Review Article on Effect of Mindfulness Mediation on Stress among College Students

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Abstract

Background: When student enters in college life and encounters unexpected threats which create stress among college students and eventually effect on psychosocial behaviors. College students reported a high prevalence of mental health problems, increase in symptoms of mental disorders due to stress. Stress represented an important psychosocial challenge for students. The high prevalence of stress among college students highlights a need for accessible interventions that can resolve timely upcoming psychosocial problems among students. Aims: The aim was to review the effect of Mindfulness Meditation to reduce stress of college students utilized in included articles of the study. Materials and Methods: Articles were collected from electronic database. The Whitlemore and Knaff’s framework was used for methodology of study. Only Nine studies included in the review after critical appraisal. Results: Different approaches of Mindfulness Mediation utilized in various studies were found significantly effective in reducing stress among college students. Conclusion: Reviewer concluded using of Mindfulness mediation program in early stage of college life can reduce the stress and enhance the academic and nonacademic performance. Key Word: Mindfulness Meditation, Stress, College, Students

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I. Introduction

A life of college is a remarkable and loveable times of an individual. It provides different positive experiences and negative experiences related to academic, nonacademic and personal aspects. In the view of academic experiences, student encounter new terminologies, concepts and skills which students are not exposed in her or his previous life that demands high focus towards learning. Every student has different strength to learn, focus and improving skills which gradually create stress and other psychosocial behavior and eventually impact on well being of students. When environmental demands overwhelm an individual’s resources, high levels of stress are perceived and threaten personal wellbeing. College students report a high prevalence of mental health problems and research indicates a general increase in symptoms of mental disorders among students. Stress represents an important psychosocial challenge for both undergraduate and graduate students. The high prevalence of mental health problems among university students highlights a need for accessible interventions that can address the specific psychosocial challenges of this population.

II. Background

Mindfulness is a process where people create a sense of deep relaxation and tranquility by calming down their mind. It helps to concentrate on a certain point in the room, chanting mantra, visualizing or focusing on the breath. There are various ways to conduct like sitting on the floor with their legs cross in the lotus position, mediation can also be practiced while standing, walking or lying down it can be done on its own, but it is also associated with yoga. Mindfulness and meditation are both great ways for students to improve their health and the benefits of these practices can also trickle into their academic lives. The benefits of Mindfulness Mediation are relieving from stress and anxiety created by rule and regulation of colleges, increasing focus helps to do tasks and avoiding distractions, improving memory need high academic performance and practicing mindfulness can go a long way toward increasing students’ ability to remember their course material.

In recent years, there has been increasing evidence that acknowledges the potential role of mindfulness in promoting wellbeing and reducing anxiety, depression, and academic stress across a variety of population, including graduate and undergraduate students. Mindfulness is defined as the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment.
Given the potential impact of Mindfulness Meditation needs critical appraisal. The purposes of present review is to integrate literature included in the study that examined the effect of mindfulness mediation on stress of college students. [4]

III. Material And Methods

Design
The Whitttemore and Knaff’s framework was used to review for integration. [5]

Search methods
Electronic databases were used to identify research articles that explored the effect of Mindfulness Meditation on stress of college students using combination of the following terms: ‘Mindfulness , College Students.

Search limits
- Study on humans
- English language used for publication
- Effectiveness of Mindfulness Mediation among College students
- Study must be discussed in terms of stress

Inclusion criteria
- Quantitative study
- First 50 searched articles through electronic database

Exclusion criteria
- Research papers were excluded if they were not primary studies
- Medium of language other than English
- Systemic review

Search outcome
Initially, 50 articles were searched and screened to assess the relevancy. After review of titles and abstracts, 36 articles were excluded, only 14 were critically appraised 5 articles were removed following critical appraisal leaving 9 articles included in the review.

Quality appraisal
Quantitative papers were critically appraised using Mc Master critical review form.[6] A Modified Mc Master critical review form includes the following elements : purposes, literature, design, sample, outcome, intervention, results conclusion and implications was used to score the elements. For each elements, we allocated one point and maximum score 15. Sample size of article was initially 50 and after securing it became 9 at the end. Two were excluded on the basis of inadequate description of the intervention and outcome.

Data abstraction
Each study was being read and re-read in details followed by abstractions and analysis of relevant information. Major findings were assessed and analyses.

Data synthesis
A descriptive coding process was used to organize and synthesis the results.

