

Mindfulness and Creative Capacity

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Mindfulness can typically be defined as being in the present moment, and having non-judgemental awareness of thoughts, sensations and emotions. (chopra.com) Essentially, if you are truly in the present moment, you are being mindful. Creativity on the other hand, is defined as the ability to transcend traditional ideas, rules, patterns, relationships, or the like, and to create meaningful new ideas, forms, methods, interpretations, etc.(Dictionary.com) With knowing and understanding these two definitions, we must now decide if mindfulness and creativity can be beneficial to one another. Many would argue that you can not be mindful and creative at the same time. This is due to the fact that if you are participating in mindfulness practices, such as meditation, you try to be aware of how much your mind wanders. If it begins to wander you must re-focus, re-center and concentrate on the meditation. (chopra.com) With creativity, having your mind wander can be beneficial, if can lead to new ideas, interpretations and forms, much like its definition suggests. However, it has been shown that mindfulness can actually increase and improve creativity, not hinder it.

As stated by mindfulnessworks.com if we are to look at the brain from a neuroscience perspective there are four stages to the creative process. Essentially it starts with coming up with new ideas and to do that the brain must quiet the cognitive control network to allow the imagination to work. Then the ideas must incubate, either by sleeping or completing a different task, that way the brain can begin to process and organise the thoughts and ideas. Next, the brain has the “aha” moment where the best idea comes forward. Finally, the cognitive control comes back into play by analysing, verifying and refining the idea into something useful.

Mindfulnessworks.com also comments on how the creative process uses a number of different thinking styles. They explain that mindfulness training can allow us to be more conscious and aware of the thoughts that we experience and the thinking styles we are using. By practicing

mindfulness, it allows people to switch between freestyle thinking and control. By doing this we can more easily navigate our creative process by allowing ideas to come to our mind without judgment, thus, achieve the best results for creativity. (Mindfulnessworks.com)

In addition to that, Huffpost.com states that we have three main parts of our brain, the Neocortex which is where our creative thinking, problem solving, visioning, hypothesizing and strategizing occur. The limbic system which processes emotions, motivations and memories. Finally, the reptilian brain, which is concerned with our survival, is activated by adrenaline and is responsible for our fight or flight response. Now, the neocortex is also selective in regards to what it wants to focus or work on. Essentially, the limbic system and reptilian brain have to be in agreement in order for an idea to enter the neocortex for processing. (Huffpost.com) This could be where an issue with creativity could lie. If someone's emotions are out of balance or they are overly stressed and their limbic system kicks in, the brain may be too busy trying to handle those emotions to ensure there are enough resources for creative thinking. Likewise, the reptilian brain is quite lazy and also includes our sex impulses. If an idea is mate-able, dangerous or threatens our survival it will be passed through to the neocortex. (Huffpost.com) Other than that it is difficult for other ideas to be passed through to the neocortex. The question then becomes; how do we enable these parts of our brain to work together and boost creativity?

One way to boost creativity is through mindfulness meditation. We already know that mindfulness involves being in the present moment and having non-judgemental awareness of our thoughts, sensations, but also our emotions. We can infer that if we are non-judgmental with our emotions, we could essentially keep our limbic system from becoming over loaded. In fact, Huffpost.com found that mindfulness meditation has been shown to reduce the reactivity of the reptilian brain, increase resilience, stimulate the neocortex and improve emotional intelligence.

Being able to improve on these aspects can certainly be beneficial for increasing a person's creative capacity.

Another way to promote creative thinking is through open-monitoring meditation. (chopra.com) Essentially, open-monitoring meditation allows your mind to wander, which is quite different from traditional forms of mindful meditation. Usually, you want to focus on deep breathing, any emotions or sensation you may be feeling and when your mind starts to wander bringing it back to the present moment. Chopra.com explains that with open-monitoring meditation, you want to follow those thoughts with curiosity and a non-judgmental awareness instead of trying to get rid of them. In fact, Chopra.com even lists 5 steps to constructive Mind Wandering. Step 1 instructs to begin by getting into a comfortable position where you can be alert but relaxed at the same time, close your eyes or look down and un-focus your eyes. Step 2, take three deep breaths ensuring you fill your lungs completely with air and exhale completely. Step 3, begin breathing at a normal pace, making note of how the breath feels moving in and out of your nose. Step 4, allow your mind to wander and follow it. Notice what you are thinking about but be sure to remain non-judgmental to any thoughts that may come to mind. Acknowledge that a new thought arrives and continue with the meditation. Step 5, after a set length of time, slowly begin to bring your awareness back to the present moment and end the meditation. Now, having practiced mindful meditation myself, the technique of open-monitoring meditation seems daunting simply because you are allowing all your thoughts to enter your mind. Nevertheless, when speaking in terms of creativity, allowing those thoughts to penetrate your mind and being non-judgemental towards them could open many avenues for new ideas that may have never considered when using traditional mindfulness techniques.

