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Educational Benefits of Mindfulness

'The faculty of voluntarily bringing back a wandering attention, over and over again, is the very root of judgement, character, and will. No one is compos sui [master of himself] if he have it not. An education which should improve this faculty would be the education par excellence. But it is easier to define this ideal than to give practical directions for bringing it about' (James, 1890, vol. 2, p. 424).

Introduction

Mindfulness has been defined by psychologists as self-regulated attention that is focused on the present moment. Bishop et al (2004) proposed a two-component model of mindfulness. The first component centres on the ability to self-regulate attention which allows individuals to focus on the present. The second component focuses on the orientation individuals use to assess their experiences in the present moment and is characterised by acceptance, openness and curiosity.

In the last decade, mindfulness has become a mainstream psychotherapeutic tool, largely due to the success of Mindful-Based Stress Reduction Programmes in clinical and non-clinical populations (Davis & Hayes, 2011). Increasingly, the potential benefits of mindfulness have been of interest in educational settings. In relation to higher education, mindfulness may combat the high levels of stress and anxiety reported by students (Lynch, 2013). In school settings, mindfulness has been considered a potential tool for coping with the growing numbers of school-aged children experiencing social, behavioural and emotional difficulties that interfere with the ability to succeed at school, and become capable adults and well-rounded citizens (Schonert-Reichl & Lawlor, 2010).

Our wiki page aims to provide a concise and comprehensive overview of the educational benefits of mindfulness. Below is a short video introducing the concept of mindfulness in relation to university life from mindful-kiwi.com (<http://mindful-kiwi.com/>) (the website provides online classes for students for a fee, but we will give you some free advice later on how to practice mindfulness!).

<http://www.youtube.com/watch?v=4enG8Leogso>

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If you only read one paper...

We strongly recommend you read Katherine Weare's (2012) paper:- "Evidence for the Impact of Mindfulness on Children and Young People."

Why read this paper?

This paper describes what the young generation can gain from practicing mindfulness, and summarises recent research that explains how children can gain in terms of emotional wellbeing, mental health, physical health, and social and emotional learning. It also offers brief criticism of the current research.

Click here to read the paper:

(<http://www.enhancementthemes.ac.uk/docs/documents/impact-of-mindfulness---katherine-weare.pdf>)
(<http://www.enhancementthemes.ac.uk/docs/documents/impact-of-mindfulness---katherine-weare.pdf>)
(<http://www.enhancementthemes.ac.uk/docs/documents/impact-of-mindfulness---katherine-weare.pdf>)

Cultural Connections

Although mindfulness has only become popular in Western society in the last couple of decades, Buddhists in Eastern communities have practiced mindfulness for thousands of years.

Buddhism is a nontheistic religion concerned with relieving "dukkha" (suffering), and encouraging enlightenment, with the ultimate goal of helping others to attain nirvana – a state of blissful ego-lessness.

According to teachings of the Buddha, mindfulness practice allows one to become aware and attentive to the reality of things. By doing so, one overcomes delusion, which is considered crucial in achieving enlightenment.

Most Buddhists formally cultivate mindfulness through meditation. However, Buddhist teachers emphasise mindfulness as a way of life and encourage followers to pay attention and be aware of all aspects of life, from showering to eating a meal.



On the family trip to nirvana

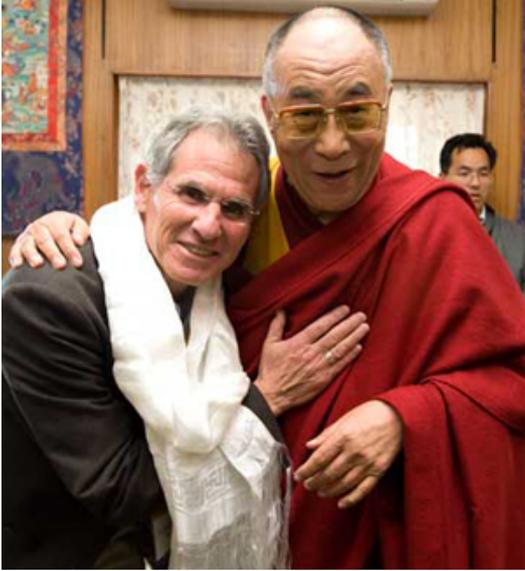
While mindfulness has traditionally been cultivated as part of a wider religious or cultural practice, it is important to remember that attaining non-judgmental awareness of the present is a skill achievable by all. Therefore, mindfulness is not bound by religion and may be applied to other disciplines such as psychology.