III. Result

Characteristics of included studies: Out of Nine studies reviewed, three studies from united states, each study from Germany, South Korea, Spain, Netherlands, New Zealand and UK. All studies were quantitative studies. The Mindfulness Mediation was provided in different approaches to the student showed for stress reduction. Mostly studies used randomized control studies using stratified random sampling, simple random sampling. Sample size of the participants was above 50. Other factors also discussed with stress.

Participant’s Characteristics: The participants were from different educational college. One study has limitation related to female population only.

Outcome Measures: The included researches reported multiple outcomes with the most common like stress, sense well being, empathy, self-compassion, academic performance. But reviewer measured in terms of stress reduction. Other factors were not discussed.

Data Analysis: In this review, there were significantly reduction in the stress in different approaches of Mindfulness Mediation used by college students.

IV. Discussion

Stress reduction in College students using Mindfulness Mediation
Seven of the Nine studies using randomized control designed to assess the effectiveness of Mindfulness Mediation on stress reduction. Studies also discussed other outcome but review objectives was to discuss impact of Mindfulness Mediation on stress reduction.
Health not only as a physical but also as a mental and social well-being. Stress is an important one and has been related to common disorders like depression, work-related fatigue burnout and anxiety disorders. Already students at an early stage of medical school experience stress, depression and anxiety and an increase thereof in the years to come. High amounts of stress not only foster the abuse of substances like alcohol and nicotine but can also lead to other unhealthy habits[7]. The various studies utilized different approaches of mindfulness meditation to assess efficacy in terms of stress reduction as discussed below.

One study delivered an 8-week mindfulness meditation intervention to college students through a consumer-based mobile app (i.e., Calm) and discussed Calm as a consumer-based mindfulness meditation mobile app which offers a range of mindfulness meditation practice guide modules that vary in length, instruction, and content. It further discussed that mindfulness meditation is the practice of moment-to-moment awareness in which the person purposefully focuses on the present without judgment. The Study included Vipassana which is a technique of mindfulness that explores how the mind influences the body and how the body influences the mind. The findings showed 8 weeks of meditation on the intervention group had a significant reduction in perceived stress compared with the control group. [8]

There was one study which utilized teaching formal techniques of MBSR (Mindfulness-based stress reduction) included 6 two-hours courses was utilized among preclinical medical students. Intervention included the first two hours started with an introduction into mindfulness, followed by an exercise of mindful breathing. Thereafter, the students were invited to share and reflect their experiences, such as thoughts, feelings and judgments and give a feedback. At the end of these first two hours, mindful breathing was once again practiced and additional homework was assigned which included practicing the formal methods of mindfulness at home and being more mindful during everyday activities. The data was longitudinally analyzed over their first and third term revealed, that elevated mindfulness was paralleled by a reduction of perceived stress and vice versa. Perceived stress and mindfulness correlated inversely at both time points. The intervention on mindfulness based stress reduction helped to contain stress and maintain mindfulness during the observation period and this effect lasted for at least six months beyond completion of the intervention.[7]

Guided meditation including psycho-education which discussed mindfulness is helpful during stressful times delivered to students. In the study, the raisin exercise was practiced (beginner’s mind), as well as a sitting meditation focusing on the breath, a body scan, and mindful walking. Each student received a CD of several guided meditations (e.g., awareness of breathing meditation, body scan, and mindful movements) for their daily exercises. The weekly meditation program and the meditation practices on the CD. Each students received a brochure with the mindfulness meditations copied from this book, instructions for the Mindfulness Meditation exercises, and additional information on stress and meditation. All approaches had substantial effects on perceived stress and anxiety both.[9]

One study showed that the MVC (Mindfulness Video Conferences) intervention was provided to undergraduate students 8 weeks in duration. The intervention comprised 3 components: (1) 12 student-specific mental health modules conveyed by online video; (2) 3 anonymous discussion boards dedicated to depression, anxiety, and stress; and (3) an anonymous 20-minute group-based live video conference led by a moderator (a counselor with a master’s degree in psychology and training in mindfulness) during which students could raise and discuss topics covered in the module.

