

## Mindfulness as an effective technique for various psychological problems: A conceptual and literature review

Arihdy Caesar Pratikta

University College London

London, United Kingdom

E-mail: arihdyacaesar@gmail.com

Received: March 11, 2020; Revised: April 26, 2020; Accepted: April 29, 2020

### Abstract

Mindfulness recently has gained its popularity amongst therapeutic researchers and practitioners. As a part of therapy sessions, mindfulness highlights the urgency of the relationship between therapists and clients as this factor can strongly predict the therapeutic outcomes. This article will discuss issues and several mindfulness-related aspects. The remainder will be organised into six sections, including: the definition of mindfulness, the importance of relationship in mindfulness, measurement the outcomes of mindfulness, several mindfulness-based therapies, the benefits of mindfulness from various empirical studies, summarising the presented explanations and offering suggestions for future research. Researchers and practitioners have developed various mindfulness-based therapies. It also implies the practice of counselling. Mindfulness-based counselling can effectively help people who suffer from various psychological problems, ranging from anxiety disorders to trauma and posttraumatic stress disorder. Nevertheless, it warrants further research to overcome the current research flaws, such as the number of sample size, methodological procedures, and replicated findings.

**Keywords:** *mindfulness, counseling, psychological problems, literature review*



This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



### Introduction

Mindfulness recently has gained its popularity amongst therapeutic researchers and practitioners. A survey by the Psychotherapy Networker has found that 41% of more than 2500 therapists reported implementing mindfulness as a part of their practices (Siegel, 2011). In addition, more than 1500 articles whose titles contain “mindfulness” are found in the PsycINFO (A. P. Brown, Marquis, & Guiffrida, 2013), and more than 37 books on mindfulness have been published since 2014 (Ronay, 2014). Its growing body of research offers therapists and clients numerous options of adapting mindfulness to their therapies.

The term ‘mindfulness’ was originally derived from Pali (the language used in original teachings of Buddha) word, *sati* and *sampajanna* that can be translated as consciousness, memory, or judgement (Wallace & Bodhi, 2006). Although often associated with Buddhist tradition, or even yogic tradition in Hindu (Miller, Fletcher, & Kabat-Zinn, 1995), the phenomenological nature of mindfulness can be found in most religious traditions, for example, Tafakkur in Islam, Kabala in Judaism and the rosary in Christianity (K. W. Brown & Cordon, 2009; Manikam, 2014).

The concept of mindfulness is then re-arranged and adopted by counselling practitioners as part of their therapies (Hanley, Abell, Osborn, Roehrig, & Canto, 2016). Although there is a debate amongst theorists in defining mindfulness as a means that is originally from Eastern spiritual system into Western therapeutic practices, in this essay, mindfulness is “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (Kabat-Zinn, 1994, as cited in Hanley et al., 2016, p. 104). Following this definition, Shauna L. Shapiro, Carlson, Astin, and Freedman (2006) posit three components of mindfulness: *intention* (representing ‘on purpose’), *attention* (representing ‘paying attention’), and *attitude* (representing ‘in a particular way’) (IAA). These components occur simultaneously in a single cyclic process. Intention is related to the outcomes and reminds the clients why they are practising mindfulness. Attention identifies clients’ surrounding worlds and moment-to-moment internal experiences. Whereas attitude is needed to include heart qualities to the attention in the mindfulness process (J Kabat-Zinn, 1990; S. L. Shapiro & Carlson, 2017).

As a part of therapy sessions, mindfulness highlights the urgency of the relationship between therapists and clients as this factor can strongly predict the therapeutic outcomes (Weinberger, 2002). Some theorists, such as Lambert and Simon (2008) argue that the therapeutic relationship is the key aspect of helping clients, regardless of the type of interventions. The characteristics of the relationship are empathy, trust, warmth, unconditional positive regard, kindness, congruence, and human wisdom. These characteristics are essential for clients’ changes (Bohart, Elliott, Greenberg, & Watson, 2002; Lambert, 2005; Rogers, 1961).

In the therapeutic relationship, the therapists must be present with the clients, instead of being separated individuals (Hick, 2008). This requires the skills in which the therapists must be able to switch attention to what their experiences in their bodies as well as what the clients are feeling or saying. No matter how well-trained the therapists are, if they cannot pay full attention to what occurs during the sessions, they cannot build good rapport and respond appropriately (S. L. Shapiro & Carlson, 2017).

## Findings and Discussion

### 1. *Mindfulness and the Therapeutic Relationship*

As a part of therapy sessions, mindfulness highlights the urgency of the relationship between therapists and clients as this factor can strongly predict the therapeutic outcomes (Weinberger, 2002). Some theorists, such as Lambert and Simon (2008) argue that the therapeutic relationship is the key aspect of helping clients, regardless of the type of interventions. The characteristics of the relationship are empathy, trust, warmth, unconditional positive regard, kindness, congruence, and human wisdom. These characteristics are essential for clients’ changes (Bohart, Elliott, Greenberg, & Watson, 2002; Lambert, 2005; Rogers, 1961).

In the therapeutic relationship, the therapists must be present with the clients, instead of being separated individuals (Hick, 2008). This requires the skills in which the therapists must be able to switch attention to what their experiences in their bodies as well as what the clients are feeling or saying. No matter how well-trained the therapists are, if they cannot pay full attention to what occurs during the sessions, they cannot build good rapport and respond appropriately (S. L. Shapiro & Carlson, 2017).

### 2. *Mindfulness Measures*

In measuring mindfulness, there is a debate amongst theorists. Some theorists (e.g., K. W. Brown and Ryan, (2003)) argue that mindfulness should be measured as a unidimensional factor, instead of multidimensional factors. Whereas other theorists (e.g., Baer, Smith, Hopkins, Krietemeyer, and Toney (2006)) disagree with this argument. They believe that mindfulness is a complex mechanism. Thus, it must be measured by considering the mindfulness complexity (Chiesa, 2013).

