Stress and Relaxation

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In a world filled with external chaos, what can one do to find inner peace? How can one practice both relaxation and mindfulness?

Often times it appears impossible to quiet the mind and align the body, however-inner peace is indeed attainable through the utilization of various relaxation techniques such as Yoga, Feldenkrais, Ai Chi, Tai Chi and meditation (to name a few.)

Why relaxation you might ask? Do you often feel that you are suddenly thirsty, but it seems that your body has known that you needed water many hours ago? Or- when someone puts their hand on your shoulder and you suddenly exhale, you realize that you were holding your breath and breathing shallowly? Both are examples of how mindfulness and relaxation can be beneficial to overall health. By practicing any relaxation method one can alleviate both physical ailments and feel less anxiety, depression, and physical pain which (in turn) eases sleeplessness; lowers heart rate and blood pressure; and alleviates arthritis, infertility, aging and genomic changes (Martin 2008.)

Yoga

Yoga is one such method that can help to attain inner peace through practice. By definition it is an ancient system (born in India) which is deeply rooted in mindfulness. Yoga also has quite the following (it is estimated that more than 55 million Americans currently practice some form of yoga -CompareCamp 2020.) However, when asked what yoga truly is, most Americans think of a system of physical postures (asanas)--historically, yoga asanas (with the exception of the seated meditation pose) did not become part of the yoga system until 600–800 years ago, when they were developed to help practitioners release physical tension so that deeper relaxation—and ultimately meditation—could occur. Preliminary evidence also shows that yoga therapy can impact neurotransmitters involved in the regulation of mood, motivation, and pleasure (a component of mindfulness.)

Furthermore, the polyvagal theory (Porges) is where traditional yoga philosophy meets with neuroscience to facilitate self-regulation. Bidirectional movement (or communication between the brain and body) are emerging as an important protocol in yoga therapy as opposed to just practicing yoga poses known as ‘Hatha Yoga’. The neurocognitive process or 'top-down' approach would involve the client setting a personal intention in their yoga practice. Self-inquiry processes have been shown to decrease psychological stress as well as hypothalamic-pituitary axis (HPA) and reduce SNS activity. An additional benefit is also thought to be the regulation of immune function and inflammation. The 'bottom up' or neurophysiological approach would

incorporate yoga poses (asana) and breathing practices (pranayama.) These techniques would have overwhelmingly positive effects on musculoskeletal, cardiovascular and NS function along with benefits to immunity and well-being as the bidirectional approaches may regulate autonomic, neurocognitive, emotional, and behavioral activation to life's challenges. It may also reduce symptoms for people suffering with IBS, neurodegenerative diseases, chronic pain, depression, and PTSD.

Ai Chi and The Healing Power of the Water

In the water, breathing feels different due to the water pressure, temperature (warm water is preferred) as well as the buoyancy of your body. For example- your spine & ribs may stretch more in the water which allows for deeper breathing. The water also facilitates deeper relaxation especially while practicing Ai Chi, which offers a slow and continuous approach to overall alignment (and therefore relaxation.)

Feldenkrais

As another method of relaxation and mindfulness, Feldenkrais offers a unique experience on the path to inner peace. The Feldenkrais Awareness Through Movement (ATM) program offers techniques which allow the practitioner to do a ‘scan’ of the body which illustrate the relationship between the right foot and the heel, the lower leg to the space behind the knee (etc.) One may continue to scan their body and use the floor as a guide. It is a focused approach which tells the practitioner not to change anything or “rush to make it better”, but simply to notice what is touching the floor. Feldenkrais allows us to think differently about movement and the visualization of that movement to facilitate overall relaxation. Furthermore, if someone has an injury, even though it might have occurred many years prior, the body still remembers; the mind still remembers. To alleviate some of the pain associated with injury, focused relaxation can offer relief and help to diminish pain when one is aware of the relationship between where they are (physically) and what they are touching. The philosophy behind Feldenkrais makes movement a journey on which one explores their own body using minimal movement which aids neuroplasticity and benefits the body as a whole.