There was approach used 12 mental health modules consisted of one educational content video and one mindfulness practice video recorded in both male and female voices and offered in both high and low resolution (a total of 8 videos per module); students could choose the type of video they wanted to watch for each module. The videos were available for participants 24 hours/day to watch or listen to on computers, phones, or tablets at their convenience. The MVC intervention significantly reduced anxiety scores. The intervention had no effect on stress levels although a previous pilot MVC study showed significant reductions in stress levels in a similar population. Researcher found one reason for the absent effect could be higher baseline stress scores for this sample than in the pilot study.[10]

The study concluded eight 80-minute long group sessions were delivered by one lead and one assistant facilitator over a period of 6 weeks (2 sessions/week during weeks 1 and 2, 1 session/week during weeks 3 to 6) in the evenings in the dormitories. The goal of the mindfulness-training program was to enhance emotion regulation in students with group sessions that focused on the following themes: body awareness, thought awareness, emotion awareness, integration of body, thought and emotion awareness, reduction of self-judgments, and integration of mindfulness practice in daily life. Mindfulness training helps to attenuate first-year college students’ responses to family stress across the fall academic semester.[11]

One study showed that mindfulness meditation offers a promising tool for managing the stress that may be associated with the challenges of emerging adulthood. Mindfulness meditation training has been shown to reduce stress and improve mood and academic performance in both college and graduate students. The Koru program requires a commitment to practicing meditation for at least 10 minutes daily, completing and returning a daily meditation log, as well as reading the required chapters in the course book, Wherever You Go, There
You Are. The meditation log includes space for daily documentation of two things for which the student feels grateful. During each class, students learn and practice mindfulness meditation and one or two mind-body skills, including breathing exercises, walking meditation, guided imagery, and eating meditation. There was a significant group X time interaction for change in perceived stress scores. Whereas perceived stress scores for the control group did not change over time.[12]

The study reported Mindfulness is a means of training the regulation of attention for the purpose of mental health promotion. The MSS (Mindfulness Student Study) intervention consisted of a secular, face-to-face, group-based skills training programme based on the course book “Mindfulness: a practical guide to finding peace in a frantic world” and adapted for university students. Seven MSS courses ran in parallel during university terms, with up to 30 students in each course, all delivered by an experienced and certified mindfulness teacher. The eight, weekly sessions lasted 75–90 min. Sessions included mindfulness meditation exercises, periods of reflection and inquiry, and interactive exercises. Students were encouraged to also practice at home. The recommended home practice time varied throughout the course, starting at 8 min and increasing to about 15–25 min per day. Home practice included meditations from the course book’s audio files and other mindfulness practices, such as a mindful walk, mindful eating, and habit breakers. Before and after each class, students received a generic email from the mindfulness teacher with relevant materials. MSS course maintains wellbeing and engenders resilience to accumulation of stress during the academic year, notably during the summer examination period.[13]

V. Conclusion

There was stress among college students which can lead to health problems and addiction. The different approaches of Mindfulness Meditation could help students to reduce stress and increase well-being and maintain healthy life styles. The reviewer provides evidence that Mindfulness Meditation helped to reduce stress among college students. We recommend that mindfulness mediation program need to be involved in the curriculum of early stage of college life. So that students can protect themselves from harmful effect of stress in college life. Reviewer tries to provide the impetus for broader utilization of this relatively cost-effective approach support by a rigorous body of quantitative study.

Limitation

The relatively small number of included studies limit generalization and representation of the results. The searching research paper for reviewing limited to first 50 studies searched in electronic database, it may expand with large number of research paper of topic of interest. The review only included studies published in English, this may have excluded other relevant studies. The review limited to quantitative studies and using modified critical appraisal for appropriateness of the studies. Reviewing was limited to assess effect of Mindfulness Meditation in terms of stress.

Implications

Practicing of mindfulness meditation can help students to enhance their theoretical and skilled performance. Mindfulness Meditation can improve the memory and concentration of the students, reduce the distraction area and prevent students from bad habits like addictions. It gradually makes student emotionally strong and use defense mechanism to handle college threatening situation effectively which leads to low mortality of students suicidal cases. Therefore, it is important to initiate such program for enhancing mental health of college students.

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Conflicts of Interest
No conflicts of interest

References

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[10]. Mor C, Paul R, Ahmad F, Moneddin R, and MVC Team. Effectiveness of an 8-Week Web-Based Mindfulness Virtual Community Intervention for University Students on Symptoms of Stress, Anxiety, and Depression: Randomized Controlled Trial. JMIR Ment Health. 2020 Jul; 7(7): 18595.