However, since mindfulness is less likely to be measured objectively, self-report measures become one of the most common measures to measure mindfulness. Nevertheless, using this type of measures has considerable issues that may result in bias. Since the respondents have not sufficiently had experience in mindfulness, it might affect the understanding of every item in the questionnaire. In addition, the language used in the instrument may be perceived differently depending on whether the respondents have (or not) been taught mindfulness (Leigh, Bowen, & Marlatt, 2005). To overcome such difficulties, researchers should minimise distractions during the assessment and ensure that the items of the questionnaire are easily understood. In addition, they can offer the respondents assistance if necessary (Farhall, Shawyer, Thomas, & Morris, 2013).

One of the examples of self-report scales that is widely employed is the Mindful Attention Awareness Scale (MAAS) (K. W. Brown & Ryan, 2003). It consists of 15 items with 6-point Likert-type scale ( $\alpha=.82$ ). As a scale representing those who perceive mindfulness as a single factor, the MAAS focuses only on the present-centred attention/awareness as they believe that this is the core element of mindfulness. Some researchers criticise the item of MAAS which are all negatively worded, making researchers conclude that it measures how unaware or mindless individuals are. Indeed, having not certain state does not necessarily mean individuals have the opposite (e.g., not feeling happy does not mean feeling sad) (Hanley et al., 2016).

The Five Facet Mindfulness Questionnaire (FFMQ), on the other hand, is another most widely employed scale representing those who see mindfulness as multidimensional factors (Baer et al., 2006). It comprises 39 items measuring five elements: describing (labelling the experiences that arise;  $\alpha=.91$ ), observing (attending to stimuli from internal or external;  $\alpha=.83$ ), non-judgmental (not judging feelings or thoughts;  $\alpha=.87$ ), non-reactive (letting thoughts and feelings come and go without attempting to change them;  $\alpha=.75$ ), and acting with awareness (paying attention to the present moment;  $\alpha=.87$ ). The FFMQ corresponds to Buddhist understandings of mindfulness nature (Bergomi, Tschacher, & Kupper, 2013). One of the critiques of FFMQ is that it does not measure mindfulness as such, rather it measures the respondents' beliefs in which elements they frequently engage with (Hanley et al., 2016).

Having analysed various mindfulness scales, Bergomi et al. (2013) suggest that those who will employ a certain scale must be well-understood about the information of each tool. Alternatively, they can attempt to use qualitative interviewing techniques to measure mindfulness (K. W. Brown & Cordon, 2009).

### **3. Mindfulness-based Therapies**

Mindfulness-based therapies are therapies that include mindfulness concepts in the therapies to teach mindful awareness, ranging from formal meditation (e.g., sitting quietly for 45 minutes) to informal exercises (e.g., bringing mindful awareness to daily activities) (Baer, 2014). Despite the various types of mindfulness-based therapies, this section focuses on Mindfulness-Based Stress Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), Acceptance and Commitment Therapy (ACT), and Functional Analytic Psychotherapy (FAP).

#### **3.1 MBSR**

MBSR is the first therapy utilising mindfulness as part of the therapy. It was initially developed to help patients with chronic pain in medicine settings. It comprises eight weekly groups sessions for 2.5-3 hours each with approximately 30 participants. Apart from the sessions, participants are required to complete daily home practices (meditation and yoga) for six days per week for 45 minutes per day during the treatment period (J. Kabat-Zinn, 1982; J Kabat-Zinn, 1990).

MBSR typically begins with the *body scan* in which the participants are directed to pay attention to parts of the body (started from toe to head or otherwise) and feel the sensations that arise without judging nor changing them for 40-45 minutes. The next practice is *mindful yoga* which aims to kindly arouse mindful awareness while observing the body. Many people report

that by practising mindful yoga, they can easily relax and maintain awareness. *Sitting meditation* is also included in MBSR. This practice is paying attention to the flow of breath while sitting. During the practice, participants are directed to move their attention to other broader aspects step by step, such as sounds, emotions, and thoughts. The next exercise is *walking meditation* which is the same as the other meditation practices. However, in this case, participants are required to feel the bodily sensations of walking. The last practice is *lovingkindness meditation* in which participants purposefully pay attention to different objects as well as all beings with kindness and compassion. This practice is perceived as the core element of the adaptations of MBSR programme for other purposes. In addition, MBSR encourages clients to practice informal mindfulness exercises every day rather than only depending on formal exercises during the sessions. Mini meditation can also be practised at any time. For example, when clients are in a queue, in traffic, or any short period recess (Baer, 2014; S. L. Shapiro & Carlson, 2017).

### **3.2 MBCT**

MBCT was initially developed following the fact that Cognitive Behavioural Therapy (CBT) experts on depression treatment John Teasdale, Mark Williams, and Zindel Segal were unable to help people suffering from the depressive relapse, a tendency to feel depressed again after recovered. Since MBSR became familiar, they integrated MBSR and CBT into one therapy, known as MBCT (Baer, 2014; S. L. Shapiro & Carlson, 2017).

There is a distinction between CBT and MBCT in the mechanisms of behaviour changes. CBT has three main theories: (1) cognition can affect behaviours, (2) cognition can be identified and altered, (3) behaviour changes is affected by cognitive changes (Dobson & Dozois, 2010), suggesting that CBT stresses the role of cognition in changing behaviours. Clients are encouraged to change their thoughts so that they can change their behaviours. However, in MBCT, clients are taught to see thoughts without judging. Instead of replacing negative thoughts, clients are encouraged to create good relationships with thoughts that arise in their mind (Baer, 2014; S. L. Shapiro & Carlson, 2017).

MBCT comprises eight sessions with 12 participants for two hours per week. Since MBCT adapts MBSR, the exercises included in the programme are the same as MBSR, except *lovingkindness meditation*. One of the unique techniques in MBCT is Three-Minute Breathing Space. This technique consists of three steps: (1) focus on the internal experiences of asking “What is my experience right now?” to notice the sensations currently arising without judging, (2) pay attention to the sensations of the breath process, (3) broaden awareness to the whole body without judging. Clients are required to practice this technique every day, particularly when they feel overwhelmed (Baer, 2014; S. L. Shapiro & Carlson, 2017).

