

## MINDFULNESS – A SPIRITUAL APPROACH TO CHILD AND FAMILY MENTAL HEALTH

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Mindfulness, initially a Buddhist meditation practice that involves cultivating a state of purposeful awareness, has grown over the past few decades into a widespread current, particularly in Western societies, where it is becoming a science in its own right, demonstrating high versatility by adapting to diverse cultures and social groups. An important part in this development was played by Jon Kabat-Zinn's (1979) Mindfulness Based Stress Reduction method. Within the fields of clinical psychology, psychiatry and neurobiology there is strong scientific proof in support of the effectiveness of mindfulness based therapies in treating stress, anxiety, depression, emotion regulation, addiction, as well as many other mental and physical health issues. Mindfulness based methods have been applied to family therapy and parenting programs and they are starting to be used for treating children with mental health problems, such as ADHD, learning disabilities, externalizing and internalizing problems. Systematic literature reviews have shown that there is still need of rigorous research in order to validate various interventions and to reach a deeper understanding of the potential and efficiency of mindfulness based therapies. The present paper aims to review and discuss the current state of mindfulness based interventions in the field of child and family therapy.

*Key words:* mindfulness, intervention, therapy, parenting, resilience.

### INTRODUCTION

#### MINDFULNESS AS ATTENTIVE AWARENESS

According to Jon Kabat-Zinn's operational working definition<sup>18</sup>, mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience, moment by moment. Traditional Buddhist mindful meditation aims to develop a state of consciousness based on purposefully observing one's own exterior and interior experience. It involves sustained attention to the flow of sensations, thoughts and feelings. Initially, the objective of the practice was spiritual illumination. Since 1979, when Kabat-Zinn launched the Mindfulness Based Stress Reduction (MBSR) Program, for clients with medical problems such as severe pain and distress from chronic physical health conditions, the approach

was integrated into a wide range of therapeutic interventions, in clinical and educational settings, without its religious or philosophical underpinnings. In a state of mindfulness, thoughts and feelings are observed as events in the mind, without over-identifying with them and without reacting to them in an automatic, habitual pattern of reactivity<sup>5</sup>. It is difficult to reach a consensus regarding the definition of mindfulness, but various authors agree that it can be viewed both as a *process* of self-observation and as an *outcome*, a special type of consciousness and self-knowledge. Bishop *et al.* propose a two-component operational psychological model<sup>5</sup>, involving: 1) the self-regulation of the focus of attention, allowing an increased recognition of the current experience of thoughts, feelings and sensations, and 2) an open, accepting orientation towards the present moment, in a process of relating openly and with acceptance to experience, on the other side. In this sense, Bishop argues that mindfulness is a metacognitive skill that monitors and controls the stream of consciousness<sup>5</sup>.

## MBSR, THE BASIC MINDFULNESS PRACTICES AND MECHANISMS

MBSR is an eight-week experiential learning program that includes weekly group sessions and regular individual practice at home. The group sessions focus on psycho-educational issues regarding brain functioning, stress development, body-mind interdependence and discussing the personal experiences of participants. The core of the formal techniques is composed by the body scan, the sitting meditation, the walking mindfulness, and the mindfulness of breath. Informal practices are based on incorporating mindfulness into daily routines such as eating, gardening or shopping. The training develops participants' focusing skills, sustaining and switching attention, and an accepting attitude towards the present experience in their mind and body. Practicing the mindfulness of breath, participants sit still and follow the physical sensation of breathing in their bodies purposefully, for a period of time. When attention wanders or is distracted by thoughts, worries or feelings, they must acknowledge and accept them, observe the source of distraction and re-focus without judgement. Breath is used as an anchor for attention.

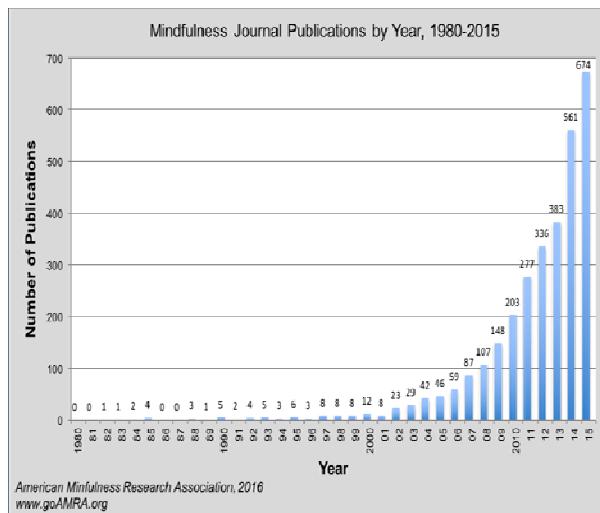


Fig. 1. Mindfulness Publications by Year, 1980–2015 – American Mindfulness Research Association, 2016.

