

# Benefits of mindful meditation



**ASSIGN  
BUSTER**

## Introduction

Throughout our journey in life, we have many stresses. We tend to become overwhelmed by the demands and responsibilities of life. Living creates many “noises” in our mind that create anxiety, overthinking and possibly even restlessness. We constantly search for ways to relax, such as reading books, watching Netflix, going to the sauna and many more. Another way to relax the mind is through meditation. Keep in mind that meditation can help create a state of calm in the mind. Meditation works by targeting the different nervous systems. It targets the involuntary nervous and sympathetic nervous system as well as the parasympathetic nervous system; therefore, lower breathing and lowering heartrate. “Notable effects of Zen meditation on autonomic nervous system have been reported during the past decade” (Lo, Tsai, Kang, & Tian). There are different types of meditation and a variety of ways to do meditation such as breathing awareness, transcendental, Zen and much more. Each meditation suits everyone differently. Individuals can choose which types of mediation helps them the most. Meditation goes into a deeper meaning describing types of chakras in our bodies. However, for the purpose of keeping it simple, I will only discuss the basic and straightforward benefits of meditation. The purpose of this essay will illustrate how, with meditation, one can reduce stress, lengthen their attention span, reduce blood pressure and manage pain; creating a state of peace and calmness, overall boosting the health of an individual.

## Reducing stress

Scientific proof has shown that meditation can help reduce stress. The meditation used was a form of yoga called asana. The study selected 100 people that were asked to answer questions on stress, from those 100 people 30 people were chosen. These individuals suffered high and moderate stress. The study was then conducted on 30 people between ages 15 to 25 years old, to measure the stress levels after practicing meditation. A scientific tool was used during the study such as PSS. “ The stress of an individual was assessed using perceived stress scale (PSS). A measure of personal stress can be determined using a variety of instruments that have been designed to help measure individual stress levels.” (Santhanam, Preetha, & Devi, 2018) The PSS has been used since 1983 and remains a well-known decision for helping individuals to see how unique circumstances influence our sentiments and our apparent pressure. The inquiries in this scale get information about a person’s emotions during the past month. In each case, the individual will be requested to demonstrate how regularly he/she felt or thought a specific way. The questions ranged from 0-4, 0 describing never felt stressed and 4 describing very often. The study recommended everyone to practice meditation once a day for 1 month. The study made sure to ask the same questions to the same individuals after the month of meditation and compare the answers. Before meditation, 40% of the group had high perceived stress and 60% moderate stress. After the meditation month, there were changes in individuals with high perceived stress. “ After doing meditation for 1 month, the impact on the sample population was that only 10% had high perceived stress and 90% had moderate stress...” (Santhanam, Preetha, & Devi, 2018). Evidence showed that meditation has quick effects from high stress to moderate stress,

however it did show slower rate from moderate stress to mild. Essentially what happens during meditation is the cortisol levels lower helping individuals relax and create a calming state. Though meditation did not fully remove stress, we can see how it does have an impact on reducing stress. Remember stress will always be in our lives. We constantly have unplanned events happening in our lives that cause stress; however, we can sometimes take a step back and calm our mind through meditation.

### Lengthening attention span and memory

There are many times in life where we cannot concentrate or cannot remember certain things. In the book titled “ You Mean, I’m Not Lazy, Stupid or Crazy?!” by Kate Kelly and Peggy Ramundo, it was recommended for those who suffer from ADD or ADHD to meditate. In the book, the authors describe how living with the condition causes many frustrations and constant racing thoughts. Many times people even without ADD complain that they cannot meditate because they think too much. The authors discuss how even if you think too much you can still meditate. “ We promise you it’s not possible to “ fail” at meditation. It’s astonishing how many of our clients have told us that they tried meditation and found it an exercise of frustration. These clients thought that if there was a lot of activity going on in their brains, they were just not doing this meditation thing right... Meditation begins by just observing.” (Kelly & Ramundo, 2006). A study was done on a group of individuals doing meditation. Brain scans were conducted to see the differences in attention between non-meditators and meditators. It was found that those who meditated had improved attention and impulse control. “...results have shown that meditation experience was associated