Inner Peace and Relaxation Methods

It has been said that people often recognize that they feel mentally and emotionally nourished after practicing relaxation techniques. Such practices allow people to reach deep states of peace that, in some cases, they have never before experienced. It can be a life-altering practice for people of all ages. As popularity grows these techniques have become the object of serious research.

Relaxation practitioners might be inclined to use a variety of methods, please see the list below for some ideas/ musings:

- Take a warm bath or shower.
- Practice sound healing with crystal or metal bowls
- Create a positive affirmation or chant a favorite mantra
- Get out in nature to practice mindfulness
- Restorative yoga (this can be done on land and in the warm water)
- Yoga Nidra (Sanskrit for Sleep) may play a vital part in 'exposure therapy' for people suffering PTSD. Furthermore, Yoga nidra is a practice of deep rest in which the practitioner goes beneath the alpha brain-wave state of relaxation into a state where the brain is producing theta or even delta waves (Parker, Bharati & Fernandez 2013). In these states, the body experiences deeper rest than it does while sleeping, yet the mind is present and aware of everything in its outer environment. Yoga teaches that in the theta state, the subconscious mind is easily accessed and can be imprinted with whatever knowledge or visualization the practitioner wishes to assimilate. In the delta state, the practitioner rests in pure being—pure awareness—without thought.
- Understand your sensory triggers (SPD Sensory overload disorder) For example: flashing lights, certain sounds and smells which can also contribute to PTSD.
- If you wear a uniform, always take it off and change into your favorite comfortable clothes upon returning home
- When you get home, remove your outdoor shoes and either shower or wash your hands and face. This will allow any negative particles to wash down the plughole.
- If you must watch the news do so in the morning to avoid issues with sleep.
- Observe the circadian rhythms in nature and start dimming lights earlier before bed.
- Notice how certain foods may trigger your mind and the way you feel. (a little bit of good dark chocolate goes a long way)
- Have a nice cup of tea, Rose tea can be especially soothing
- Practice slow, conscious diaphragmatic breathing
- Systematic progressive relaxation
- Marma point relaxation- The Ayurvedic system of Marma points may be even older than the system of acupuncture points. There are 108 Marma points—107 in the body and one in the mind. Physically, the Marma points are found where tendons, bones, muscles, joints, veins, nerves and other tissues meet. Relaxation practices often include focusing on 31 or 61 points.

- Regarding mindfulness: Close your eyes and picture the lotus blossom (or another image that you find peaceful) when you close your eyes you picture that lotus by using various components such as memory or simply imagination. When you close your eyes and think of your arms, you picture arms based on what you perceive them to be; you are using your imagination and memory to craft the image (mindfulness.) Once you see your arms (eyes closed) you are focusing

your mind; when you focus your mind, you can feel what you are touching and with the help of gravity (which acts as a straight down force) you can center yourself and calm your mind.

- You just woke up and had a good night's sleep. That is important. Eating a good meal, also important. However, did you know that sleeping is not actually relaxation and that simply eating does not mean that your body feels nourished? Try this: After you have done your necessary morning rituals, lie down in the constructive Rest Position (bed, floor, or recliner). Close your eyes. Visualize your body resting- starting with your arms, then head & trunk, then your legs, invite the breath to further your relaxation. Try this 3 times- feel what you are touching, notice what your senses detect but keep focused on the 3 basic ideas that encompass your whole body. Stay focused. After a moment or 2 slowly open your eyes. How do you feel? Compare that to the way you felt when you woke up. Are you moving in a different way? Is it the same or better than when you woke up? Are you breathing deeper?
- People often wake up in the middle of the night and rather than lying there trying to get back to sleep, it might be an idea to sit up in bed or find a comfortable seat and practice deep slow breathing making sure that the jaw and tongue are relaxed. Give yourself a few minutes where you do not feel you need to 'do' anything. In the wee small hours, the world is usually quieter, and we tend to be more in our astral body rather than in the physical. Aligning with the stillness in nature at this time can be very relaxing, even if you are unfamiliar with meditation techniques. Simply sit and be still and allow the passive breath to breathe you. Set the timer for 5 mins or so, not too long, and it won't be long before you want to sit and be still for a lot longer at subsequent sessions. You can crawl back into bed after and hopefully a nice deep sleep will ensue before long.