Colzato et al (2012) also investigated the use of focused attention meditation and open monitoring meditation and its effects on convergent and divergent thinking. Convergent thinking generates one possible solution to a problem where as divergent thinking generates multiple new ideas. (Visual Arts class 2019) Colzato et al used focused attention meditation by instructing the participants to use their natural breathing pattern as an anchor to focus their breathing on a certain body part. For example, when you inhale bring attention to your hands and when you exhale, exhale from the hands. While the participants in the open monitoring meditation group were instructed to use their breath to open their mind to any new thoughts, sensations or emotions that may come forward. After they completed the meditation tasks the participants completed a remote association task to look at convergent thinking and an alternate uses task to assess divergent thinking. They found that the scores for the alternate uses task (divergent thinking) were at an advantage when the participants completed the open monitoring meditation compared to the focused attention meditation. However, Calzato et al also found that the focused attention meditation did improve the scores for the remote association task (convergent thinking) however not significantly. It was also noted that the mood scores for the participants in both meditation groups showed an elevated mood comparable to each other. This demonstrates that both forms of meditation are useful, however, if you want to improve creativity and divergent thinking it is best to perform an open monitoring meditation.

Now that we have considered various types of mindfulness practices, something else to consider is how long should a mindful practice be in order to boost creativity. The Harvard Business review conducted a study to find this out. They had 3 groups that were instructed to generate as many business ideas as they could for the possible use of drones. 1 group participated in a 10-minute audio guided meditation before they began, another participated in a fake

mindfulness practice and the last group started brainstorming immediately. They found that each group came up with roughly the same number of ideas and the descriptions of the ideas were similar. However, the main difference they found was that the group who meditated before hand had a wider range of ideas compared to the other groups. The groups who did not meditate had two groups of ideas, where as the group that did meditate had four groups of ideas. They also found that the participants who meditated before the brain storming session felt less negative, the meditation also decreased the participants feeling of restlessness by 23%, nervousness by 17%, and irritation by 24%. (hbr.org)

These findings show that completing mindful meditations does have an impact on creativity. It should also be noted that the participants who completed the mindfulness practice felt less negative, restless, nervous and irritated. These feeling could easily impact one's ability to think creatively. If someone is feeling negatively or nervous, they may not think they have the ability to think creatively or that they may be judged for their creativity. Others may become irritated and restless when trying to think creatively because it is not something they enjoy doing. However, by simply completing a mindful meditation for 10 minutes it was proven that those feelings were decreased. If simply meditating for 10 minutes shows these decreases in negative emotions and increases in creativity, imagine what doing this meditation everyday would improve. Implementing these practices in work places, schools and at home has to possibility to come up with endless new ideas and thoughts.

We have explored how mindfulness can have an impact on creativity. We now know that mindfulness can typically be defined as being in the present moment, and having non-judgemental awareness of thoughts, sensations and emotions. (chopra.com) Where as, creativity is defined as the ability to transcend traditional ideas, rules, patterns, relationships, or the like,

and to create meaningful new ideas, forms, methods, interpretations, etc.(Dictionary.com) We have taken these two concepts and found that being mindful does in fact have positive effects on creativity,. By looking at how the brain processes and forms new ideas, thoughts, sensations and emotions, we are able to better understand how to use various mindfulness practices to improve and expand our creativity. Open-monitoring mediation has been shown to improve creativity by allowing thoughts to enter the mind without judgment and by following those thoughts with curiosity the new ideas that could be formed are limitless. We have also seen that you only need 10 minutes to perform a mindful mediation in order to see positive effects on improving creativity. If it can be proven that 10 minutes is all you need to improve creativity, image what could happen if we incorporated mindful practices throughout our daily lives. The possibility for creativity and new thoughts and innovations could be absolutely incredible.

References

- Chaskalson, Michael. (2017). The Enhancement of Creative Thinking with Mindfulness. Retrieved from <https://mindfulnessworks.com/the-enhancement-of-creative-thinking-with-mindfulness/all>
- Colzato, Lorenza.S. & Ozturk, Ayca. & Hommel, Bernhard. (2012). Meditate to Create: The Impact of Focused-Attention and Open-Monitoring Training on Convergent and Divergent Thinking. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpsyg.2012.00116/full>
- Rothschild, Bianca. (2014). How Mindful Meditation Boosts Creativity and Innovation. Retrieved from https://www.huffpost.com/entry/the-science-of-how-medita_b_5579901?guccounter=1
- Schairer, Sara. (2017). Mindfulness and Creativity: Do they mix?. Retrieved from <https://chopra.com/articles/mindfulness-and-creativity-do-they-mix>
- Schootstra, Emma. & Deichmann, Dirk. & Dolgova, Evgenia. (2017). Can 10 Minutes of Meditation Make You More Creative?. Retrieved from <https://hbr.org/2017/08/can-10-minutes-of-meditation-make-you-more-creative>