### **3.3 ACT**

Different from MBSR and MBCT, ACT is derived from the behavioural approach and the relational frame theory (a theory positing that there is a strong relationship between psychology and language). It includes mindfulness and acceptance to move people’s awareness from certain feelings and thoughts to behaviours influenced by personal values (Oliver, Joseph, Byrne, Johns, & Morris, 2013). ACT aims to achieve the ability to be fully aware of the present moments and determine whether to change or to persevere with behaviours, also known as *psychological flexibility*, by learning how to accept the present experiences. Similar to other mindfulness-based therapies, instead of altering internal experiences (thoughts or feelings), ACT changes the relationships to these experiences (S. C. Hayes, Strosahl, & Wilson, 1999; Steven C Hayes et al., 2006).

In practice, ACT is commonly undertaken in individual rather than in group settings. It has six core processes guiding to the psychological flexibility that is interrelated and clustered into three response styles: open, aware, and active. *Open* comprises *acceptance* (embracing the

experiences without attempting to change, particularly when it causes psychological pain) and *defusion* (a process in which clients see language as an active relational process). *Aware* comprises *self as context* (securing the self from occurring events and differentiating from those events) and *present moment* (contact with occurring events without judging). *Active* comprises *values* (life directions) and *committed action* (agreed steps to achieve certain goals) (Steven C. Hayes, Villatte, Levin, & Hildebrandt, 2011).

### **3.4 FAP**

Another mindfulness-based therapy derived from behavioural philosophy is FAP. It posits that behaviours are shaped by the reinforcement that occurs during therapy. Therefore, the therapist and the client influence each other's behaviours (Kohlenberg et al., 2004). FAP highlights clients' interpersonal relationships and posits that the psychological problems that clients suffer from are caused by a lack of interpersonal relationships (Horowitz, 2004). Clients are directed to increase awareness by seeing interpersonal relationships from different perspectives (Bowen, Haworth, Grow, Tsai, & Kohlenberg, 2012). More importantly, they are encouraged to be open and honest in interactions with others as this can increase closeness and connection with others, which is the purpose of FAP (Cordova & Scott, 2001).

In practice, the interaction between therapists and clients are essential to creating love and intimacy and in turn, increase clients' relational quality in their own lives. Therefore, FAP therapists must be able to conduct therapies with acceptance and mindfulness, love, courage, and compassion (Kanter, Tsai, & Kohlenberg, 2010). AFT can be a stand-alone approach or combined with other approaches that have similar treatment rationales (Kohlenberg et al., 2004).

## **4. Benefits of Mindfulness-based Therapies**

As the popularity of mindfulness is rapidly growing, the number of studies investigating the benefits of mindfulness-based therapies for people suffering from psychological problems are also increasing. Mindfulness-based therapies effectively reduce attention-deficit disorders (Mitchell, Zylowska, & Kollins, 2015), psychosis (Dannahy et al., 2011), eating disorders (Katterman, Kleinman, Hood, Nackers, & Corsica, 2014), and bipolar disorders (Perich, Manicavasagar, Mitchell, & Ball, 2013). This section will focus on research-based benefits of mindfulness-based therapies in some of the most common psychological problems: depression, chronic pain, anxiety disorders, addiction, and trauma and posttraumatic stress disorders.

### **4.1 Depression**

Depression is an emotional disorder in which negative thoughts affect individuals' views of their past, current as well as future life and cause individuals to lack interests of enjoyable activities (Barnhofer & Crane, 2009). One of the mindfulness-based therapies concerning depressive disorders, particularly on depression relapse, is MBCT. Teasdale et al. (2000) carried out a study to investigate whether MBCT can reduce depression relapse. The study recruited 132 depressed participants and divided into two groups: MBCT (N=63) and treatment as usual (TAU) (N=69). In MBCT group, the participants received MBCT programme. Whereas in TAU group, the participants were asked to do what they frequently do to reduce the relapse. This study was monitored for over 60 weeks. The findings show that the depression relapse of 77% participants in MBCT group was significantly reduced, compared with 35% participants in TAU group. Another study attempted to replicate the earlier study with 75 depressed participants who did not consume antidepressant medication for 12 weeks and have been previously depressed twice, which is risky for relapse (Ma & Teasdale, 2004). The result remained the same, in which MBCT is effective in preventing relapse in depressed people.

Following the earlier study, Williams et al. (2014) recently investigated the comparison between Cognitive Psychological Education (CPE), MBCT, and TAU in preventing relapse. CPE was a special programme developed for the study. This is the same as MBCT programme,

excluding the meditation practice. Two-hundred-and-fifty-five depressed participants were recruited and divided into three groups: MBCT+TAU (N=99), CPE+TAU (N=103), and TAU (N=53). The result shows that there is no distinction between these groups after 12-month follow-up. However, further analyses show that MBCT effectively reduces relapse in the participants who experienced abuse in their childhood, suggesting MBCT is more likely to be efficacious for people who have traumatic experiences. This result was also confirmed by a larger study with 424 depressed people monitored for two years. Furthermore, in addition to individuals with traumatic histories, MCBT is also helpful for vulnerable people (Kuyken et al., 2015).

In addition to preventing relapse, another study shows that MCBT is effective in helping people who currently suffer from depression. A study with 124 remitted and 58 depressed patients shows that MCBT can decrease both depression and rumination levels and increase the participants' mindfulness and life quality (Van Aalderen, Donders, Peffer, & Speckens, 2015). In summary, MCBT can effectively reduce depression as well as the relapse that may occur after treatments, particularly those who are vulnerable and have traumatic experiences.

#### **4.2 Chronic Pain**

Chronic pain can be described as a type of constant pain that persists longer than common curative time (approximately six months) and can affect individuals' bodies and emotions (Siddall & Cousins, 2004). Several studies show that MBSR can effectively reduce not only chronic pain but also reliance on pain-relief medication (Creswell, 2017). Kabat-Zinn (1982) conducted a study with 51 participants suffering from chronic pain, particularly on the headache, shoulder, neck, and low back. After a 10-week treatment, the pain ratings were reduced by 33% in 65% participants and 50% in 50% participants. However, the absence of a control group in the study evoked critiques from other researchers. Therefore, three years later, Jon Kabat-Zinn, Lipworth, and Burney (1985) carried out a follow-up study with the participants suffering from chronic pain divided into two groups: one group received 10-week MBSR, whereas another group received traditional treatments. The result shows that MBSR group shows significant improvements compared with the control group.

