Examining the Effects of Mindful Meditation in Stress Reduction

The Necessity of Effective Stress Reduction Techniques for Mental Healthiness and Wellbeing of College Students During a Pandemic - 2021

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ABSTRACT

The wellness and mental health of college students has greatly declined since the beginning of the COVID-19 pandemic in 2020. Prior to the start of the pandemic students frequently experienced episodes or "crises" . The additional stress of a pandemic and the transition from face-to-face to virtual learning and working has only intensified the need to effectively develop techniques to reduce stress. With limited access to face-to-face intervention, students must develop and utilize healthy habits to improve the state of mental health. The use of mindful meditation as a method of stress reduction aims to increase self awareness, effective communication, emotional regulation, focus and memory.

Ⅰ. INTRODUCTION

Mental health is the psychological, emotional and social well being of an individual. Recently there has been a strong effort of mental health professionals and allies to destigmatize the negative attitude surrounding mental health. One of the methods that is typically used to minimize and alleviate the effects of stress is mindfulness.

According to the American Psychological Association, "mindfulness is the moment to moment awareness of an individual's experience without judgment."(American Psychological Association, 2012) Mindfulness has been utilized by Buddhist for many centuries and mindfulness had an introduction into mental health during the 1970s. "The word mindfulness originally comes from the Pali word sati, which means having awareness, attention, and remembering" (Bodhi, 2000). Although meditation and mindfulness appear to be similar they are not the same, as individuals we may use meditation as a practice to develop or promote mindfulness. Meditation is a practice that combines the mind and body to refine psychological balance, cope with illness, improve well being and increase bodily relaxation. Mindful meditation can be defined as "a self-regulation practice where an individual focuses on training attention and awareness in order to bring mental processes under greater voluntary control and thereby foster general mental well-being and development and/or specific capacities such as calmness, clarity and concentration."(Walsh & Shapiro, 2006).

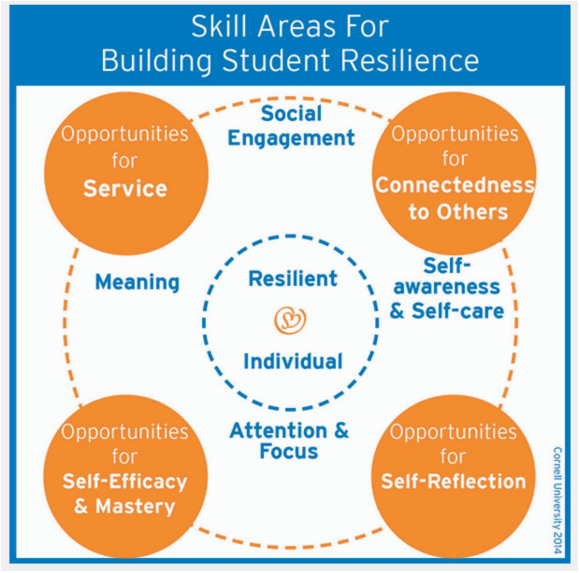
Ⅱ. SELF AWARENESS

Evidence exists to suggest that cultivating a mindful or meditative attitude toward oneself and others, which we have conceptualized as the MS, is of great benefit to one's health and well-being. Research suggests that "positive changes result from the integration and internalization of the mindful or meditative self-view and attitude which encompass notions of the non-self, impermanence, non-attachment, and equanimity." (Xiao, Yue, He & Yu, 2017)

Ⅲ. RESILIENCE

Resilience is the ability of a person to cope with difficult situations and bounce back to before the event/situation even occurred. Researchers have found "Major traumatic and stressful events such as

those associated with the COVID-19 pandemic can increase the strains on college students who are still undergoing identity development. Some students may be facing unmet physiological, psychological, and safety needs, possibly in areas in which they have not previously experienced a deficiency." (Schlesselman, Cain & DiVall, 2020)



The "Framework for Building Student Resilience" above identifies skills and goals that foster and sustain student resilience.

Ⅳ. EFFECTIVE COMMUNICATION

Research has found that participating in a mindful communication was associated with short-term and sustained improvements in well-being and attitudes. In a study conducted by Crowley and Munk it was found that college students became more mindful, compassionate, and experienced a heightened sense of psychological well-being from practicing meditation. Results demonstrated the practice of meditation can facilitate exploration of emotional states that support the process of self-actualization and improve overall college student well-being." (Crowley & Munk, 2020)

Ⅴ. EMOTIONAL REGULATION & REACTIVITY

Researchers theorize that mindfulness meditation promotes metacognitive awareness, decreases rumination via disengagement from perseverative cognitive activities, and enhances attentional capacities through gains in working memory; these cognitive gains, in turn, contribute to effective emotion regulation strategies. (Corcoran, Farb, Anderson & Segal, 2010)

"A frequently reported finding is that mindfulness practice leads to (or is associated with) a diminished activation of the amygdala in response to emotional stimuli during mindful states, as well as in a resting state, suggesting a decrease in emotional arousal. However, although such results have been reported for meditation beginners, they have less consistently been detected in experienced meditators." (Tang, Hölzel & Posner, 2015)

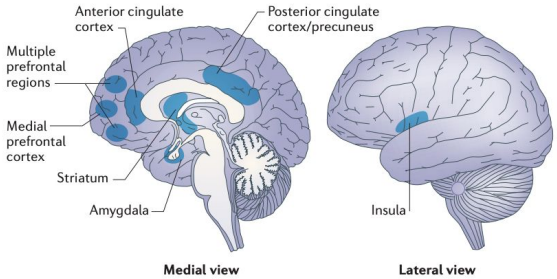


Figure 1 | **Brain regions involved in the components of mindfulness meditation.** Schematic view of some of the brain regions involved in attention control (the anterior cingulate cortex and the striatum), emotion regulation (multiple prefrontal regions, limbic regions and the striatum) and self-awareness (the insula, medial prefrontal cortex and posterior cingulate cortex and precuneus).

Ⅵ. NEUROPLASTICITY & MEMORY

Effects reported by individual studies found in multiple brain regions, including the cerebral cortex, subcortical grey and white matter, brainstem and cerebellum. These results suggest that the effects of meditation may possibly involve large-scale brain networks. (Ong, Stohler, & Herr, 2019)

"The findings demonstrated a global medium effect size, and eight brain regions were found to be consistently altered in meditators: the frontopolar cortex, which the authors suggest might be related to enhanced meta-awareness following meditation practice; the sensory cortices and insula, areas that have been related to body awareness; the hippocampus, a region that has been related to memory processes; the anterior cingulate cortex (ACC), mid-cingulate cortex and orbitofrontal cortex, areas known to be related to self and emotion regulation; and the superior longitudinal fasciculus and corpus callosum, areas involved in intra- and

inter-hemispheric communication." (Tang, Hölzel & Posner, 2015)

Ⅶ. ATTENTION & FOCUS

Researchers have found that "Mindfulness practice enhances attention. The anterior cingulate cortex is the region associated with attention in which changes in activity and/or structure in response to mindfulness meditation are most consistently reported." (Tang, Hölzel & Posner, 2015)

CONCLUSION

Although research concerning the effectiveness of mindful meditation is in the early stages, there are results that reflect the positive outcomes of practicing mindfulness and mindful meditation. Mindful meditation is a method of stress reduction aimed to increase self awareness, effective communication, emotional regulation, focus and memory.

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