The psychological mechanisms underlying mindfulness are: 1) focused attention, 2) decentering, 3) emotion regulation. Decentering allows a self-reflective stance. The individual experience is observed with openness and accepted; current thoughts, feelings and sensations are regarded as

transient mental experiences, not as stable reflections of the person or of reality. Mindfulness enables us to engage in the present experience rather than avoid or suppress it, interrupts the rumination cycle of depressive or anxious ideation and thus makes emotion regulation possible<sup>5</sup>.

## MINDFULNESS – THERAPEUTIC INTERVENTION, SCIENTIFIC FIELD AND MAINSTREAM MOVEMENT

Data provided by the American Mindfulness Research Association shows a significant raising trend of research in the field of mindfulness for the last 10 years. MBSR and other mindfulness approaches have been documented by scientific evidence. Some of the successful therapy programs including mindfulness practices are: Mindfulness-based cognitive therapy (MBCT), Acceptance and commitment therapy (ACT), Dialectical behaviour therapy (DBT), Mode deactivation therapy (MDT). These clinical interventions addressed a wide variety of psychological disorders and proved to be effective in the reduction of stress, anxiety, depression, treatment of chronic pain, fibromyalgia, feeding disorders and drug addictions. Positive results are also associated with mindfulness-based therapy in a variety of medical conditions such as rheumatoid arthritis, type 2 diabetes, psoriasis and prostate cancer.

Evidence from large population studies showed that mindfulness practice is highly correlated with well-being and perceived health.

The mindfulness-based interventions (MBI) gained popularity world-wide and have applications in schools, hospitals, youth and elderly centres, governmental organizations, corporations and businesses. Big companies offer professional development programs in mindfulness to their employees, as it was found that mindfulness is associated with higher levels of employee well-being.

Neurobiological evidence of mindful meditation effects on brain functioning are reported by Davidson *et al.*<sup>11</sup> based on EEG measurement of brain electrical activity in response to various emotional challenges, before and after an 8-week MBSR training. Significant increases in left-sided activation in the anterior cortical area, usually associated with positive affect, have been found in subjects who had undergone the training. In order to test the immune function, all participants and the subjects in the control group were vaccinated with

influenza vaccine at the end of the program. The MBSR group showed a greater rise in antibody titres when tested 8 weeks post-influenza vaccination.

Kilpatrick *et al.*<sup>19</sup> reported that a MBSR 8-week training had an effect on the intrinsic cerebral connectivity networks, as measured by functional connectivity MRI (fcMRI). MBSR trained subjects compared to a control group, during a focused attention instruction, have an increased connectivity within the sensory networks and between regions associated with attentional processes and with those in the sensory cortex involved. Greater differentiation between regions associated with attentional processes and the unattended sensory cortex as well as greater differentiation between attended and unattended sensory networks has also been found. This brings evidence for enhanced sensory processing, and more efficient attentional processes, as a result of MBSR training.

Voxel-based morphometry used by Hölzel *et al.*<sup>15</sup> before and after a MBSR program confirmed increases in gray matter concentration within the left hippocampus. Whole brain analyses identified increases in the posterior cingulate cortex, the temporo-parietal junction, and the cerebellum for the MBSR group compared to the controls. The results suggest that participation in MBSR is associated with changes in gray matter concentration in brain regions involved in learning and memory processes, emotion regulation, self-referential processing, and perspective taking.

#### MINDFULNESS INTERVENTIONS WITH CHILDREN, ADOLESCENTS AND PEOPLE WITH DISABILITIES

Interest in developing MBI for children and adolescents grew especially in the last 10 years. Applications in clinical and non-clinical settings are based on age appropriate adaptations of adult programs. MBCT-C is a program developed for children with anxiety, which also includes parent training<sup>23,24</sup>. MBRS-T is an adolescent version of MBRS addressing stress aspects relevant for youth, described by Biegel *et al.*<sup>4</sup> Several MBIs for children in school settings focus mostly on prevention and health promotion; they start at pre-school level. The Inner Kids Program developed by Susan Kaiser-Greenland<sup>13</sup> is designed for use for pre-kindergarten to high-school. Class-sessions for young children include games and activities that develop breath and sensory awareness in the

beginning, followed by awareness of thoughts and emotions. Each session includes a sitting meditation, an activity or a game, and a body scan or a meditation lying down. Children learn mindfulness skills by interaction with peers and the teacher. Parents are also trained to assist practices included in the home routine. The Program of Mindful Awareness Practices (MAP)<sup>13</sup> was designed and found effective for 7–9 years old children ages 7–9 in the school environment. The Attention Academy Program<sup>20</sup> is a 24-week training program for elementary school students including breathing exercises, bodyscan, movement, and sensorimotor awareness activities that has been successfully tested. The authors reported significant differences between intervention and control groups on all the attentional measures administered.

