Treating Anxiety with Exercise

Might Physical Activities Such as Dance and Yoga Improve Your Mental Well-Being?

Tag Words: Anxiety, Music, Dance, Step Dancing, Yoga, Exercise, Psychotherapy

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Summary: Anxiety is an issue that plagues virtually everyone at some point in their life. It is the overwhelming feeling of nervousness and pressure sometimes created by perceived insurmountable responsibilities. In fact, it can become so serious that people require additional help in dealing with what has become a very common disorder. Patients suffering from severe anxiety require counseling from a professional and often, are prescribed medicines to help ease their anxiety. One can also try to reduce anxiety by doing enjoyable activities that involve movement, such as yoga and dance.

Video Link: https://youtu.be/oi42wiVmry8

The Issue: Relieving anxiety can be achieved through every day activities not necessarily requiring counseling and medications which may have significant side effects.

What is Anxiety?
Have you ever felt nervous? Have you ever felt uneasy? Have you ever been so wrapped up in something that the many potential outcomes consume you? Well, that is exactly what anxiety is. Anxiety is a normal human emotion that everyone experiences. Many can feel nervous taking an exam, facing a problem at work or making an, although subjective, but nevertheless important decision (1).

Anxiety is experienced by everyone, however, there are extreme cases of it that can rival some of the most problematic mental disorders. Anxiety disorders can cause a substantial amount of distress, hindering them from living normal lives (1). Their worries become fears and their fears become crippling. Imagine being paralyzed by the mere thought of something. Anxiety is a very serious mental disorder that deserves proper attention.

Looking deeper, Anxiety disorders can be manifested in various ways. They can exist as panic disorders, social anxiety disorders, specific phobias, and generalized anxiety disorders, obsessive-compulsive disorders, and depression (1). Panic disorders better known as panic attacks are accompanied by sudden terror, irregular heartbeats, and chest pain that occurs with no signs or warning. Social anxiety happens in everyday social situations; it is usually a fear from being judged by others or facing ridicule. A specific phobia describes the intense fear onset by an object, animal, person, or situation such as being afraid of heights. Generalized anxiety disorders consist of excessive worrying and
tension even if there is noting to provoke it. OCD (obsessive-compulsive disorder) are cases where people have obsessions that make them perform routines that become rituals essential for easing their anxiety. Lastly depression is a disorder in itself that has very close ties to anxiety disorders. It involves the overwhelming feeling of sadness, hopelessness, and disinterest with life.

With all those aforementioned variations and their handicapping effects on people, it’s a clear problem. Moreover, it is the most common illness in the United States affecting over 40 million adults of the age 18 or older, which is roughly 18% of the population (2). This disorder becomes quite costly averaging over 40 billion a year in health care services provided to stop the symptoms related to the illness. Individuals suffering from anxiety disorders are likely to be hospitalized six times more than those who don’t suffer from the illness (2). Additionally, anxiety sufferers frequent the doctor three to five times more than people without anxiety disorders.

With most every illness, disease or disorder, there is some form of treatment that helps the patient recover from it or at least, alleviate their symptoms. Traditional drug treatment for anxiety includes benzodiapines, SSRIs (serotonin reuptake inhibitors), and SNRIs (serotonin-norepinephrine reuptake inhibitors) (3). These drugs act in different ways to affect levels of serotonin that help to offset the hormonal imbalance that anxiety creates and bring it back to normal levels. However, with these medicines, come many adverse side effects and the potential for dependent drug abusive behavior. Effects include sedation, psychomotor impairment, and rebound anxiety from the discontinuation, cognitive impairment, and the risk of fetal birth defects if taken while pregnant (3).

Non-Drug Therapy
On the other hand, there are many potential non-drug treatments with little to no adverse side effects that people can look to explore. They range from physical activities, to herbal remedies, to just listening to music. Simply talking to a professional or participating in certain physical activities can help immensely.

Music can evoke feelings of joy or excitement depending on what you’re listening to. Music therapy, by definition, is the clinical use of music as a therapeutic intervention for people who have special needs (4). This ability can be extended and used in dealing with anxiety disorders. Research shows that music can significantly decrease anxiety levels. One study measured the levels of anxiety using specific physical parameters such as blood pressure, heart rate, skin temperature and cortisol levels. They compared patients who were about to undergo surgery to patients who were also going under surgery, but allowed to listen to their preferred choice of music. It was observed that those that listened to music had smaller increases in blood pressure, heart rate, skin temperature and cortisol when compared to the group who did not listen to music (5). Listening to music is very non-threatening and can provide a catalyst for relaxation. It can be added to in conjunction with numerous other non-drug therapies to help ease a person’s anxiety.

Natural herbal teas have been used by some to treat depression, sleep disorders, and anxiety. Some have reported that teas containing certain herbs such as kava,
passionflower, and valerian root, have some of the same affects as benzodiazepines with far less side effects (6). These may also include sedative and muscle relaxing effects that can prove useful to someone with frequent anxiety attacks.

