# Mindfulness Meditation as a function of combating stress and anxiety in Adolescents : A Review

# Col Jai Deep Puri

Researcher, Mental Health

### Abstract

The past decade has seen significant attention being paid to mindfulness and its correlates in ameliorating distress and enhancing mental stability. The turbulence of adolescence burgeons into many stressor triggers as adolescents find themselves encountering varied experiences positive or negative as and when such situations arise. As adolescents , tentatively stepping onto the young adulthood, its time to move away from the cosy environment of home and the support system it entails. The present paper delineates some such dilemmas faced by adolescents and elucidates about the significance of mindfulness as a very important way of coping mechanism in dealing with life's uncertainties and improving one's quality of life. The implications of Mindfulness in the era of covid 19 has been discussed.

Key words ; mindfulness meditation, quality of life, adolescence, COVID 19

# Introduction

Adolescence is a very special time of one's life. Many poets have romanticized and extolled this particular time in a person's life. At the same time, the individual is in throes of turbulence of adolescence with multifarious academic demands, relationship issues, social challenges along with uncertainties linked to future increase the levels of stress and pressures (Deasy, Coughlan, Pironom, Jourdan, & McNamara, 2014; Banerjee and Puri 2018). Apart from these emotional social pressures financial issues do unhand them in various ways (Deasy et al., 2014). Researches also indicate that consistent to feeling overwhelmed, they do go through lots of undue stress and anxiety which adds to their perceived burden (Regehr, Glancy, & Pitts, 2013; Schmidt, Sieverding, Scheiter, & Obergfell, 2015).

Social support plays a lot of meaningful role in this trying time of their life. Lack of

perceived social support may prove to be overwhelming to adolescents at this stage. Hence, it is seen that lots of maladaptive coping strategies along with unhealthy lifestyle habits and choices choices are both prevalent as well as problematic in this population (Deasy et al., 2014; Schmidt et al., 2015).

# **Literature Review**

Stress may be thought of as a state wherein body enters a heightened state of arousal when it perceives the outside environment as threatening (Frydenberg, 2014). Contrary to popular beliefs, stress can be both both beneficial and deleterious (Frydenberg, 2014). Stress is considered healthy when it serves as a motivator to assist in the accomplishment of a task or goal. (Frydenberg, 2014). But stress becomes delimiting and debilitating when it threatens the individual into deep negativity and the productivity of the person starts diminishing gradually but steadily. There is a consistent and steady decline in the performance with or without an external stressful trigger. This negative stress is very unprofitable and plays havoc in the life of the individual. Traumas faced during the formative years also predict the way an individual will cope with stress in the later years (Karatoreos & McEwan, 2013).

### Stress and Nervous System

Highly developed adaptive mechanisms are required to cope with stress and although many adolescents are able to handle stress yet some buckle down under pressure and may experience avoidance or denial - which may be the temporary answer to manage highly unfavourable environments/ situations like abuse or poverty (Wadsworth, 2015). But long term usage of either avoiding or denying as coping mechanisms do hamper the overall harmonious growth of the individual and lead to more physica and psychological distress. (Wadsworth, 2015).

Our ancestors survived the excruciating external environments of the then stone ages by quickly responding to the perceived stress. This helped in coping from immediate threats and even anticipating future escapades too (McKlveen, Myers, & Herman, 2015). Thus it is that our gene pool has abundance of such stress response adaptive mechanisms. This kind of response capacity was so required for human survival that this particular efficiency is maintained and evinced in the gene pool. This process is well evinced through the actions of the CNS – Central Nervous System. Whenever individuals find themselves in a

threatening situation, the sympathetic vertical of their Autonomic Nervous System gets activated and the "fight or flight" response is emanated. (McCorry, 2007). For example, presence of a menacing person around the immediate environment triggers an externally perceived threat as it's a visible one. However, in the case of internally perceived threats, minds gets into heightened sensitivity and nervous system gets activities as personal interpretation is given to the situation (Karatoreos & McEwen, 2013). Things get complicated as the internally perceived threats may not be life threatening but are seen by the individual as impacting his goals, status or achievements (McKlveen et al., 2015).

Given that these are involuntary body responses, the autonomic nervous system does not function independently of the rest of the nervous system. Some reflexes are involuntary and occur at the level of the brain stem and spinal cord, but certain autonomic responses are regulated by higher-order brain structures , namely the hypothalamus (Kreibig, 2010).