The first meta-analysis of mindfulness interventions with youth conducted by Zoogman *et al.*<sup>31</sup> in 2014 identified 20 studies published in peer-reviewed journals between 2004 and 2011. The overall effectiveness of mindfulness was found positive in the small to moderate range. A significantly larger effect size was revealed for psychological symptoms as compared to other variables, and for clinical groups, as compared to non-clinical. The ages of the children were 6–21 and the majority of the interventions were developed in schools.

Outcomes of the studies included measures of psychological symptoms such as anxiety and depression, general functioning (e.g. social skills and quality of life), mindfulness and attention. Several studies cited by Burke<sup>9</sup> and Black<sup>6</sup> targeted children and adolescents with ADHD, learning disabilities, disruptive behavior, conduct disorders and academic problems; the reported outcomes showed improvements in attention, internalizing and externalizing behavior problems, anxiety and academic performance.

A systematic review of mindfulness interventions research for people with intellectual disabilities identified 11 relevant studies, 7 with people with intellectual disabilities, 2 with parents and 2 with carers, Chapman *et al.*<sup>10</sup>. 6 studies reported mindfulness training for people with intellectual disabilities for the management of behavioral issues such as anger, aggression and inappropriate sexual arousal. The most used meditation procedure was Soles of the Feet<sup>26</sup> a practice that teaches individuals to divert attention

from an emotionally arousing thought, event or situation to an emotionally neutral part of their body that eventually becomes an automatic response to calm the mind. Mindful Observation of Thoughts, involving visualizing and observing thoughts as clouds passing through awareness, and focusing on breathing have equally been utilized. The results of MBI showed a significant reduction of problem behavior, increased self-control, even at follow-up after 2 years<sup>28</sup>.

Mindfulness training for staff resulted in a decrease of aggressive behavior and higher levels of happiness in people with intellectual disabilities living in group homes<sup>27</sup>. Children of parents that participated in MBI showed a decrease in aggressive behavior<sup>28</sup> and improvements in the interactions with parents and siblings. At the end of a community-based MBSR training for parents of children with intellectual disabilities, they reported statistically significant less stress and an increase in mindfulness<sup>2</sup>.

In a 2015 review of research on mindfulness training for children and youth, Black<sup>6</sup> found 41 studies on mindfulness-based interventions from 2002 to 2013, comprising 13 randomized controlled trials, and 28 quasi-experimental trials. The majority of the interventions (78%) were implemented for health conditions such as high blood pressure, psychiatric disorders, ADHD, conduct problems.

Experimental studies showed that mindfulness training in adolescents produced significant decrease in anxiety symptoms, depression and perceived stress<sup>4</sup> and was also associated with a decrease of rumination and externalizing problems, and an increase in pro-social skills<sup>25,7,30</sup>. There is growing evidence of positive neurocognitive outcomes of MBI in children; measures of the executive function involved in behavior control and regulation show significant gains for mindful awareness program participants. Psychobiological outcomes of MBI involve improvements in physiological measures such as blood pressure and heart rate<sup>1,14</sup> or biomarkers such as C-reactive protein<sup>22</sup>.

Harnett and Dawe<sup>16</sup>, reviewed mindfulness-based therapies for children and families and proposed a conceptual integration of the subject. They identified 24 studies; 12 interventions in educational settings and 12 interventions in clinical settings. 10 out of the total of 24 addressed parents, families, teachers and caregivers; minorities and disadvantaged families have been included.

Encouraging results were found in both types of settings for programs that targeted parents and caregivers. In a randomized controlled trial Oord *et al.*<sup>21</sup> reported the effects of a MBI for children with ADHD that included a parallel course for parents. A statistically significant decrease in both child and parent ADHD symptoms was found, while parental mindfulness improved significantly, as measured with the Mindfulness Attention and Awareness Scale.

The authors of the review discuss the mindful parenting model proposed by Duncan *et al.*<sup>12</sup> in the context of MBI parenting intervention research. In their opinion a possible impact mechanism of mindful parenting may be the one described by Bogels *et al.*<sup>8</sup>: better parental awareness on their own and their child's emotional states and improved parental emotion regulation skills allow parents to respond more flexibly to the child and to avoid mindless negative reactivity. This evidence suggests that mindfulness has a positive effect on child outcomes. Harnett and Dawe<sup>16</sup>, conclude that MBI parenting should be integrated in programs that address multiple domains of family functioning, proposing an integrated framework for both research and practice. They suggest that large scale rigorous studies are needed for understanding the therapeutic processes underlying parenting interventions.