History in Psychology

Jon Kabat-Zinn, an American doctor, introduced mindfulness as a mainstream concept in Western society, having studied under Buddhist monk Thích Nhất Hạnh. Kabat-Zinn's background in science, combined with his personal experience of mindfulness, led him to believe that integrating the two approaches could be effective for the relief of certain medical conditions

approaches could be effective for the relief of certain medical conditions.

In 1979, Kabat-Zinn founded the Stress Reduction Clinic at the University of Massachusetts Medical School and pioneered mindfulness-based stress reduction (MBSR) therapy to help patients cope with chronic pain (Kabat-Zinn, 1982). It might therefore be argued that as a Western concept mindfulness originates in behavioural medicine.



It soon became evident that mindfulness might also be effective in combatting mental disorders such as anxiety and depression, thus research conducted by clinical psychologists and psychiatrists flourished (Grossman, Niemann, Schmidt, & Walach, 2004).

Mindfulness fits well with the values of positive psychology due to its apparent ability to enhance well being, increase positive emotions and prevent against mental illness. For this reason, mindfulness was adopted and researched by positive psychologists when the branch emerged in 1998.

However, it should perhaps be noted at this point that although the progression of mindfulness as a Western concept appears simple, its definition and purpose has evolved since Kabat-Zinn's introduction in 1979. Kabat-Zinn's definition was more reflective of the Buddhist roots of mindfulness, stating that the goal of practice should be non-judgmental acceptance of reality, regardless of whether reality is positive or negative. Although mindfulness may result in positive outcomes, this should not be the intention of practice. In contrast, positive psychologists emphasise practicing mindfulness specifically because of the benefits it can have on one's life.

That said, focus on the positive effects of mindfulness has led to the development of mindfulness training schemes in non-clinical settings. Mindfulness has recently been implemented in schools and universities, with the intention of promoting well-being and preventing future mental health crises.

The wish of William James for an "education par excellence" may finally be coming true!

Benefits and Drawbacks of Mindfulness in Education

Why is Mindfulness a Good Thing?

Research suggests both students and teachers can benefit from mindfulness-based training programmes. This section explains what these benefits are.

Improved Mental Wellbeing...

...In University Students

In light of recent findings that roughly 50% of students in higher education suffer from mental illness (Bayran & Bilgel, 2008; Bewick et al., 2010; Keyes et al., 2012), research has examined whether mindfulness has therapeutic effects on student mental health. A study conducted by de Vibe et al. (2013) found that students reported reduced study stress and enhanced mental well being following a seven-week mindfulness program, suggesting mindfulness training is effective for combating mental distress in

students. That said, only female students, and not males, benefitted from the programme (de Vibe et al., 2013). This is puzzling given that gender differences in the effects of mindfulness have not been observed in the clinical literature (Arch et al., 2013; Grossman et al., 2004), nor in other studies of mindfulness training in students that have shown psychological benefits for both genders (Lynch et al., 2011; Ritvo et al., 2013).

The male sample size was relatively small in de Vibe et al.'s (2013) study which may account for the absence of an effect. It is also possible that small male sample sizes indicate a lack of interest in mindfulness training among men. Indeed, Lynch (2013) reported that the majority of volunteers for her mindfulness studies are young females. If men really are less interested in mindfulness training, it is possible that male participants in de Vibe et al.'s (2013) study were less motivated to practice mindfulness at home, and therefore showed fewer positive psychological outcomes than female participants. Future studies should attempt to reveal male and female attitudes towards mindfulness interventions, and assess how often participants engage in private practice during mindfulness programs.



...In School Children

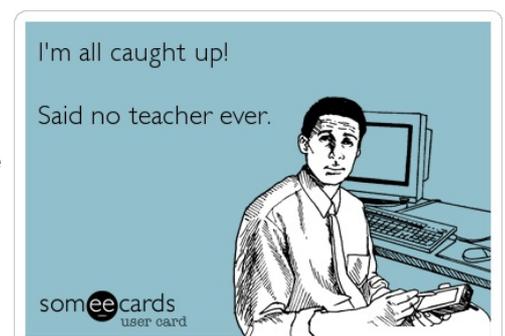
van de Weijer-Bergsma, Langenberg, Brandsma, Oort, and Bögels (2013) assessed the effects of a 6 week mindfulness intervention on schoolchildren and found preventive effects on stress directly after training, with effects becoming more pronounced at 7 weeks follow-up. It is hoped that by teaching children how to be mindful, skills for coping with stress can be implemented from a young age and prevent against mental health problems in adulthood. However, research is in its infancy and longitudinal studies will be crucial to determine whether mindfulness training in childhood has long-term effects on mental health.