We are so busy: things to do, places to be, people to take care of, decisions to make, food to buy and prepare, the need to drink more water, buy coffee, walk the dog, feed the pets, and many, many, many other elements that we all face in this life (including technology mishaps!). Just writing this down stressed me out! So- how do I get anything done or make important decisions? When I start to feel overwhelmed by external forces and am stuck mentally – I gravitate towards a quiet place, perhaps with quiet music and a pleasant fragrance in the air. Then I use the Constructive rest position (CRP) lying on my back with my knees bent at a 90-degree angle and arms in a calm resting position. As I settle in, I notice my breath – is it fast? Slow? Lastly, I use the Milton Feher Relaxation Formula: I Let my arms rest; let my head and trunk sink down; let my legs relax. Repeat, repeat, repeat, letting gravity cover me like a blanket. I let go using this basic formula which covers the entire body. I let go of my arm muscles; let go of my head & trunk muscles; let go of my leg muscles. The bones and hard tissue all support the body position in CRP and allow the body and mind to relax. In this- I do nothing but breathe & feel what my arms are touching; Do nothing but breathe & feel what my head and trunk are touching; Do nothing but breathe & feel my legs relaxing.

With each idea, allowing the breath to go deeper feeling the floor/chair/bed more than anything else. When you give your body to what is underneath you and allow it to lift you up, you can rest down and let go of stress and maybe even pain.

How the techniques differ

There is some confusion about how each technique differs from 'simple relaxation'. According to Stephen Parker, PsyD, Psychologist, Yoga scholar, Yoga teacher and author of *Clearing the Path: The Yoga Way to a Clear & Pleasant Mind: Patanjali, Neuroscience, and Emotion* (Ahymsa 2017)- a majority of U.S. research has been done on relaxation and not on the actual techniques. Per Stephen Parker- "These studies demonstrate that what is often referred to as yoga, Ai Chi, Tai Chi, etc. in contemporary research is often a state of deep relaxation (alpha state) and imagery generation that is a precursor to yoga nidra." Through consistent practice, he adds, the practitioner can learn to relax more deeply and move from the alpha state of simple relaxation to theta, where the subconscious can be accessed and programmed. With mastery of the technique, a shift into the delta state becomes possible.

This suggests that most practitioners may not go beyond the alpha state of relaxation when they are new to the practice. However, this level should not be discounted, as research indicates that even this state has profound implications for both mental and physical health. In 2011, Harvard Health Publishing released a report showing that certain genes involved in controlling free radicals, inflammation processes and cell death can be turned on and off by the relaxation response (Harvard Medical School 2011.)

Conclusion

As movement facilitators, we help people move easier, breathe deeper. The question is- how do we help ourselves? When you practice relaxation, you breathe deeper and the oxygen moves through the body unobstructed; it flows through the body to the areas that need it most. Now, you may feel softer, more fluid, calmer even. Relaxation allows you to be you. When everything gets too busy, even one-minute worth of practicing a relaxation method can help you to stay centered, focused, and grounded.

As a whole, the benefits of relaxation are vast, and the overall contribution to health, both physical and mental is scientifically well established. Recent studies support the benefits of many basic practices: hydration, proper breathing, laughter, and movement. Now other deep relaxation techniques can be added to the list. It is also important to note that anxiety has been shown in a study of over 70k patients to lower life expectancy. Causal effects are unclear but researchers think that deterioration in mental and physical health plus taking medications may have a significant role in this.

In the film Eat, Pray, Love- the priest in Bali tells Julia Roberts' character "You serious face like this, you scare away good energy. To meditate, only you must smile. Smile

with face, smile with mind, and good energy will come to you and clear away dirty energy. Even smile in your liver." When we do this, the Vagus nerve responds and the face muscles 'piggyback' creating an entourage effect of mindfulness and relaxation.

