001): 269-323. Print.
- Jones, Keith. "Music in Factories: A Twentieth-Century Technique for Control of the Productive Self." *Social & Cultural Geography* 6.5 (2005): 723-44. Print.
- Juslin, Patrik N., and Petri Laukka. "Expression, Perception, and Induction of Musical Emotions: A Review and a Questionnaire Study of Everyday Listening." *Journal of New Music Research* 33.3 (2004): 217-38. Print.
- Levitin, Daniel J. *This Is Your Brain on Music: The Science of a Human Obsession*. New York, NY: Dutton, 2006. Print.
- Scherer, Klaus R. "Which Emotions Can Be Induced by Music? What Are the Underlying Mechanisms? And How Can We Measure Them?" *Journal of New Music Research* 33.3 (2004): 239-51. Print.