...In Preschoolers

Little research has been conducted on the effects of mindfulness training in very young children. Zelazo and Lyons (2012) suggested training could be highly effective as the brain is highly plastic at this age and may respond more readily to mindfulness training, enhancing emotional regulation and attention skills. However, age-appropriate interventions need to be devised that reflect the executive function capacities of children under the age of 5.

...In Teachers

Although little research has examined the effects of mindfulness training on teachers, there is some indication that mindfulness training can help teachers to cope with stress, which subsequently has a positive effect on teacher-pupil interactions, and improves the atmosphere of the learning environment (Gold et al., 2010; Singh, Lancioni, Winton, Karazsla & Singh, 2013).



Enhanced Academic Achievement

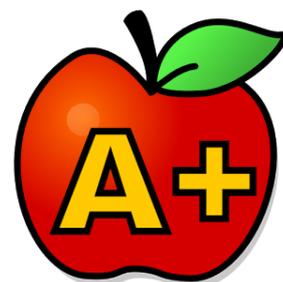
...In University Students

In a study by Ramsberg and Youmans (2013), students briefly meditated or rested at the start of a lecture. Students were subsequently quizzed on the lecture content at the end of class. Meditators performed significantly better than those in the rest condition, suggesting mindfulness had improved knowledge retention. In addition, improvements were evident after only 6 minutes of meditation suggesting the effects of mindfulness were strong. However, it is unknown if the benefits of meditation were long-lasting as participants were not quizzed on the lecture content again following a significant delay (i.e. on final exams) (Ramsberg & Youmans, 2013).

Mrazek, Franklin, Phillips, Baird and Schooler (2013) found that students who completed a 2 week mindfulness-training course showed significant improvements on the Graduate Record Examinations (GRE) compared with their own scores prior to intervention, and with non-intervention controls. The authors suggested that improvements in scores might be accounted for by observed reductions in mind wandering and improvements in working memory (Mrazek et al., 2013). Such findings have been supported by qualitative reports of students stating that they felt mindfulness had improved their concentration and memory (Lynch et al., 2011).

...In School Children

Napoli, Krech and Holley (2005) investigated the effects of a mindfulness-training programme on attention in first, second, and third grade students, and found increases in selective attention as well as reductions in behaviours associated with ADHD. The authors concluded enhancing attention through mindfulness can result in fewer class disruptions, thereby enriching learning for all (Napoli et al, 2005).



Improved Social Functioning

Lucas (2012) has suggested that practicing mindfulness meditation allows one to become aware of and alter maladaptive behaviours in romantic, personal, and professional relationships. While improved social functioning has not been explicitly studied in student populations, Lynch et al. (2011) reported that many college students who had participated in mindfulness training reported a change in the way they communicated with others and engaged in conversation.

Future research could address the potentially beneficial effects of mindfulness on social interaction, given that going to school or university involves meeting and interacting with unfamiliar and diverse individuals. For teachers, it is possible that mindfulness-associated improvements in social functioning could enhance interactions with colleagues and allow teachers to feel more confident in their abilities at work.

Limitations of Mindfulness in Education

Although practicing mindfulness in an educational setting may offer various benefits (e.g. improved mental well being, academic achievement, and social functioning), certain methodological issues exist with the research conducted thus far, as well as the implementation of mindfulness training.

Mindfulness research in general relies heavily on self-report measures. In terms of higher education

mindfulness research in general relies heavily on self-report measures. In terms of higher education, students are often required to self-report perceived levels of mindfulness using scales such as the Mindfulness Attention Awareness Scale (MAAS), and personal outcomes of practice using the Effects of Meditation Scale (EOM). In studies of school children, outcomes are often measured through the reports of teachers and parents. Thus, the research on mindfulness in education has not been particularly objective and findings may be subject to social desirability bias.

If you want to read more about how mindfulness is operationalised in research, we would recommend reading the "How to measure mindfulness" section of Group 18's wikipage!

There is also a concern that even if mindfulness programs are made more widely available, students in higher education will not make use of them. While Lynch et al. (2011) reported that initial interest in a mindfulness intervention was high, many withdrew from the programme before completion. This is not an unusual phenomenon among the student population. A study by Kang, Choi and Ryu (2009) reported student drop-out rates of more than 20%.