There are many techniques one can learn (meditation, breathing techniques, Feldenkrais, or Ai Chi) which can aid you on this journey. You may find yourself practicing one method more than the other due to personal preferences or pain levels, do what feels comfortable to you. Letting go of tension allows the cells to breathe which allows your body to heal and your mind to rest.

And always, remember The Buddha- "Peace comes from within. Do not seek it without."

If you are interested in learning more about relaxation techniques, please see the resources below:

1. **Brain Wave Patterns**

Beta waves: Beta waves (13–30 cycles per second) suggest alert functioning of the waking state and are associated with normal daily activities.

Alpha waves: Alpha waves (frequency of 8–13 cycles per second) indicate deep physical relaxation and mental calmness.

Theta waves: Theta waves (4–8 cycles per second) are associated with concentration and meditation, dreams, hypnosis, and hypnogogic imagery.

Delta waves: Delta waves (0.4–3 cycles per second) are most consistent with deep non-REM (dreamless) sleep.

Source: Parker, Bharat & Fernandez 2013.

2. **Additional Yoga Nidra Studies**

Swami Veda Bharati of Rishikesh, India, a brilliant sage, yoga scholar and master of yoga nidra, taught that the ultimate state of yoga nidra is devoid of imagery and thought and consists only of awareness of being. In this state, the brain is generating delta waves consistent with the non-REM state of deep sleep. A study conducted at the Institute of Noetic Science in Petaluma, California, found that Swami Veda exhibited a delta brain-wave state even as he was conversing with the researchers, a seemingly impossible feat (Radin 2005).

Swami Veda's longtime assistant, Lauren, a Minneapolis computer scientist and yogi, demonstrated a practical mastery of yoga nidra when she used it for a 40-minute sinus surgery in lieu of general anesthesia. Her surgeon's signed declaration of this and other yoga research can be found in Swami Veda's book Yogi in the Lab (Himalayan Yoga Publishing Trust 2006).

"Yoga nidra lowers ESR. A 2012 study found that yoga nidra brings down the erythrocyte sedimentation rate, which is a good thing. An ESR test can help determine if you have a condition that causes inflammation (Kumar & Pandya 2012). Arthritis, vasculitis and inflammatory bowel disease are all inflammatory diseases. Yoga nidra improves blood glucose levels in patients with type 2 diabetes. Results of this study suggested that subjects who practiced yoga nidra while taking oral hypoglycemics were better able to control fluctuating blood glucose levels and other diabetes-related symptoms compared with those who just took the oral medication (Amita et al. 2009). Yoga nidra increases heart rate variability. HRV is a measure of the variation in time between heartbeats. Individuals who have a high HRV may have greater cardiovascular fitness and be more resilient to stress (Markil et al. 2012).

3. **iREST: A Contemporary Adaptation**

iRest, a modern adaptation of yoga nidra, was developed by Richard Miller, PhD, a clinical psychologist, yogic scholar and spiritual teacher, who combined traditional yoga nidra with Western psychology and neuroscience to create the program. There are currently trained iRest teachers in 43 countries (irest.org).

Multiple iRest studies report its benefits for health, healing and well-being in diverse populations, including active-duty soldiers, veterans, college students, children, seniors, the homeless, the incarcerated, and people experiencing issues such as sleep disorders, post-traumatic stress disorder, chemical dependency, chronic pain and related disorders.

Branches of the U.S. military have used iRest since 2006, when it was introduced into the Wounded Warrior Program at Walter Reed National Medical Military Hospital in Washington, D.C. Subsequently, as a result of positive research findings, it was adopted by other areas of government, as well.

In 2010, the Defense Centers of Excellence recommended iRest as an effective complementary and alternative medical practice for managing chronic pain and treating

PTSD. Based on research into iRest, the U.S. Army Surgeon General listed yoga nidra as a Tier 1 approach for addressing pain management in military care (Nassif et al. 2015).

4. **To assist and facilitate mindfulness and relaxation-**
https://www.independent.co.uk/arts-entertainment/music/news/relaxing-song-best-weightless-marconi-union-youtube-surgery-anxiety-a9011971.html

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