The human mind is so powerful that, in most cases, if you can trick yourself into believing something, it can control the body to mimic their new thoughts. If someone truly believes drinking tea or any other non-drug remedy is supposed to work, the body will soon follow suit (7). After all, the most important thing in anxiety disorders is having control over the mind, which is the cause of these unfortunate affects.

**Counseling**

Sitting down and just talking it out with a professional can provide substantial benefits as well. Professional counselors can get to the bottom of the type of anxiety disorder a person has and help them truly understand it. This form of counseling is called psychotherapy, which focuses on cognitive behavioral therapies that attack anxiety (1).

More specifically, it includes exposure therapy, cognitive restructuring, relaxation training, and strengthening of social skills. The main point behind exposure therapy is putting someone in a situation that they would otherwise avoid. They are given skills to alleviate anxiety and then encouraged to face the problem head on as an attempt to get rid of the problem (1). Cognitive restructuring is a direct therapy that focuses on the way a person thinks. It promotes figuring out which thoughts provoke anxiety and teaches them to think less biased (1). Video feedback is a prime component of cognitive restructuring. Relaxation training looks to decrease the amount of physical tension that is induced during a stressful situation (1). It can include, but is not limited to, deep breathing, progressive muscle relaxation, autogenic training (visualization techniques), and meditation (1). Lastly the strengthening of social skills looks to attack the underlying issues of a person with social anxiety. It targets to improve a person’s behavioral skills in social interactions therefore leaving them better equipped with their anxiety issue when faced by it again (8).

**Physical Activity as Therapy**

Exercising is a fundamental activity that is imperative for people to partake in throughout their lifetime. It is encouraged from childhood all the way into adulthood. One may ask why? Well, exercising not only nurtures your body’s physical condition by improving muscles, breathing, and heart rate, but it can have a substantial impact on your mental state as well. Exercising can help maintain or improve one’s physical condition, including the brain. Exercise has a profound affect on brain chemicals; it increases them, which encourage growth (9). Exercise is known to affect the release of chemicals like serotonin and dopamine that are thought to participate in the feelings of anxiety and depression (11).

Some researchers, after reviewing published studies on exercise and anxiety, have concluded that exercise could be used as a treatment for anxiety (11). These authors explored the potential mechanisms by which physical activity might result in positive mental health gains. These included reduction in anxiety sensitivity, physiological
adaptations, and improvements in sleep, self-efficacy, and distraction. Anxiety sensitivity describes the fear of sensations that are related to experiencing anxiety and by exercising, these sensitivity levels can be reduced significantly. Exercising mimics certain neurochemical processes that are achieved from anxiety, and repeated bouts of exercise may serve as a tool to help tolerance (11). In addition, the added activity can serve to aid in sleep because of the body’s need to replenish the energy lost from exercising. Sleep deprivation is something very common in anxiety stricken people. Being able to learn an exercise regiment instills a sense of mastery. This can translate into a person’s belief that they have control to influence their environment and bring their preferred outcomes to fruition. It is a direct opposite to catastrophic thinking which is something anxious individuals suffer from. Lastly exercising is engaging both mentally and physically and serves as a successful distraction to the negative thoughts that plague anxiety victims (11).

Treating anxiety with exercise comes without medical side effects and can be accomplished using a whole host of activities. Choosing one type of exercise depends mostly on individual preference and lifestyle which ultimately means everyone can find a good way (for them) to become more physically active. Let’s take walking, jogging, and running for instance. Each of which involve the act of your legs moving, but also include a different level of intensity at each stage. These are all aerobic exercises that also reduce anxiety. Research shows that people that participate in aerobic workouts have lower levels of anxiety compared to people who did not partake in them showing no change in their anxiety levels (9). The length of time one spends on doing these activities can be more important than the intensity of the exercise because it increases the potential for that workout to target the brain chemically (9). It has been shown that exercising three times a day for 20 minutes can significantly reduce levels of anxiety (9). Additionally, they found that the intensity of the workout was correlated with the release of endorphins (13). These are hormones that are involved in activating the body’s opiate receptors. They have the capacity to emit a profound euphoric, painkilling effect on the brain. However their natural release from the body does not hold the same risk of dependence and addiction those painkillers may give off. Therefore by taking advantage of these workouts, one can partake in self-therapy with little to no risk.

Anaerobic workouts, like weight training or weight lifting that involves the use of weights to isolate muscle groups and increase their strength and stamina, may also reduce the rate of anxiety. Anaerobic workouts have “anxiolytic effects” much like that would be obtained from taking medications prescribed for anxiety. In other words, resistance training can exist in a clinical practice and aid in the management of anxiety (13).