Lynch et al. (2011) has suggested that because university mindfulness programs are often free of charge, students may not have enough incentive to continue. However, as poor students ourselves, we would argue that if an admission fee were charged, probably fewer participants would enrol.

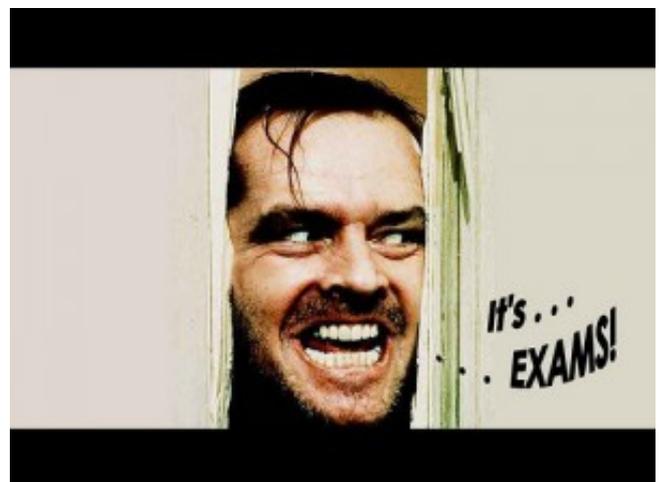
Lynch et al. (2011) has also suggested that university students may not feel they have the time or a vested enough interest in committing to regular mindfulness practice. Student participants have largely been individuals with mild to moderate psychological distress, rather than severe clinical diagnoses. It may be that drop-out is less common in clinical studies because participants feel compelled to continue in order to overcome specific difficulties (e.g. chronic pain or major depression).

Thus, while numerous studies have suggested mindfulness training in education can improve various aspects of students' and teachers' lives, additional research is required to examine the effects of mindfulness more objectively, and to develop ways of advertising mindfulness programs so that they are attractive to all.

Applications

Mindfulness for University Life

Siobhan Lynch has developed a specific programme called Mindfulness Based Coping with University Life (MBCUL) which is an eight week programme specifically designed to help students cope with the pressures they face at university. The programme was devised in response to research that found university students experience more stress and anxiety than age matched peers who did not attend university (Bewick et al, 2010) and the finding that the majority of students suffering from stress and anxiety do not seek help (Lynch, 2011). The MBCUL is modelled on the Mindful-Based Stress Reduction Programme (MBSR) and the Mindful Based Cognitive Therapy programme (discussed in Group 18's wikipage!), both of which are used to treat a broad range of symptoms in clinical populations and have been found to be effective in reducing stress levels in healthy populations (Cheisa & Serreti, 2009). Lynch proposes that educators and student

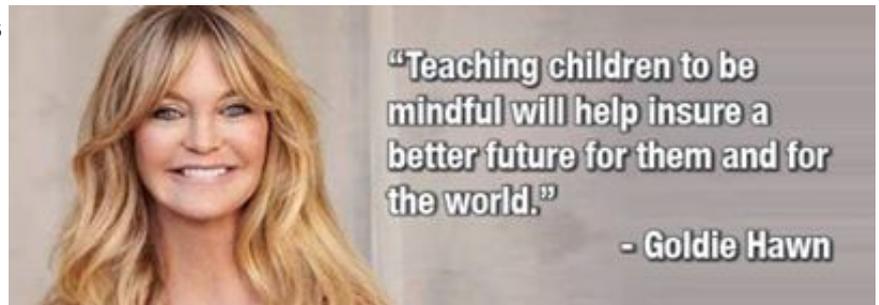


counsellors can use the programme to introduce mindful meditation to students while tailoring the material to meet their needs.

A pilot evaluation of the MBCUL found that when compared with wait-listed peers, individuals on the programme experienced significant changes in their perceived levels of stress, anxiety, depression and personality relevant change. While, the MBCUL shows promise, it must be noted that the more traditionally used mindfulness training programmes have been used with University students and have also had strong effects. de Vibe et al (2013) found that the MBSR programme produced significant positive improvements in mental distress, study distress and subjective well-being in female participants. It would be advantageous for future research to analyse whether the MBCUL is more effective at reducing stress in students than the more traditional methods, to discover if a programme created specifically for students is warranted.

