An alternative BCBA view of meditation:

I understand where the critical view of meditation originates, but I would encourage people to think of meditation from a medical perspective. Our bodies incur adverse results if certain variables are compromised under sustained conditions of stress. When we respond to certain levels and durations of stress, our breath, hormones and other chemicals are affected along with a number of other variables in the body that we can measure. Meditation, in the way an analyst would view it, is simply engaging in behaviors to ensure our bodies access decreased cortisol levels, improved cortical specificity, etc. It's similar to using behavior analysis with a diabetic patient that uses a behavioral plan to improve intake of greens or decrease intake of sugar. No one argues with that because we can back it up with medical literature that teaches us why greens are more important than, say, donuts. Our bodes don't do well under long periods of stress with long exposures to cortisol. Just as I practice a replacement behavior for decreasing sugar consumption, which we agree is healthy, I can enact a behavioral plan to encourage restoring oxygen or cortisol levels through this behavior called meditation.

The science and benefits of meditation:

Two operational definitions include:

1) "Actively sitting in a comfortable position with a straight back while voluntarily inhaling and exhaling for 5 seconds each while redirecting disruptive private verbal behavior back to the sound and/or count of one's breath."

2) *"Actively seated in a position comfortable for the individual, with or without crossed legs, on a pillow, chair or other surface that allows the individual to actively sit upright with a straight back, then voluntarily engaging in a 4-second close-mouthed inhale and 4 second close-mouthed exhale pattern throughout the duration of the session, whenever possible. When private verbal behavior (a thought) occurs, the*

individual acknowledges and labels the thought "thought" and redirects their attention back to the count of their breath (i.e., one, two, three, four), making every attempt to label the intrusive thought as simply a thought, in lieu of creating additional verbal behavior surrounding the thought (i.e., This isn't working, I'm not good at this, etc)".

Some studies measure attention by asking participants to engage in behavior incompatible with attending to alternative stimuli (thoughts, items, etc). For example, researchers can use biofeedback measures and observation to ensure participants inhale for 4 seconds, exhale for 4 seconds, then tap their finger every 3rd exhale. It's difficult, if not near impossible, to do this consistently for 10-20 minutes while attending to anything besides breathing and tapping one's finger. The neurological effects of meditation can be found in Altered Traits and in Richard Davidson's work but, overall, researchers see increased cortical specificity indicative of improved ability to maintain focus. Behaviorally, this means that meditators may be able to improve their ability to maintain their focus on one task or stimuli (i.e., a conversation, a project, etc) without becoming easily distracted. There are hundreds of different types of meditation, but the best science we have points to *state effects* (temporary) of relaxation and improved ability to maintain focus. *Trait effects* (long-lasting) are typically only seen in "Olympic-level" meditators and include a variety of neurological effects indicative of increased REM sleep, decreased responsiveness to physically painful stimuli and compassionate behavior.

Task overload and workplace stress: Research from Ideas42's Work and Life Team suggests that what we once thought to be indicative of a healthy workplace- flexibility in work hours for example- may not be as effective as we'd once thought. If you can work whenever you want to, when does your workday end? We all need more scientific research on these topics. Companies are asking workers to shut down- some companies encourage "ZZZ-mail" (controlled emailing hours). Other programs I've seen encourage walking meetings and bring healthy food to meetings, but of course these are small changes. The bigger question- and by the way very few companies have this model completely figured out- is "What variables contribute to the deterioration of health in the workplace?". Jeffery Pfeffer out of Standford Busness School wrote a book called *Dying for a Paycheck* where he provides his algorithm and research into ten workplace variables and their effect on four dimensions of health (self reported mental and physical health, physician-diagnosed illness and mortality)**.** The most interesting to us as analysts are: having relatively low freedom and decision discretion at work, high job demands like the pressure to

work quickly, working long hours and the lack of close relationships with co-workers (social support) to mitigate the effects of stress. These can all be addressed by modifying behavior but we are only at the very beginning of tackling the challenge of workplace stress.

The role of behavior analysis in workplace health: It seems that although companies are interested in workplace health, demonstrated by the rise of corporate wellness programs, these companies are struggling to find something that works because it's not a one size fits all. This is easy for a behavior analyst to understand- individualization is paramount to behavior change, but we know Americans particularly prefer the quick and easy answer. It's just not that simple. Who makes up the majority of your workers? Females or males? Parents or non-parents? 40-50 year olds or millennials? All these variables are important and companies rarely have the resources or know-how to assess them. That's where we as behavior analysts come in. The basis for W3RKWELL is to help companies answer the questions "What does our company need to improve employee health, how can we provide it within our budget and how can we see sustainable, business-relative results?'. One popular benefit that companies are moving toward is an unlimited PTO model. It saves the company money because they don't have to pay out vacations hours when the employee leaves the company and it's viewed as attractive because it provides freedom to employees. Giving additional autonomy and control has been shown to be a top benefit for some employees, but as with everything else it's not a one size fits all. If it's too stressful to take vacation, individuals will avoid this benefit. We want to encourage the development of additional processes that help this benefit serve it's purpose. These are just a few of the many opportunities for behavior analysts to encourage meaningful change in the workplace and in society.