Thus, stress is indeed harmful to individuals and chronic stress kills. Researches have pointed that the regulatory capacity of even the components of the limbic system is possible to be altered by chronic stress (Herman, Ostrander, Mueller, & Figueiredo, 2005). Also, it has been seen that actions which are counterproductive to mindfulness, such as substance use, rumination, and self-judgement, are associated with delayed physiological recovery from emotionally induced stress (Low, Stanton, & Bower, 2008). Its been accepted that with the limited effectiveness of their self-regulatory capacities, it follows that those with greater sympathetic reactivity would certainly use less functional means within themselves to cope. When we consider this additional bias toward fewer mindful traits, coping with day-to-day stressors would present severe difficulties. In this scenario, the relations among coping, mindfulness, and physiological reactivity do form a more cohesive picture regarding the individual's psychological and physiological makeup.

In such situations, with effort, emotional stress responses can be consciously mediated (McKlveen et al., 2015). Researches indicate that when chronic stress causes sustained arousal, executive functions such as decision making, planning or even response inhibition are negatively impacted (McKlveen et al., 2015). Since these are also the tools needed to adapt to the stressor in the environment, further deterioration is caused by impairment to hypothalamus and other higher order brain structures (McKlveen et al., 2015). In the light of all this, it becomes imperative that the students especially in secondary and senior

secondary classes learn healthy and productive forms of coping behavior when faced by elevated stressful situations.

#### Mindfulness – The new kit on the block

The good news from the above mentioned researches is that a large amount of work has indicated that regardless of the kind or type of stress, it is possible for the individuals to learn to cope effectively with stressful times. Healthy coping requires many strategies like compassion based practices like mindfulness based therapies.

It is accepted that although the origin of mindfulness has its roots in Buddhist practices yet the contemporary therapeutic interventions have adapted this in their present approaches like Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002) and Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 1982).

In this therapeutic approach, the individual is asked to focus on the immediate cues in the environment, internal or external, which are here and now (Grossman & Van Dam, 2011). Research indicate the individuals who practice mindfulness are able to reduce their sympathetic nervous system arousal when distressed, which in turn helps them in their emotional regulation (Keng, Smoski, & Robins, 2011).

It has been accepted that trait mindfulness is the inherent capacity of the individual to be simply being " aware" of the present. All individuals have this trait inherent in them to various degree. (Kabat-Zinn, 1990). It is very much possible by individuals to improve their level of state mindfulness through regular training and practice. (Baer, 2003; Brown & Ryan, 2003; Bishop et al., 2004). The two main components t which are hought to be most essential in mindfulness training are the ability to (i) focus on the present and (ii) use non-judgmental appraisal of one's thoughts and actions (Baer, 2003; Bishop et al., 2004; Grossman, Niemann, Schmidt, & Walach, 2004; Holzel et al., 2011).

Just to be in the moment and simply be aware of thoughts, feelings and sensations which are observed by self and accepted as existing, without appraisal or categorising (Baer, 2003; Bishop et al., 2004). The various The maladaptive coping mechanisms which arise under conditions of stress i.e. avoidance, suppression, and obsessive thoughts may be shoved aside successfully when mindfulness is practiced habitually (Keng et al., 2011).

Trait mindfulness has been associated with positive life outcomes, including mental and physical health, social relationships, and life satisfaction (Brown et al., 2007; Grossman et al., 2004, Keng et al., 2011). Researches indicate that mindfulness-based interventions are likely to improve overall functioning in distressed students (Palmer & Rodger, 2009; Warnecke, Quinn, Ogden, Towle, & Nelson, 2011), it has also been seen that inherent trait mindfulness does also increase the likelihood of choosing positive forms of coping over more harmful strategies, i.e. as drinking alcohol or other forms of substance abuse.

Researches have also indicated that in non-clinical populations, it has been evinced that higher levels of self-rated mindfulness was also linked to lower levels of perceived stress, as well as decreased alcohol and illicit drug use (Bowen & Enkema, 2014; Caldwell, Harrison, Adams, Quin, & Greeson, 2010; Christopher, Ramsey, & Antick, 2013; Warnecke et al., 2011). Furthermore, research suggests that trait mindfulness and mindfulness training may be inversely associated with substance use behaviours (Garland, Roberts-Lewis, Kelley, Tronnier, & Hanley, 2014; Hsin Hsu, Collins, & Marlatt, 2013; Karyadi, VanderVeen, & Cyders, 2014).

Mindfulness has received significant attention in the empirical literature during the past decade, and studies have focused on mindfulness in adolescents and how it may influence problematic behaviours. Miller et al (2017) in their study examined the relationships among mindfulness, coping, and physiological reactivity in a sample of university students. Participants completed questionnaires, and skin conductance measurements were collected during an interview where they recalled a personally stressful event. The results were quite encouraging. Correlation analyses tested relationships among these variables. There was a negative correlation between substance use and mindfulness. It was seen that those using substances as a coping mechanism were less likely to be mindful and displayed higher physiological reactivity.