Mindfulness for School Pupils

In response to increasing signs of stress and high dropout rates in children, a number of organisations have set up programmes that aim to increase the wellbeing of students. For instance, The Hawn Foundation, created by actress Goldie Hawn has created a social and emotional literacy curriculum and



training programme called MindUp. The programme was developed by a team of educators, neuroscientists, positive psychologists and experts in mindfulness training and is now used across the world. The programme has a strong focus on teaching children to be mindful and recent research suggests the programme is effective. Schonert-Reichl and Lawlor (2010) found that students on the MindUp, mindfulness based education programme, when compared to wait listed peers showed significant increases in optimism. Effects were also found for teacher-rated classroom social competency behaviours and self-concept. Furthermore, teachers were pleased with the programme stating that mindful activities were easy to integrate into the classroom. Research by Schnoert-Reichl et al. (2011) similarly found that 4th and 5th graders who participated in the MindUp programme showed greater improvements in cognitive control, stress regulation, optimism and empathy. Additionally, the students were viewed by peers to be more trustworthy and helpful and had better math grades by the end of term.

It would be a valid point to make that the MindUp programme while having promising initial results does not have a strong empirical basis with relation to it's efficacy long-term and cross cultural suitability. However, The Hawn Foundation supports future research and currently there is a longitudinal study taking place using one of the groups from the MindUp pilot group from 2008. Dr Kyle Matsuba is currently implementing a MindUp programme in a school in Uganda and is pilot testing the effectiveness of culturally adapted standardised outcome measures.

MindUp is currently offered in the U.S., Canada, Australia, China, Uganda and the U.K. and the Hawn Foundation offers training to teachers who wish to teach the MindUp programme in their classroom.

If you would like to read more about the MindUp programme and ongoing research, information can be found at this website - (<http://thehawnfoundation.org>)
(<http://thehawnfoundation.org>).

Mindfulness for Teachers

While it is important to understand the benefits mindfulness training can have for pupils it is also very valuable to ascertain the effect mindfulness training can have on teachers. Teaching is consistently found to be a stressful profession. Indeed, one quarter of teachers consider their occupation very stressful (Johnson et al, 2005). Thus, a potential application for mindfulness could be to help improve teachers' social and emotional wellbeing. At present, there does not seem to be specific mindfulness training courses provided for teachers in the UK. However, empirical evidence suggests that mindfulness training could be of benefit to teachers. For example, Flook et al. (2013) investigated the effect of a modified Mindfulness-Based Stress Reduction course (mMBSR) adapted specifically for teachers who showed significant signs of burnout (characterised by feelings of distress and despair). The authors noted the intervention had promise as participants showed significant reductions in psychological symptoms and burnout while participants in the control group showed declines in cortisol functioning over time and significant increases in burnout. Furthermore, participants in the intervention group showed increased scores in self-compassion and observer-rated classroom organisation.



While still a relatively new topic, so far empirical evidence suggests that mindfulness training could be of benefit to teachers who are suffering from stress and burnout. Given the serious implications of teacher burnout, such as choosing to leave the profession (Split et al, 2011), the potential to apply mindfulness to teacher stress is an area that should be further investigated.

Wild Uncritical Claims

Mindfulness cures anxiety, ADHD, autism and depression!

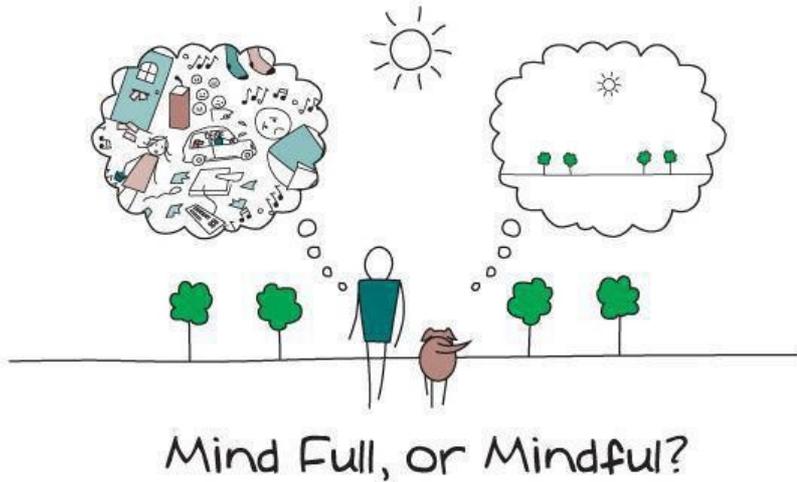
As mentioned above, mindfulness and meditation practice helps children to develop empathy, mind-body interaction and attention. Some scientists and mindfulness trainers believe mindfulness practice treats autism, ADHD, anxiety and depression among children (Garey, 2011). They teach mindfulness to children, mostly using Mindful Based Stress Reduction (MBSR), guiding them to pay attention to breath, and encourage them to apply techniques in daily life. Although these studies are usually small in scale, and programs have been short in duration (6-8 weeks), results revealed that both anxiety and behaviour problems in 8- to 12-year-olds were reduced (Sample & Lee, 2011). However, while research has found symptoms of childhood disorders can be reduced using mindfulness techniques, it's a stretch to suggest such programs can cure serious symptoms associated with such disorders.

