

MUS 208: Popular Music in Society

African Hand Drumming

A Helping Hand Drum

Evan Fryer
V00724694

In today's society, stress permeates life. Whether you are studying for exams as a University student or providing for your family as a single parent, the hectic schedule of everyday life seems to take precedence over the pursuit of emotional sanity. As a culture plagued by the oppressive economy and rapid growth of technology, we lack the conscious ability to engage in self-reflection. Ultimately, this inability to soulfully delve into one's deeper nature is a main contributor to stress. Although exercise, meditation, and the like have been practiced for centuries in an attempt to rid stress from one's life, there exist many modern methods that are just as effective. Hand drumming is one of these recently popularized strategies used to pacify stress. Despite the fact that hand drumming has been vastly used in celebration, rituals, and ceremonies around the World for many millennia, the merging of science with music therapy is a recently new development. Current research shows that active participation in hand drumming can physiologically eliminate stress from the human body. Furthermore, playing music in a drum circle or with peers helps develop one's sense of belonging in a community. With a better understanding of the positive effects of hand drumming through scientific evidence and spiritual experience, this form of music therapy will continue to grow and be implemented not only in a medical setting, but also in the workplace, at school, and at home.

In order to better understand how hand drumming can help alleviate stress, it is important first to understand how stress develops in the human body. Homeostasis is a central physiological principle relating to stress; it is defined as the

maintenance of relatively constant conditions within the body (Stanfield, 2011). In essence, the body has a plethora of regulatory mechanisms that work to keep living conditions ideal. Without a relatively constant state of homeostasis, death will ensue. However, through human evolution, our bodies have learned to adapt internally to these rapid changes in our external environment. For instance, we are able to live in extremely hot climates, and also in much colder climates. We are even able to live at higher altitudes where there is a low concentration of oxygen in the air. The definition of stress stems from changes in homeostasis; it can be defined as anything in the external environment that affects the perfect state of homeostasis (2011). Thus, it is apparent that every being on Earth suffers from some level of stress; we can all relate to it. However, it is important to note that stress not only encompasses physical factors such as climate, altitude, and health, but also emotional factors as well. That is, many people who are not in a spiritual place of well-being experience stress on a day-to-day basis. Luckily, our bodies are able to adapt to these stressful situations and changes in our environment through the existence of chemicals released at the cellular level, called hormones (Martini, Timmons, & Tallitsch, 2012). However, these hormones are often short-lived and temporary, and long periods of stress require long-term solutions. Rehabilitation through therapy is often needed after long-term exposure to stress due to a hormone called cortisol that is released into the blood stream (2012). Although cortisol is necessary to life as it helps regulate blood pressure and cardiovascular function, an overabundant release of this hormone from the adrenal glands can have detrimental affects (2012). Hormones in the body are controlled neurally through

the hypothalamus in the brain and an influx of cortisol demands in the body directly increase the activity of the hypothalamus and its associated brain waves (Magill, 2010). With the increased innervation of the hypothalamus comes an augmentation of beta waves (the brainwaves which are associated with anxious thinking and active concentration) (2010). These brainwaves are primarily active during exercise and motor movement and use up a lot of energy, compared to the alpha brainwaves that oscillate with rest and relaxation (2010). This excessive firing of beta brainwaves and enhanced state of sensory sensitivity is called hypervigilance, which is common in long-term stress patients or those suffering from post-traumatic stress disorder (PTSD) (Stanfield, 2011). No matter the level of stress in one's life, proper management of stress on a day-to-day basis is fundamentally necessary to prevent one from entering a hypervigilant state. The fact is: stress is inevitable. Thus, it is of the utmost importance to engage in some kind of stress treatment, like hand drumming, before it is too late.

The healing qualities of hand drumming have actually existed for many centuries. Despite the long history of hand drumming in places like West Africa, the idea of creating music to help physically heal the body seemed to dumbfound Western medical practice; in fact, many critics believed that drumming therapy was only a crafted mystical voodoo used in small African villages. However, advancements in research over the last five years have helped abolish this stereotype; hand drumming is indeed an effective technique in alleviating stress in everyday life. The success of this therapy stems from which cortical hemisphere of

the brain you are using. Whether you are studying for a calculus test, working a 40-hour week, or managing your finances, the left side of your brain is working dominantly over the right side. Typically, the left hemisphere is the logical, critical thinking side of your brain (Stanfield, 2011). In juxtaposition to this analytical left side, is the creatively dominated right hemisphere (2011). With the hubbub of everyday life, people are thinking too much and using more and more the left side of their brain, which can, especially over long periods of time, be physically draining. The therapeutic secret to hand drumming is the fact that you are not required to *think* while playing. Thus, the right side of your brain is more actively engaged while a relaxed sensation fills your body. This relaxed, euphoric feeling is produced as a result of the aforementioned brainwaves (2011). Through active participation in hand drumming, those beta brainwaves that contribute to the stressful feeling in the human body are converted into the alpha brainwaves (Bittman et al., 2001). There exists an inverse relationship between recruitment of alpha brainwaves and work rate of the hypothalamus (Stanfield, 2011). Thus, as the amount of alpha brainwaves increases from hand drumming, the hypothalamus slows down, resulting in a decrease in the release of cortisol at the cellular level, and ultimately, a decrease of stress (Bittman et al., 2001). Although this is the main physiological reason why you may feel de-stressed after playing music, hand drumming has many other indirect benefits that help contribute to a better sense of total well-being. For instance, through the assuagement of stress, breathing is regulated and circulation is promoted (Bensimon, Amir, & Wolf, 2008). Contrary to the pre-conceived notions of drums as a mystical voodoo instrument, playing music on the drum actually has

positive physical, emotional, mental, and spiritual benefits; active involvement in drum playing is undoubtedly a healthy practice in today's society. After a long day at the office, hand drumming can revitalize your body by relaxing the mind and refueling for the next day.