Recently, Cherkin et al. (2016) carried out a large Randomised Clinical Trial (RCT) study (N=342; 20-70 years old) to compare the effectiveness of MBSR with CBT and TAU. One-hundred-and-sixteen participants received MBSR, 113 participants received CBT, and 113 participants received TAU. MBSR and CBT were delivered for two months in 2-hour weekly group sessions. After 4-month and 10-month follow-ups, the findings show that MBSR reduces functional limitations affected by back pain compared with TAU. However, the outcomes of MBSR are similar to those of CBT. Regardless of the recent results, it can be summarised that MBSR is effectively helpful for people who suffer from chronic pain, particularly adults with low back pain.

#### **4.3 Anxiety Disorders**

Anxiety disorder is defined as a fear of fear that causes severe distress and physical symptoms and disrupts individuals' everyday lives (Barlow, 2002). Since anxiety affects physical and mental health, the effective treatments must address both aspects. To date, to alleviate anxiety disorders, treatments include medication and psychotherapy. The most commonly used psychotherapy interventions are behaviour therapy and CBT. Behaviour therapy attempts to expose sufferers to the feared condition without allowing it to interfere in behavioural response, whereas CBT attempts to change negative thoughts as well as distorted beliefs (Greenson & Brantley, 2009). However, it remains unsure to what extent certain factors, such as behavioural, cognitive and psychoeducational components influence therapeutic outcomes, compared with other factors, for example, good rapport, empathy, and reinforcement (Barlow, 2002).

Mindfulness-based therapies recently have gained attention since such therapies integrate both specific and non-specific factors. J Kabat-Zinn et al. (1992) carried out a study to investigate

whether MBSR can alleviate anxiety. Twenty-two participants suffering from anxiety disorders according to DSM-III-R were recruited. The result shows that symptoms of anxiety and panic were effectively reduced through MBSR. After 3-year follow-up, the benefits of MBSR remain evident, suggesting that MBSR is long-term beneficial therapy for anxiety disorders (Miller et al., 1995). However, as pilot research on a new intervention, a control group was not included in this study.

To overcome this flaw and compare with other techniques, Koszycki, Bengler, Shlik, and Bradwejn (2007) carried out a study with 53 participants suffering from social anxiety disorder. They compared MBSR with CBT in 12 weekly sessions. The result shows that there is no significant difference between both therapies. Rather, CBT is superior in overcoming specific aspects of social anxiety, whereas MBSR might be suitable for general social anxiety disorders. Similarly, Arch and Ayers (2013) carried out a study to compare MBSR with CBT in reducing anxiety disorders. The study recruited 71 participants suffering from anxiety disorders according to DSM-IV. They were divided into two groups: MBSR (N=32) and CBT (N=39). After 3-month follow-up, the result shows that CBT is more effective for mild anxiety, while MBSR is more effective for moderate and severe anxiety.

More recently, Goldin et al. (2016) conducted a study with 108 participants suffering from social anxiety disorder. This study compared MBSR with CBT and TAU. It included posttreatment and one-year follow-up. The result shows that MBSR and CBT can effectively reduce social anxiety disorder. However, in terms of alleviating avoidance behaviours, the study shows that CBT is better than MBSR.

#### **4.4 Addictions**

Addiction is a state in which individuals have cognitive dichotomies and high dependence on addictive behaviours or substances that disrupt their daily life (Creswell, 2017; Marlatt et al., 2004). One of the most common treatments for addiction is CBT. It can help people who are addicted to alcohol (Kadden, 2001), substance (McCrary & Ziedonis, 2001), the internet (Young, 2007), and cigarettes (Carroll, 1996).

As explained earlier, mindfulness does not change cognition as CBT does. Rather it changes the attitude and relationship towards thoughts and feelings. It trains individuals not to judge and be present on moment-to-moment experience (Marlatt et al., 2004) (see section 4.2 for the discussion). Garland, Roberts-Lewis, Tronnier, Graves, and Kelley (2016) carried out a study to investigate the comparison between Mindfulness-Oriented Recovery Enhancement (MORE) and CBT in reducing substance abuse in 180 participants in which 64 participants received MORE, 64 participants received CBT, and 52 participants received TAU. After a 10-week treatment, the result shows that MORE shows better improvements than CBT and TAU. This might be because MORE has trained the participants to be mindful in everyday life during the treatment.

In terms of reducing the relapse, there is a study conducted with 286 participants who have received treatments for substance use disorders to examine the effectiveness of mindfulness-based relapse prevention (MBRP) posttreatment compared with that of CBT and TAU posttreatment (Bowen et al., 2009). After 12-month follow-up, the result shows that MBRP and CBT can significantly reduce the relapse of drug users and heavy drinkers. Those who received CBT aftercare delay the first drug relapse longer than those who received MBRP and TAU. However, regarding the number of drug use days, MBRP group is less than CBT or TAU group, suggesting that MBRP is more impactful for long-term benefits than CBT.

Due to the increasing number of studies, Chiesa and Serretti (2014) reviewed 24 studies on the effectiveness of mindfulness-based therapies in reducing substance use disorders. It includes Vipassana meditation (a type of meditation technique commonly practised by Theravada Buddhism), MBSR, MBCT, MBRP, Spiritual self-schema therapy, Dialectical behavioural therapy (DBT), and ACT. The result shows that mindfulness-based therapies effectively reduce the use of

various substances, such as cocaine, marijuana, cigarettes, opiates, alcohol, and amphetamines. Despite a large number of studies included in this review, several limitations are noted, for example, the inconsistency of replicated findings, the small number of participants in each study, and unclear methodological procedures. Nevertheless, mindfulness-based therapies have shown significant improvements in various types of addictions. Although further research is needed, these therapies offer promising benefits for people with addictions.