Yoga is a type of exercise that has been around more than 5000 years (14). Yoga emphasizes flexibility and breathing patterns while concentrating on meditation and postures. Cyclic meditation (a series of alternating yoga postures) combines the relaxing effects of yoga with the cognitive benefits of knowing different positions (15). These sorts of activities can have very relaxing effects, can increase calmness, attention, and concentration, and like weight lifting and aerobic workouts, can act to inhibit both stress and anxiety and therefore may serve as adjunctive therapy in the treatment of anxiety (14).
Proving that exercise reduces anxiety in everyone is a difficult task. Individuals (being individuals), react differently to different situations complicating definitive studies on whether exercise can be considered as effective “treatments” for anxiety. The problem with typical anxiety drug treatments is that they cost too much and they can build an unhealthy dependency on drugs and leave the patient vulnerable to their adverse side effects. There needs to be a push for healthy and cost effective ways to “treat” anxiety. Researching whether exercise reduces anxiety is further hampered by a lack of funding to do the research. Unlike that for pharmaceutical research, there is no money to be had for saying that yoga, or exercise produces beneficial effects on mood or anxiety. So sometimes you just have to go with your gut feeling and how something makes you feel. If it makes you feel better (and perhaps so much so, that you no longer “need” drugs), then go for it.

Let’s Try Dance – it works for me…
Dance involves both upbeat and slow beat music with varying rhythmic body movements. To participate, one must not only control their body, but they must make sure to keep up with the beat and remember the movements associated with that dance (16). In addition, dance is not limited to just remembering steps. It can also serve as an explosion of movements that simply comes to a person; this is called freestyle. Dance can combine the musical benefits, the exercise benefits, and the cognitive workouts that have been recently discussed to decrease anxiety. To say the least, dance is an anxiety relief super concoction!

Dancing is so variable that it can be done to pretty much any type of music. This can play greatly into designing a treatment for a patient based on his/her preferences. Additionally, it can be as slow as something mimicking the theme of yoga or as fast as something that can copy aerobic workouts.

Imagine those high-tension moments in movies where two characters face off. They stare at each other in a silence echoed by the surrounding people who await their action. Then all of a sudden, music starts playing and they are engaging in a dance battle that creates smiles among their watchers and themselves. This is an example of how dance can serve as something to reduce tension, which is a key factor in many causes of anxiety disorders. Someone who experiences anxiety can be considered tense, and uneasy. Being able to provide a tool to release tension, without adverse side effects is exactly what dance does.

To demonstrate easy, cost effective, harmless activities that would likely help reduce levels of anxiety, a video was created. These activities include yoga, choreographed dancing, and a personal favorite called step dancing. The video starts off with me introducing these therapeutic activities and goes through each type respectively.

A close friend demonstrated yoga for this project. She was surrounded by the serenity of nature and went through a couple of poses. Yoga promotes relaxation and calmness which are essential aids in reducing anxiety. I choreographed a dance with the help of my roommate, first going through the various steps, and then doing it full out. Dancing
combined with music can be therapeutic due to serotonin release from the exercise achieved through dancing. We chose an old school song to dance to because it generated an overall happy feeling reminding us of family cookouts and relieving anxious feelings.

Dancing also promotes cognitive functions through learning and remembering dance steps. Strengthening cognitive function leaves you better equipped in dealing with anxiety. This idea is taken a step further in step dancing where people create rhythmic beats using their very own body. It is a series of intricate steps and movements that can be coordinated into a wonderful performance. The art of memory and coordination is truly displayed in this type of dance. It can be done individually, but is more commonly performed in a team of people. Personally, I had the opportunity to partake in stepping through my high school, and various organizations in college such as Black Student Union, and Phi Beta Sigma Fraternity Inc. There are numerous teams at respective universities, one just needs a legit hunger to participate. The amount of thrill and excitement that takes place while on stage is immeasurable. In those moments nothing else matters and your mind is in a state of serenity and synchronization with your body that eradicates anxious feelings. I included a short clip from a performance I did back in January 2014 to display this.

References


Letter to Editor

Sent to the NJ Star Ledger June 2015

I am a Rutgers student and I am writing to notify the public of anxiety disorders along with easy fathomable ways in reducing their occurrence. Anxiety is something we all
experience from time to time facing the many difficulties of life. However, there are extreme cases in which anxiety takes control of a person’s life and leaves them incapable of functioning normally. The problem is as much mental as it is physical, and both are confronted when dealing with this problem.

As a result, Psychiatrists are usually the place people go to for proper diagnosis of anxiety disorders in conjunction with the proper medications for dealing with it. These meds can turn out to be quite costly and deliver adverse side effects to people. In addition, some treatments have the potential to develop drug dependency from users after a prolonged usage. It would be in the best interest of both professionals, and victims of this illness to explore less harmful, cheaper therapies.

A simple solution can be music, exercise, and dance. Virtually everyone has a favorite song or genre of music. That catchy song you love listening to can actually be a way to reduce anxiety levels. Of course the type of song would vary depending on what soothes you. Participating in certain exercises in general release endorphin hormones that have a lot to do with the satisfaction, joy, and comfort we feel in everyday life. Exercise can serve as a healthy distraction and soothe a person from whatever is making them so anxious. Lastly, dance serves as super-activity that combines both music and exercise along with cognitive functions that require a bit of memory as well. This strengthens the brain and body making it more suitable for dealing with anxiety. So I implore you to turn those speakers on, get moving, and dance!

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