On the other hand, more mindful individuals were less likely to report misusing substances and were able to calm themselves more quickly than their counterparts following a stressful event. The implications have lots of encouragement to the educators as indubitably it can be said that poor outcomes for distressed students can be reduced with mindfulness-based interventions and by indulging such students with meaningful engagements on and off school hours.

It has also been observed that addiction behaviours are more often exhibited by those with low scores on mindfulness measures (Bowen & Enkema, 2014; Karyadi et al., 2014). Prior research with undergraduate samples has shown a negative association between mindful traits and maladaptive coping strategies (Palmer & Rodger, 2009). Furthermore, Deasy et al. (2014) found that undergraduate students who engaged in substance use behaviours were more at risk for other problematic behaviours.

(McKlveen et al., 2015). Research has shown that the regulatory capacity of these components of the limbic system can be altered by chronic stress (Herman, Ostrander, Mueller, & Figueiredo, 2005). In addition, actions counterproductive to mindfulness, such as substance use, rumination, and self-judgement, are associated with delayed physiological recovery from emotionally induced stress (Low, Stanton, & Bower, 2008). Given the limited effectiveness of their self-regulatory capacities, it follows that those with greater sympathetic reactivity would use less functional means to cope. When considering the additional bias toward fewer mindful traits, coping with day-to-day stressors would present severe difficulties. In this context, the relations among coping, mindfulness, and physiological reactivity begin to form a more cohesive picture.

The current findings suggest that those who display low levels of mindfulness and who employ maladaptive coping strategies also exhibit prolonged autonomic activation. This process of prolonged reactivity to stress, if activated repeatedly in response to stressful life events, can have cumulative and deleterious effects on health, including hypertension, obesity, and cardiovascular disease (McEwen & Stellar, 1993). Poor health could pose an additional problem for those who strive to meet the increasing demands and high standards of the current workforce and academic climate without having sufficient coping strategies to fall back on.

### Seventh sense hypnotherapy (SSH):

In this context, seventh sense hypnotherapy, based on Optimism attitude model (Banerjee and Puri 2017) has certain mindfulness resources in its repertoire which when used appropriately will help the individual develop his seventh sense of optimism along with positive emotions, meaningful engagement, relationship network with a firm sense of accomplishment. This will help develop in the individual a sense of inherent calm, poise, quiet and inner dignity. All these things together help develop his adaptability to cope with stress and stressful triggers in a more responsible way. This training of SSH is simple ,

concise and has proven very beneficial to educators, teachers, psychologists, corporate, students and parents. (Banerjee and Puri 2018). Future researches have lot of scope in this very significant fiels.

# To conclude

From the researches mentioned in this work, one can say with reasonable conviction that its very much possible to be able to train oneself for coping with stress using various adaptive strategies like mindfulness. Researches in this field have been very encouraging and thought provoking. It has been evinced in various studies that trait mindfulness is related to coping on a physiological level as well as a cognitive-emotional level. Negative correlation has been associated between mindfulness traits and maladaptive coping strategies. Researches have also implied that mindfulness training would benefit nonclinical substance users by teaching self-regulation, thereby giving them the opportunity to engage in alternate, healthy coping strategies

Research studies have also suggested that those who display low levels of mindfulness while employing maladaptive coping strategies do exhibit prolonged autonomic activation. This process of prolonged reactivity to stress, if activated repeatedly in response to stressful life events, will definitely have cumulative and deleterious effects on health, i.e. hypertension, glandular disorders, obesity, IBS, Sleep disorders skin and cardiovascular disease (McEwen & Stellar, 1993). Poor health too poses an additional problem for those who struggle to face the increasing demands and high standards of the current workforce and academic climate without having sufficient coping strategies to fall back on.

From the student's perspective, the implications of high stress and poor coping are costly, given the potential for psychological distress, physical health risks, and interpersonal conflict. It is known that students suffering from psychological distress have, on average, lower grades and lower graduation rates than their counterparts (Regehr et al., 2013). In this scenario , it is safe to state that improved resources need to be made available to students in distress.

This approach of Mindfulness has important implications for school administrators, teachers counselors, parents and other community stakeholders. Researches do suggest Adolescents who engage in substance abuse behaviours are more likely to indulge in problematic behavior patterns. By making it part of the curriculum, teaching MBCBT –

Mindfulness based cognitive behavior therapy at school levels and also by engaging emotionally disturbed adolescents in mindfulness activities will definitely teach them better ways to cope with the uncertain times especially stress pertaining to covid 19 era. Mindfulness Meditation is indeed the new and a very important "kit on the block" and it has come to stay.

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