#### **4.5 Trauma and Posttraumatic Stress Disorder**

Trauma can be described as an event that results in individuals' incapability of responding accordingly as the strength of the event is bigger than individuals' capabilities (Cloitre, Cohen, & Koenen, 2006). Trauma and posttraumatic stress disorder (PTSD) was first introduced in DSM-III in response to the increasing number of war and terror (Foa & Meadows, 1997; V. M. Follette & Vijay, 2009). Regarding the treatment for PTSD, most practitioners utilise treatments focusing on alleviating trauma symptoms (Becker & Zayfert, 2001; V. M. Follette, Palm, & Hall, 2004). One of the most common treatments is exposure therapy, which includes fear activation, thought, and feeling changes related to traumatic experiences, and finally setting up accurate cognitions (Foa & Meadows, 1997). The limitation of this therapy is only a few clients can tolerate the therapeutic process, resulting in many practitioners' reluctance. In addition, it is questionable whether the clients have the necessary normative skills to involve in this therapy (V. M. Follette & Vijay, 2009).

Different from exposure therapy, mindfulness requires clients not to avoid feared stimuli. Rather, it encourages clients to accept and to be psychologically aware and flexible in response to traumatic experiences (V. Follette, Palm, & Pearson, 2006). Omidi, Mohammadi, Zargar, and Akbari (2013) conducted an RCT study with 62 male participants, aged between 39-59 years, who suffered from PTSD according to DSM-IV-TR. The participants were divided into two groups: MBSR (N=31) and TAU (N=31). The result shows that there is no distinction between MBSR and TAU in anger and vitality. However, MBSR group shows improvements on depression, tension, fatigue, and dizziness, suggesting that MBSR is effective in regulating participants' mood state.

Another RCT study also shows the similar result (Kearney, Mcdermott, Malte, Martinez, & Simpson, 2013). Forty-seven participants (37 male; 10 female) suffering from PTSD were recruited in the study. They were divided into two groups: MBSR plus TAU (N=25) and TAU (N=22). The result shows there is no distinction in PTSD symptoms. However, MBSR group's mental health scores show greater than TAU group after 4-month follow-up.

To investigate this issue with a large number of participants and compare MBSR with another approach (present-centered therapy), Polusny et al. (2015) recently conducted an RCT study with 116 veterans suffering from PTSD. They were divided into two groups: MBSR (N=58) and present-centered (N=58). The result shows that there are more improvements on PTSD symptoms in MBSR group than in the present-centred group with moderate effect after 2-month posttreatment.

Having analysed these three mindfulness studies, it appears that MBSR is a promising approach to alleviate PTSD. The small number of participants in these studies result in the limited generalizability. Therefore, it warrants future research to compare MBSR with other mindfulness-based therapies and address unclear aspects in this area (Canadian Agency for Drugs and Technologies in Health, 2015).

## **Conclusion**

To summarise, the interest of researchers, theorists, and practitioners in mindfulness has been rapidly growing. It offers helping professions a new perspective and approach that can be implemented and tailored following their needs. Since mindfulness and the therapeutic



relationship have an interrelated connection, the therapist must build a good rapport with their clients for the successful therapy.

As an evolving approach, mindfulness has offered a myriad of scales to measure the therapeutic outcomes. Employing self-report has been thought as the appropriate method as it is impossible to measure mindfulness objectively. Practitioners can choose one of the available scales according to their therapies, clients, and the problems that their clients suffer from.

To date, researchers and practitioners have developed various mindfulness-based therapies. These therapies can effectively help people who suffer from various psychological problems, ranging from anxiety disorders to trauma and posttraumatic stress disorder. Nevertheless, it warrants further research to overcome the current research flaws, such as the number of sample size, methodological procedures, and replicated findings.

In addition, given the fact that there are similar concepts of mindfulness in other religious traditions, future research may delve into this issue to enrich the current mindfulness perspective. It is also important to conduct studies to compare the effectiveness of certain therapies with a group of participants from different cultures and religions. Furthermore, future research might focus on the applications of mindfulness values to the world, such as compassion, curiosity, non-judgemental, and lovingkindness. It seems that these mindfulness values are currently needed by the world during this time.

## Acknowledgment

This material is based upon work supported by the Lembaga Pengelola Dana Pendidikan Republik Indonesia (LPDP).

## References

- Arch, J. J., & Ayers, C. R. (2013). Which treatment worked better for whom? Moderators of group cognitive behavioral therapy versus adapted mindfulness based stress reduction for anxiety disorders. *Behaviour Research and Therapy*, *51*(8), 434–442. <https://doi.org/10.1016/j.brat.2013.04.004>
- Baer, R. A. (2014). Introduction to the Core Practices and Exercises: Clinician's Guide to Evidence Base and Applications. In R. A. Baer (Ed.), *Mindfulness-Based Treatment Approaches* (2nd ed., pp. 3–25). London: Elsevier.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using Self-Report Assessment Methods to Explore Facets of Mindfulness. *Assessment*, *13*(1), 27–45. <https://doi.org/10.1177/1073191105283504>
- Barlow, D. H. (2002). *Anxiety and Its Disorders: The Nature and Treatment of Anxiety and Panic* (2nd ed., Vol. 159). London: The Guilford Press. <https://doi.org/10.1176/appi.ajp.159.8.1453>
- Barnhofer, T., & Crane, C. (2009). Mindfulness-Based Cognitive Therapy for Depression and Suicidality. In F. Didonna (Ed.), *Clinical Handbook of Mindfulness* (pp. 221–243). New York, NY: Springer.
- Becker, C. B., & Zayfert, C. (2001). Integrating DBT-based techniques and concepts to facilitate exposure treatment for PTSD. *Cognitive and Behavioral Practice*, *8*(2), 107–122. [https://doi.org/10.1016/S1077-7229\(01\)80017-1](https://doi.org/10.1016/S1077-7229(01)80017-1)
- Bergomi, C., Tschacher, W., & Kupper, Z. (2013). The Assessment of Mindfulness with Self-Report Measures: Existing Scales and Open Issues. *Mindfulness*, *4*(3), 191–202. <https://doi.org/10.1007/s12671-012-0110-9>
- Bohart, A. C., Elliott, R., Greenberg, L. S., & Watson, J. C. (2002). Empathy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 89–108). New York, NY: Oxford University Press.
- Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J., ... Marlatt, A. (2009).