## MINDFUL PARENTING INTERVENTIONS

Kabat-Zinn and Kabat-Zinn, described for the first time the mindful parenting approach in their book *Everyday blessings: The inner work of mindful parenting*<sup>17</sup>. Mindful awareness, openness, accepting, and non-judgmental focus on present experience are brought into parent-child relationships, making parents more able to develop empathetic skills and flexibility. Mindfulness practices are included in the daily routine of the family. Nurturing mindfulness brings an important contribution to the positive personal development of all family members and better coping skills. Parent-child relationships gain authenticity, grow deeper and become more significant.

Although the mindful parenting programs acquired a wide popularity all over the world, both in clinical and educational settings, there are few published studies to report the effectiveness of such interventions. One randomized controlled trial conducted with 32 parents and 38 educators for children with special needs by Benn *et al.*<sup>3</sup> evaluated an adapted MBSR intervention, that

comprised additional curriculum focused on emotional regulation and empathy. At program completion, participants showed significant reductions in stress and anxiety and increased mindfulness, self-compassion, and personal growth. Self-reported mindfulness significantly increased, in terms of them being (1) more aware and present to their surroundings, physical sensations, and internal mental processes; (2) less judgmental; and (3) more descriptive of their moment-to-moment experiences. These mindful competences mediated the outcomes at follow-up, with program effects persisting and increasing by the time of the assessment 2 months later<sup>3</sup>. Duncan *et al.*<sup>12</sup> found only three studies evaluating the effects of mindful parenting programs, all in clinical settings, with little emphasis on parent-child relationships outcomes.

Apparently no studies on family-focused preventive interventions were available. The authors discuss the need for developing evidence-based family MBI programs and for designing research on mindful parenting interventions. They propose a Mindful Parenting Model<sup>12</sup> describing five components relevant to the parent-child relationship: (1) listening with full attention; (2) nonjudgmental acceptance of self and child; (3) emotional awareness of self and child; (4) self-regulation in the parenting relationship; and (e) compassion for self and child. Their model is discussed and placed in the context of the parent-child relationship dynamic and the underlying processes of child development. Next, the authors describe a mindful parenting research project integrated in an empirically validated family preventive intervention, in its early stages of implementation. Their model suggests that the quality of parent-child relationships will improve by promoting parents' mindfulness, their emotional awareness and acceptance in parenting interactions and by them practicing self-regulation and compassion skills in the parenting relationships.

## CONCLUSION

### MINDFULNESS, PREVENTIVE INTERVENTIONS AND BUILDING RESILIENCE

Mindfulness-based training plays a role in developing coping capacity for different stressful situations, as reported by studies such as those of Duncan and Bardake, cited by Harnett and Dawe<sup>16</sup>.

They targeted a group of women who participated in a program to help them cope with stressful aspects of pregnancy. The repertoire of skills of the subjects expanded to coping with contextual demands such as poverty, major life events, work related stress and interpersonal tensions. Mindfulness is known to have an impact on neural circuitry, associated with alterations in stress reactivity and immune function, as documented by Davidson *et al.*<sup>11</sup>

Chronic stress in the context of extremely low economic status can cause in mothers a state of cerebral hyperarousal that has been found associated with disengaged and insensitive interactions with their children during play, as reported by Sturge-Apple *et al.*<sup>29</sup> There is evidence that MBI can significantly influence the physiological processes associated with adjustment to stress<sup>16</sup>, which suggests that mindfully-based programs may be targeted to promote improvements in family functioning and child outcomes for disadvantaged families.

Mindfulness builds resilience by developing our capacity to cope with negative feelings and to respond reflectively. Self-regulation, based on focused attention and emotional regulation provides protection from stress and it is a predictor of physical health. Mindfulness skills protect individuals from multiple-stress and distractors of modern everyday life. By facilitating the management of negative emotions, mindfulness helps prevent serious behavior problems in youth such as aggressiveness and school drop-out and by improving stress coping skills it prevents trauma associated with socio-economical adversities. Mindfulness interventions are well accepted and effective for people from diverse cultural and high-risk groups such as ethnic minorities, economically and socially disadvantaged people, people with disabilities. Future directions of research in the field of family-focused preventive interventions based on mindful parenting may have a significant impact on building resilience not only in children, parents and family functioning, but also in social groups.

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