with reduced Stroop task interference effects on paper-and-pencil Stroop tasks. This suggests that meditation produces long-term increases in the efficiency of the executive attentional network. It is possible that meditation training has facilitated the neural pathways related to maintaining attention on the task-relevant information, amplifying what is relevant.” (Kozasa, et al., 2011) The scan showed suggesting non-meditators had different brain activities than those who did mediate. The scan showed right front brain, middle brain and lentiform nucleus more active in those who meditate. These parts of the brain are responsible for memory, cognitive skills, judgment, and attention. Other studies were done on individuals practicing meditation for 20 minutes every day. After 5 days of this a test of ANT (Attention Network Test) demonstrated improvements in attention. The study proposed that attention in the brain can be trained; “ While these convergent lines of evidence clearly demonstrate that the attention faculty is subject to neuroplastic changes and therefore trainable, it remains unclear if and as to what extent contextual effects, such as meditation-associated expectations, contribute to these improvements” (Prätzlacha, Kossowsky, Gaaba, & Krummenacher, 2015).

### Physiological Change

Meditation teaches us how to properly breathe into our body. It’s a combination of different breathing techniques that can be done during the practice. When we take deep breathes it automatically targets our organs and increases our blood flow, helping us to relax. During the 1970s physiological research by Herbert Benson at Harvard Medical School prompted the production of the mind was conspicuous, and relevant

changes, across the board contemplation method to evoke what he named the Relax response (RR) and Stress Response (SR). The technique itself is basic and direct, including a couple of key advances that incorporate sitting unobtrusively what's more, easily, shutting the eyes, breathing through the nose with attention to the breath for 10- 20 minutes, and not judging the accomplishment of the training. Benson noticed a pattern of physiological change within the individuals. " These physiological changes included reduction in blood pressure, resting heart rate, and oxygen consumption." (Buttle, 2014). Benson continued to explore the physiological changes, other modifications he noticed were biochemical and genomic activity changes. The research was done on Buddhist monks who appeared to have reduced levels of cortisol; this is a hormone that is released during a response to stress. Later it was proposed that nitric oxide (NO) could intercede the RR's physiological impacts. (NO) expands blood vessels, increases blood flow and decreases blood clotting. " These researchers hypothesized that " NO changes play a role in the consistent pattern of blood pressure reduction that is seen during RR elicitation." (Buttle, 2014). Another research revealed that meditation activates a control in the automatic nervous system. It was seen that those who practice meditation had thicker brain regions than those who don't practice meditation. This was most articulated in more established members, raising the likelihood that contemplation may counterbalance age-related cortical diminishing. Consequently, there is basic proof for experience-subordinate cortical pliancy related to reflective practice.

A second research study was done in Taiwan on individuals with addiction. The study presented the effects of Zen-contemplation impact on ANS

(autonomic sensory system) balance and cardiorespiratory. 18 individuals (all males aged 21- 47) went under medication recovery treatment voluntarily. During the study, all physiological signals were monitored; within the group, one individual had a heart transplant due to a heart failure caused by drugs. The meditation consisted of different techniques of breathing and every 10 minutes. The results showed to have an impact on the autonomic nervous system. “ The results demonstrate the remarkable effect of 10-minute AR Zen meditation on slowing down the heart rate and respiration, yet, boosting up the ANS functioning.” (Lo, Tsai, Kang, & Tian, 2018). Many addicts become addicted to drugs because of their brain flight or fight response. The amygdala (part of the brain) is responsible for the emotions we feel; the emotions take over our brain’s ability to function. Through this meditation, it is believed that individuals can become more aware of their subliminal awareness, which can lead to controlling the urge. Other studies have shown that Zen meditation can cure many types of sickness and diseases. “ Since the 1990s, a large number of practitioners have proved the efficacy of HHIS Zen meditation (Appendix) in treating many chronic diseases, infections, acute symptoms as well as mental and psychological problems. Hence, more people began to practice HHIS Zen meditation in Taiwan.” (Lo, Tsai, Kang, & Tian, 2018). Overall the study showed effects on the autonomic nervous system functions that may reflect both the physiological; furthermore, mental wellbeing conditions.