- Mindfulness-Based Relapse Prevention for Substance Use Disorders: A Pilot Efficacy Trial. *Substance Abuse*, 30(4), 295–305. <https://doi.org/10.1080/08897070903250084>
- Bowen, S., Haworth, K., Grow, J., Tsai, M., & Kohlenberg, R. (2012). Interpersonal mindfulness informed by Functional Analytic Psychotherapy: Findings from a pilot randomized trial. *International Journal of Behavioral Consultation and Therapy*, 7(2–3), 9–15. <https://doi.org/10.1037/h0100931>
- Brown, A. P., Marquis, A., & Guiffrida, D. A. (2013). Mindfulness Based Interventions in Counseling. *Journal of Counseling & ...*, 91(January).
- Brown, K. W., & Cordon, S. (2009). Toward a phenomenology of mindfulness: Subjective experience and emotional correlates. In F. Didonna (Ed.), *Clinical handbook of mindfulness* (pp. 59–81). New York, NY: Springer-Verlag.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Canadian Agency for Drugs and Technologies in Health. (2015). *Mindfulness Interventions for the Treatment of Post-Traumatic Stress Disorder, Generalized Anxiety Disorder, Depression, and Substance Use Disorders: A Review of the Clinical Effectiveness and Guidelines*. Ottawa, Ontario, Canada: Author. <https://doi.org/10.1017/CBO9781107415324.004>
- Carroll, K. M. (1996). Relapse prevention as a psychosocial treatment: A review of controlled clinical trials. *Experimental and Clinical Psychopharmacology*, 4(1), 46–54. <https://doi.org/10.1037/1064-1297.4.1.46>
- Cherkin, D. C., Sherman, K. J., Balderson, B. H., Cook, A. J., Anderson, M. L., Hawkes, R. J., ... Turner, J. A. (2016). Effect of Mindfulness-Based Stress Reduction vs Cognitive Behavioral Therapy or Usual Care on Back Pain and Functional Limitations in Adults With Chronic Low Back Pain. *Jama*, 315(12), 1240. <https://doi.org/10.1001/jama.2016.2323>
- Chiesa, A. (2013). The Difficulty of Defining Mindfulness: Current Thought and Critical Issues. *Mindfulness*, 4(3), 255–268. <https://doi.org/10.1007/s12671-012-0123-4>
- Chiesa, A., & Serretti, A. (2014). Are Mindfulness-Based Interventions Effective for Substance Use Disorders? A Systematic Review of the Evidence. *Substance Use & Misuse*, 49(5), 492–512. <https://doi.org/10.3109/10826084.2013.770027>
- Cloitre, M., Cohen, L. R., & Koenen, K. C. (2006). *Treating Survivors of Childhood Abuse*. London: The Guilford Press.
- Cordova, J. V., & Scott, R. L. (2001). Intimacy: A behavioral interpretation. *The Behavior Analyst*, 24(1), 75–86.
- Creswell, J. D. (2017). Mindfulness Interventions. *Annual Review of Psychology*, 68(1), 491–516. <https://doi.org/10.1146/annurev-psych-042716-051139>
- Dannahy, L., Hayward, M., Strauss, C., Turton, W., Harding, E., & Chadwick, P. (2011). Group person-based cognitive therapy for distressing voices: Pilot data from nine groups. *Journal of Behavior Therapy and Experimental Psychiatry*, 42(1), 111–116. <https://doi.org/10.1016/j.jbtep.2010.07.006>
- Dobson, K. S., & Dozois, D. J. A. (2010). Historical and Philosophical Bases of the Cognitive-Behavioral Therapies. In K. S. Dobson (Ed.), *Handbook of Cognitive-Behavioral Therapies* (3rd ed., pp. 3–38). New York: The Guilford Press.
- Farhall, J., Shawyer, F., Thomas, N., & Morris, E. M. J. (2013). Clinical Assessment and Assessment Measures. In E. M. J. Morris, L. C. Johns, & J. E. Oliver (Eds.), *Acceptance and Commitment Therapy and Mindfulness for Psychosis* (pp. 47–63). West Sussex, United Kingdom: John Wiley & Sons Ltd.
- Foa, E. B., & Meadows, E. A. (1997). Psychosocial Treatments for Posttraumatic Stress Disorder: A Critical Review. *Annual Review of Psychology*, 48.
- Follette, V. M., & Vijay, A. (2009). Mindfulness for Trauma and Posttraumatic Stress Disorder. In F. Didonna (Ed.), *Clinical Handbook of Mindfulness* (pp. 299–317). New York, NY:

- Springer.
- Follette, V., Palm, K. M., & Pearson, A. N. (2006). Mindfulness and trauma: Implications for treatment. *Journal of Rational - Emotive and Cognitive - Behavior Therapy*, 24(1), 45–61. <https://doi.org/10.1007/s10942-006-0025-2>
- Follette, Vi. M., Palm, K. M., & Hall, M. L. R. (2004). Acceptance, Mindfulness, and Trauma. In S. C. Hayes, Vi. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and Acceptance* (pp. 192–208). London: The Guilford Press.
- Garland, E. L., Roberts-Lewis, A., Tronnier, C. D., Graves, R., & Kelley, K. (2016). Mindfulness-Oriented Recovery Enhancement versus CBT for co-occurring substance dependence, traumatic stress, and psychiatric disorders: Proximal outcomes from a pragmatic randomized trial. *Behaviour Research and Therapy*, 77, 7–16. <https://doi.org/10.1016/j.brat.2015.11.012>
- Goldin, P. R., Morrison, A., Jazaieri, H., Brozovich, F., Heimberg, R., & Gross, J. J. (2016). Group CBT versus MBSR for social anxiety disorder: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 84(5), 427–437. <https://doi.org/10.1037/ccp0000092>
- Greeson, J., & Brantley, J. (2009). Mindfulness and Anxiety Disorders: Developing a Wise Relationship with the Inner Experience of Fear. In F. Didonna (Ed.), *Clinical handbook of mindfulness* (pp. 171–188). New York, NY: Springer.
- Hanley, A. W., Abell, N., Osborn, D. S., Roehrig, A. D., & Canto, A. I. (2016). Mind the Gaps: Are Conclusions about Mindfulness Entirely Conclusive? *Journal of Counseling and Development*, 94(1), 103–113. <https://doi.org/10.1002/jcad.12066>
- Hayes, S. C., Hayes, S. C., Luoma, J. B., Luoma, J. B., Bond, F. W., Bond, F. W., ... Lillis, J. (2006). Acceptance and commitment therapy: model, processes and outcomes. *Behaviour Research and Therapy*, 44(1), 1–25. <https://doi.org/10.1016/j.brat.2005.06.006>
- Hayes, S. C., Strosahl, K., & Wilson, K. G. (1999). *Acceptance and commitment therapy*. New York, NY: The Guilford Press.
- Hayes, S. C., Villatte, M., Levin, M., & Hildebrandt, M. (2011). Open, Aware, and Active: Contextual Approaches as an Emerging Trend in the Behavioral and Cognitive Therapies. *Annual Review of Clinical Psychology*, 7(1), 141–168. <https://doi.org/10.1146/annurev-clinpsy-032210-104449>
- Hick, S. F. (2008). Cultivating Therapeutic Relationships: The Role of Mindfulness. In S. F. Hick & T. Bien (Eds.), *MIndfulness and the Therapeutic Relationship* (pp. 3–18). London: The Guilford Press.
- Horowitz, L. M. (2004). *Interpersonal foundations of psychopathology*. Washington, DC: American Psychological Association.
- Kabat-Zinn, J. (1982). An Outpatient Program in Behavioral Medicine for Chronic Pain Patients Based on the Practice of Mindfulness Meditation - Theoretical Considerations and Preliminary-Results. *General Hospital Psychiatry*, 4, 33–47. [https://doi.org/10.1016/0163-8343\(82\)90026-3](https://doi.org/10.1016/0163-8343(82)90026-3)
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York, NY: Delacorte Press.
- Kabat-Zinn, J., Lipworth, L., & Burney, R. (1985). The clinical use of mindfulness meditation for the self-regulation of chronic pain. *Journal of Behavioral Medicine*, 8(2), 163–190. <https://doi.org/10.1007/BF00845519>
- Kabat-Zinn, J., Massion, A. O., Kristeller, J., Peterson, L. G., Fletcher, K. E., Pbert, L., ... Santorelli, S. F. (1992). Effectiveness of a meditation-based stress reduction program in the treatment of anxiety disorders. *The American Journal of Psychiatry*, 149, 936–943. <https://doi.org/10.1176/ajp.149.7.936>
- Kadden, R. M. (2001). Behavioral and cognitive-behavioral treatments for alcoholism: Research opportunities. *Addictive Behaviors*, 26(4), 489–507. [https://doi.org/10.1016/S0306-4603\(00\)00139-8](https://doi.org/10.1016/S0306-4603(00)00139-8)

- Kanter, J. W., Tsai, M., & Kohlenberg, R. J. (2010). Introduction to the Practice of Functional Analytic Psychotherapy. In J. W. Kanter, M. Tsai, & R. J. Kohlenberg (Eds.), *The Practice of Functional Analytic Psychotherapy* (pp. 1–7). London: Springer.
- Katterman, S. N., Kleinman, B. M., Hood, M. M., Nackers, L. M., & Corsica, J. A. (2014). Mindfulness meditation as an intervention for binge eating, emotional eating, and weight loss: A systematic review. *Eating Behaviors*, *15*(2), 197–204. <https://doi.org/10.1016/j.eatbeh.2014.01.005>
- Kearney, D. J., Mcdermott, K., Malte, C., Martinez, M., & Simpson, T. L. (2013). Effects of Participation in a Mindfulness Program for Veterans With Posttraumatic Stress Disorder: A Randomized Controlled Pilot Study. *Journal of Clinical Psychology*, *69*(1), 14–27. <https://doi.org/10.1002/jclp.21911>
- Kohlenberg, R. J., Kanter, J. W., Bolling, M., Wexner, R., Parker, C., & Tsai, M. (2004). Functional Analytic Psychotherapy, Cognitive Therapy, and Acceptance. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and Acceptance: Expanding the Cognitive-Behavioral Tradition* (pp. 96–119). New York, NY: The Guilford Press.
- Koszycki, D., Benger, M., Shlik, J., & Bradwejn, J. (2007). Randomized trial of a meditation-based stress reduction program and cognitive behavior therapy in generalized social anxiety disorder. *Behaviour Research and Therapy*, *45*(10), 2518–2526. <https://doi.org/10.1016/j.brat.2007.04.011>
- Kuyken, W., Hayes, R., Barrett, B., Byng, R., Dalgleish, T., Kessler, D., ... Byford, S. (2015). The effectiveness and cost-effectiveness of mindfulness-based cognitive therapy compared with maintenance antidepressant treatment in the prevention of depressive relapse/recurrence: Results of a randomised controlled trial (The PREVENT study). *Health Technology Assessment*, *19*(73), 1–124. <https://doi.org/10.3310/hta19730>
- Lambert, M. J. (2005). Early response in psychotherapy: Further evidence for the importance of common factors rather than “placebo effects.” *Journal of Clinical Psychology*, *61*(7), 855–869. <https://doi.org/10.1002/jclp.20130>
- Lambert, M. J., & Simon, W. (2008). The Therapeutic Relationship: Central and Essential in Psychotherapy Outcome. In S. F. Hick & T. Bien (Eds.), *MIndfulness and the Therapeutic Relationship* (pp. 19–33). London: The Guilford Press.
- Leigh, J., Bowen, S., & Marlatt, G. A. (2005). Spirituality, mindfulness and substance abuse. *Addictive Behaviors*, *30*(7), 1335–1341. <https://doi.org/10.1016/j.addbeh.2005.01.010>
- Ma, S. H., & Teasdale, J. D. (2004). Mindfulness-Based Cognitive Therapy for Depression: Replication and Exploration of Differential Relapse Prevention Effects. *Journal of Consulting and Clinical Psychology*, *72*(1), 31–40. <https://doi.org/10.1037/0022-006X.72.1.31>
- Manikam, R. (2014). Psychology of Meditation. *Mindfulness*, *5*(5), 613–616. <https://doi.org/10.1007/s12671-014-0315-1>
- Marlatt, G. A., Witkiewitz, K., Dillworth, T. M., Bowen, S. W., Parks, G. A., Macpherson, L. M., ... Crutcher, R. (2004). Vipassana Meditation as a Treatment for Alcohol and Drug Use Disorders. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and Acceptance: Expanding the Cognitive-Behavioral Tradition* (pp. 261–287). London: The Guilford Press.
- McCrary, B. S., & Ziedonis, D. (2001). American Psychiatric Association Practice Guideline for Substance Use Disorders. *Behavior Therapy*, *32*, 309–336.
- Miller, J. J., Fletcher, K., & Kabat-Zinn, J. (1995). Three-year follow-up and clinical implications of a mindfulness meditation-based stress reduction intervention in the treatment of anxiety disorders. *General Hospital Psychiatry*, *17*(3), 192–200. [https://doi.org/10.1016/0163-8343\(95\)00025-M](https://doi.org/10.1016/0163-8343(95)00025-M)
- Mitchell, J. T., Zylowska, L., & Kollins, S. H. (2015). Mindfulness meditation training for attention-deficit/hyperactivity disorder in adulthood: Current empirical support, treatment overview, and future directions. *Cognitive and Behavioral Practice*, *22*(2), 172–191. <https://doi.org/10.1016/j.cbpra.2014.10.002>