Meditation for juveniles

Some practitioners claim meditation can help decrease impulsive behaviour in juveniles or young people at risk of engaging in crime, and ultimately prevent incarceration (MeditationPlex Updates, 2014). The Lineage Project, an American organisation, ran programs in detention centres teaching yoga and mediation. One participant reflected that the exercises led him to recognise his interests, release his anger and tension, and increased his awareness of the surroundings (MediationPlex Updates, 2014).

This has become an increasingly popular claim. However, the existing data in most cases is still not sufficient to support the efficacy (DHHS, 2009).

Practical Exercises



If you think you're more mind full than mindful, then this section aims to provide you with all the information you need to get started on reducing stress, managing your moods and improving well-being.

Getting Started

With so many resources its difficult to know where to begin. I personally found this short video by Jon Kabat-Zinn to be the easiest resource to start with. His instructions are very clear and the importance of focusing on your breath when practicing mindfulness is explained well.

<http://www.youtube.com/watch?v=D5Fa50oj45s>

If you want to continue with mindfulness...

If you are looking to integrate mindful practice in your life I would recommend downloading one of the mindfulness apps on to your phone. The mobile phone apps are convenient and easy to use. Some apps cost money but many are free. For instance, the Headspace App is free and offers lots of help with mindfulness and meditation. For beginners there is the 10 minutes for 10 days program which is easy to fit in around a busy schedule. Also, the Headspace App is good as you can set meditation reminders which makes it more likely you will complete the daily mindfulness tasks.

Also, Glasgow University Counselling and Psychological Services offer an eight week Mindfulness Based Stress Reduction course. For further information on this course, details can be found at (<http://www.gla.ac.uk/services/counselling/support/courses/>)<http://www.gla.ac.uk/services/counselling/su> (<http://www.gla.ac.uk/services/counselling/support/courses/>). The course is full at the moment, but at York University, Toronto, the Healthy Living Initiative provides free meditation classes online, which are open to everyone so if you would like to take an online class use this link (but remember you'll need to work out the time difference for the online sessions): (<http://healthystudentinitiative.com/>)<http://healthystudentinitiative.com> (<http://healthystudentinitiative.com>)

For a general resource list use mindfulnessforstudents.co.uk (<http://mindfulnessforstudents.co.uk/>). It's a good website to use as a starter reference as it provides free audio guided practices, videos and articles on different types of mindfulness exercises.

Further Reading

Germer (2005) gives you the overall idea of mindfulness, including its definition, history, origin, and some formal and informal practices you can do by yourself!

Germer, C. K. (2005). Mindfulness: What is it? What does it matter? In C. K. Germer, R. D. Siegel, & P. R. Fulton (Eds.), *Mindfulness and Psychotherapy* (pp. 3-27). New York, NY: Guilford.

Here's a link to the ebook:

(<http://books.google.com.hk/books?id=2Ldsrt1VwTUC&lpg=PP1&hl=zh-TW&pg=PP1#v=onepage&q&f=false>)
(<http://books.google.com.hk/books?id=2Ldsrt1VwTUC&lpg=PP1&hl=zh-TW&pg=PP1#v=onepage&q&f=false>)
(<http://books.google.com.hk/books?id=2Ldsrt1VwTUC&lpg=PP1&hl=zh-TW&pg=PP1#v=onepage&q&f=false>)

If you want to know more about the evidence-based advantages of mindfulness practices follow this link:

(http://www.traumacenter.org/products/pdf_files/Benefits_of_Mindfulness.pdf)
(http://www.traumacenter.org/products/pdf_files/Benefits_of_Mindfulness.pdf)

Other mindfulness resources:

www.mindful.org (<http://www.mindful.org/>) – Resources for integrating mindfulness into education.

www.mindfulschools.org (<http://www.mindfulschools.org/>) – This is a school which advocates integrating mindfulness into education. There are a lot of resources for interested teachers.

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