We have now explored the mechanisms by which hand drumming can help relieve stress in the human body. But the hand drum seems to have more than purely physiological powers; the power of the hand drum is much greater. In a World revolving around the stock market and one's financial situation, we lose sight of who we are as individuals. Living in the moment is a rarity in today's day and age. There exists a human tendency to dwell on the past and worry about what the future will entail; these thoughts are controlling our lives. If we were to only think about the *now* and not the past or the future, stress would begin to disappear for good. This is why hand drumming is so effective. I excuse myself now, for this casual recollection of experience in an academic piece of writing; however, I find it necessary to share my thoughts. I am enrolled in two University courses right now, those being African Hand Drumming and Calculus. I couldn't be taking two courses more different than each other. As my Calculus class falls right after my African Hand Drumming class, I was stressed-out about going to drum right before an exam that was worth a large portion of my grade. However, once I began playing the drum in class, my worries, concern, stress, and ultimately, thoughts regarding my upcoming Calculus exam completely disappeared. I went into my calculus exam with a calm, collected, unstressed head and came out the same way. I achieved a grade of

94% on the exam (my highest ever). Coincidence? I'm not so sure. When someone plays a drum, they are listening to the melody, feeling the rhythm, and living in the moment; in fact, they don't have to consciously *think* at all. It is in this way that hand drumming acts as a vehicle to delve into one's innermost feelings and soul; they are truly living in the *now*. Furthermore, the rapid growth of technology over the last few decades has separated us from our connection with our soul; we are moving further away from ourselves, and more towards technology. However, it is not only our deeper nature whom we are losing connection with. Communication poses many challenges in today's society. With an abundance of cell phones, Facebook accounts, and texting plans, direct and emotional contact with a family member or friend is rapidly declining. Playing music in a group, and drumming with friends or family is a perfect way to re-establish connection. Most often this takes the form of a drum circle, which helps promote acceptance and creates a sense of community. However, drumming does not need to happen solely with family members or friends. Playing music with workmates is also a strategy adopted by many companies to help bring about a sense of camaraderie about the workplace. For example, Toyota has recently renovated their office space and created a Drum Room at their motor sales headquarters in California (Stevens, 2004). Their goal in creating this drum room is two-fold: corporate teambuilding and stress reduction. Playing drums during your break is the perfect antidote to relieve stress in the workplace while making stronger bonds and building morale among your peers. Finally, although previously not mentioned, participating in drumming is fun and easy; in fact, you don't have to have any musical experience to make music and

create rhythms. Critics of drumming to reduce stress argue that the learning process of playing the drum is stressful in itself. However, this is not the case. Even patients suffering from Parkinson's disease (where motor movement is limited) can effectively drum to a reasonably high degree of skill. The way that drumming captivates such a diverse audience, despite age, sex, race, religion, or creed, is what makes hand drumming so appealing to the mass markets around the World and increasingly popular as a form of stress therapy.

Drumming has always been seen as a part of music, commonly associated with the central, driving rhythm of a song. However, in today's society, there is a paradigm shift in the way people think about creating music. That is, in the past, music has been created for the aesthetic acoustic appeal that it brings; an acoustic appeal that tempts many people to download a song onto their iPod and listen to the song over and over again. Recently, however, music is being created for non-musical outcomes, a sort of "recreational music", if you will. For example, we just explored how music can be created to alleviate stress among diverse demographics around the World. However, this era of music making is not new to the history books, for drumming was, and in some places still is, created to communicate between African villages. This is evidence that the universal quality of music does not just bring together people from all walks of life, but brings them together for different reasons. As we advance as a civilization into the future, music will create a link to the past, continue to bring communities together, and lend a helping hand to those in times of need. And how is that a stressful society to live in?

References

- Bensimon, M., Amir, D., & Wolf, Y. (2008). Drumming through trauma: Music therapy with post-traumatic soldiers. *Arts in Psychotherapy, 35*(1), 34-48.
doi:10.1016/j.aip.2007.09.002
- Bittman, B., Berk, L. S., Felten, D. L., Westengard, J. J., Simonton, O. C., Pappas, J. J., & Ninehouser, M. M. (2001). Composite effects of group drumming music therapy on modulation of neuroendocrine-immune. *Advances In Mind-Body Medicine, 17*(3), 201. Retrieved from <http://www.advancesjournal.com/>
- Magill, R. A. (2010). Motor learning and control: Concepts and applications (3rd ed.). New York, NY: McGraw-Hill.
- Martini, F. H., Timmons, M. J., & Tallitsch, R. (2012). Human anatomy (7th ed.). Boston, MA: Benjamin Cummings
- Stanfield, C. L. (2011). *Principles of human physiology* (4th ed.). San Francisco, CA: Pearson Education.
- Stevens, C. (2004). *Driving the rhythm – Drumming up teamwork at Toyota corporate headquarters*. Retrieved June 2, 2012 from www.yogitimes.com