- Oliver, J. E., Joseph, C., Byrne, M., Johns, L. C., & Morris, E. M. J. (2013). Introduction to Mindfulness and Acceptance-based Therapies for Psychosis. In *Acceptance and Commitment Therapy and Mindfulness for Psychosis* (pp. 1–11). West Sussex, United Kingdom: John Wiley & Sons Ltd.
- Omidi, A., Mohammadi, A., Zargar, F., & Akbari, H. (2013). Efficacy of Mindfulness Based Stress Reduction (MBSR) on Mood States of Veterans With Post-Traumatic Stress Disorder (PTSD). *Archives of Trauma Research*, 1(4), 151–4. <https://doi.org/10.5812/atr.8226>
- Perich, T., Manicavasagar, V., Mitchell, P. B., & Ball, J. R. (2013). The association between meditation practice and treatment outcome in Mindfulness-based Cognitive Therapy for bipolar disorder. *Behaviour Research and Therapy*, 51(7), 338–343. <https://doi.org/10.1016/j.brat.2013.03.006>
- Polusny, M. A., Erbes, C. R., Thuras, P., Moran, A., Lambert, G. J., Collins, R. C., ... Lim, K. O. (2015). Mindfulness-Based Stress Reduction for Posttraumatic Stress Disorder Among Veterans. *Jama*, 314(5), 456. <https://doi.org/10.1001/jama.2015.8361>
- Rogers, C. R. (1961). *On becoming a person*. Oxford, England: Houghton Mifflin.
- Ronay, B. (2014). There's no peace from the purveyors of corporate mindfulness. Retrieved May 4, 2017, from <https://www.theguardian.com/commentisfree/2014/sep/17/no-peace-purveyors-corporate-mindfulness>
- Shapiro, S. L., & Carlson, L. E. (2017). *The Art and Science of Mindfulness: Integrating Mindfulness Into Psychology and the Helping Professions*. Washington, DC: American Psychological Association.
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62(3), 373–386. <https://doi.org/10.1002/jclp.20237>
- Siddall, P. J., & Cousins, M. J. (2004). Persistent Pain as a Disease Entity: Implications for Clinical Management. *Anesthesia & Analgesia*, 99, 510–520. <https://doi.org/10.1213/01.ANE.0000133383.17666.3A>
- Siegel, R. (2011). Creating a New Wisdom Tradition. Retrieved May 4, 2017, from <https://www.psychotherapynetworker.org/magazine/article/298/west-meets-east>
- Teasdale, J. D., Segal, Z. V., Williams, J. M. G., Ridgeway, V. A., Soulsby, J. M., & Lau, M. A. (2000). Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy. *Journal of Consulting and Clinical Psychology*, 68(4), 615–623. <https://doi.org/10.1037/0022-006X.68.4.615>
- Van Aalderen, J. R., Donders, A. R. T., Peffer, K., & Speckens, A. E. M. (2015). Long-term outcome of mindfulness-based cognitive therapy in recurrently depressed patients with and without a depressive episode at baseline. *Depression and Anxiety*, 32(8), 563–569. <https://doi.org/10.1002/da.22369>
- Wallace, B. A., & Bodhi, V. B. (2006). *The Nature of Mindfulness and Its Role in Buddhist Meditation*. Santa Barbara, CA.
- Weinberger, J. (2002). Short paper, large impact: Rosenweig's influence on the common factors movement. *Journal of Psychotherapy Integration*, 12(1), 67–76. <https://doi.org/10.1037//1053-0479.12.1.67>
- Williams, J. M. G., Crane, C., Barnhofer, T., Brennan, K., Duggan, D. S., Fennell, M. J. V., ... Russell, I. T. (2014). Mindfulness-based cognitive therapy for preventing relapse in recurrent depression: A randomized dismantling trial. *Journal of Consulting and Clinical Psychology*, 82(2), 275–286. <https://doi.org/10.1037/a0035036>
- Young, K. S. (2007). Cognitive Behavior Therapy with Internet Addicts: Treatment Outcomes and Implications. *CyberPsychology & Behavior*, 10(5), 671–679. <https://doi.org/10.1089/cpb.2007.9971>