### Managing pain and Mental health

Other beneficial factors of meditation are managing pain and helping mental health. A Mindful-Base Stress Reduction (MBSR) was designed to help

individuals manage stress, pain and illness. The program is 8 weeks long and included 322 individuals. It consisted of 20-45 minute meditation daily 6 times a week. The program surveyed these individuals, the responses showed 66% had depressive symptoms. In the survey many scored that they had poor sleep and psychological symptoms (ex. anxiety). When individuals practiced meditation, research showed that they had an improvement on their overall health. "...to improved perseverative cognition and emotion regulation, two " transdiagnostic" mental processes that cut across stress-related disorders. These findings are important, as they offer empirical evidence to support the overarching hypothesis that mindful emotion regulation may be a key psychological process that contributes to physical and mental health outcomes associated with mindfulness meditation." (JeffreyM. Greeson, et al., 2018). The program targeted many individuals with transdiagnostic symptoms and with the research was able to assist those who suffer from mental health. Mantra meditation has been another way to aid individuals with mental health. This type of therapeutic technique includes constantly rehearsing positive quotes, expression or set of syllables while latently neglecting any inward or outside diversions. The sound or mantra in contemplation is proposed to go about as a viable vehicle for abrogating mental speech, consequently persistently diverting negative or nosy programmed considerations which propagate mental misery. The research found improvements in many different areas of mental health; however, the study found the most effective was anxiety. " Anxiety was the most frequently reported outcome across all studies, with 23 papers reporting on either state anxiety, trait anxiety, or both...Seventeen of the 23



studies reporting on the outcome of anxiety describe significant improvements in either state or trait anxiety” (Lyncha, et al., 2018)

With my own physical pain, I had my own journey into meditation. In March, of 2017, I ended up in a severe three vehicle collision. The vehicles all aimed onto the passenger side of the physical, giving me most of the hits. The collision left me with a concussion and 2 deep labrum tears on my right hip. My lower back started to suffer great pain as a result of the right hip tear. The pain became so excruciating that it caused me grief. Lying in bed would be excruciating and the pain made it a burden to walk. Simple things such as tying my shoes or sitting down became a chore. Therapies did not help, not as much as meditation did. Therefore, meditation helped mitigate the pain in my right hip and low back. Various breathing techniques helped release the tension on my low back. My right hip also corrected itself after doing one guided meditation. After meditation the pain was never the same. My body started to heal and until today I continue to practice meditation. Through the journey of meditation one can learn about how pain is more than just physical. A lot of the times we decide to numb the pain by taking pills not understanding this is only temporary release. Meditation helps to look deeper into yourself; to understand your psychological stresses and then physically be able to heal.

### Conclusion

Meditation is a great way to reduce many symptoms of stress and other health issues. Research has shown many findings that meditation does indeed help with many aspects of our health. It impacts the autonomic

nervous system which is responsible for breathing, blood flow to the heart and the digestive process. Research has found evidence that meditation activated the brain to respond to the nervous system. Through this we have also seen a reduction of the cortisol hormone, which lowers stress levels to an individual. It's important to remember that meditation does not necessarily heal you overnight. It's a constant practice that one must do every day. Individuals need to make meditation their habit. Meditation also helps restlessness, because many individuals believe they cannot meditate due to having over active minds. However, this is not the case meditation, as mentioned, in this essay can help with short attention and memory. Individuals need to understand its okay to have racing thoughts and again meditation comes with practice. It is unfortunate that health practitioners don't recommend this to their patients. Hopefully research can influence many individuals to try mediation.

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