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REVIEW ARTICLE

Mindfulness: A Dialogue between Buddhism and Clinical Psychology

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Abstract Evidence for the effectiveness of mindfulness as a clinical intervention is quickly growing. Much of our current understanding and application of mindfulness within clinical psychology has arisen from dialogue with Buddhist traditions, with the notable exception of Acceptance and Commitment Therapy. We wrote this article with two purposes: (1) to provide a concise review of mindfulness within the Buddhist traditions for interested clinicians and researchers and (2) to explore whether further dialogue between Buddhism and clinical psychology could enhance mindfulness as it is used within clinical psychology. We concluded that mindfulness, as it is understood and applied in Buddhism, is a richer concept than thus far understood and applied in psychology. In addition, within Buddhism the development of mindfulness must be understood in tandem with the development of wisdom, compassion, and ethics. We suggest an operational definition of mindfulness within Buddhism. We also explore implications for clinical psychology and possible future directions for mindfulness research and practice.

Keywords Mindfulness · Third-wave interventions · Buddhism · Meditation

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Mindfulness is currently applied widely in the field of clinical psychology, and both its popularity as a clinical intervention and evidence for its effectiveness are growing. Much of the understanding and practice of mindfulness within clinical psychology arose from dialogue with Buddhist traditions, with the notable exception of acceptance and commitment therapy (Hayes 2002). The aim of this article is to (1) give clinicians and researchers the opportunity to better understand how mindfulness has been applied in the past 2,500 years within Buddhist traditions and (2) ask whether further dialogue could enhance mindfulness within clinical psychology and determine what this enhancement may look like. This article is not intended to provide a comprehensive systematic review of the efficacy of mindfulness as a clinical intervention nor have we provided a complete description of the therapies in which mindfulness forms a part.

A Brief Summary of Mindfulness in Clinical Psychology

A thorough review of mindfulness within clinical psychology is beyond the scope of this article (for systematic literature reviews of mindfulness as a clinical intervention, the reader is directed to Grossman et al. 2004; Baer 2003; Coelho et al. 2007). First, it should be noted that there is not necessarily a consensus on the definition of mindfulness in clinical psychology (Kostanski and Hassed 2008). Mindfulness was first introduced as a therapeutic practice by John Kabat-Zinn with mindfulness-based stress reduction (MBSR) and has since become integral to three other third-wave therapies: Mindfulness-Based Cognitive Therapy (MBCT), Dialectical Behaviour Therapy (DBT), and Acceptance And Commitment Therapy (ACT) (Kostanski and Hassed 2008). Mindfulness training in particular is the central focus of MBSR

and MBCT and both use formal mindfulness practices (e.g., sitting meditations). In contrast, within DBT and ACT, mindfulness skills are taught alongside other behavioural strategies and formal mindfulness practices may or may not be used (Baer 2003).

Mindfulness-Based Stress Reduction

This involves an 8-week group session in which clients are encouraged to practice mindfulness daily (Kabat-Zinn (1990, 2003) suggests the following operational definition for mindfulness: "the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment" (p.145). The formal mindfulness practices include mindfulness of the breath exercises, body scan (mindfulness of physical sensations of the body), mindful hatha yoga, and mindful walking. Clients are encouraged to develop mindfulness in their everyday life. In a systematic review of MBSR, Grossman et al. (2004) concluded that MBSR is effective for a range of clinical and nonclinical issues including pain, cancer, heart disease, depression, and anxiety and that the consistent and relatively strong effect across a variety of conditions suggests that mindfulness training may improve one's ability to cope with the general distress of everyday life. Baer et al. (2008) conducted a systematic review of mindfulness-based interventions including MBSR, adapted MBSR, and MBCT and concluded that mindfulness-based interventions may be effective for a variety of clinical issues and may improve psychological functioning. In addition, Carmody and Baer (2008) found in a randomized controlled trial (RCT) of MBSR that increases in mindfulness, as measured by the five-facet mindfulness questionnaire, mediated the relationship between formal mindfulness practice and decreases in psychological symptoms and stress.

Mindfulness-Based Cognitive Therapy

This approach combines mindfulness training with elements of Cognitive Behavioural Therapy and is designed to prevent relapse or recurrence of major depression (Segal et al. 2004, 2002). MBCT draws from MBSR in terms of how mindfulness is conceptualized and training content (e.g. mindfulness of the breath exercises and body scan). The rationale for targeting the prevention of depressive relapse with mindfulness is based on an information-processing theory of depression that suggests that mild dysphoric states may reactivate depressive thinking in persons with previous depressive episodes and that ruminative cognitive-affective processing may escalate the dysphoric state leading to relapse or recurrence of depression (Segal et al. 2004). In essence, the aim of MBCT is to disrupt the ruminative cognitive-affective processing and, hence, the self-escalation of depressive thinking. Coelho et al. (2007) suggest in a systematic review that MBCT is effective for clients with three or more previous depressive episodes, although they note the need for RCTs with an active control condition to test specific effects. The fact that MBCT has been found to be effective in clients with three or more previous depressive episodes but not in those with two previous episodes has been explained in reference to the theoretical underpinning of MBCT (Segal et al. 2004). Ruminative cognitive-affective processing and depressive thinking become increasingly automatic with each depressive episode. Because MBCT is theorized to work by disrupting ruminative cognitive-affective processing, it is not surprising that it is effective in clients with three or more previous depressive episodes but not in those with fewer previous episodes.

Dialectical Behaviour Therapy

This behavioural therapy was originally developed for patients with borderline personality disorder (Fiegenbaum 2007; Linehan 1993). Four RCTs have demonstrated the effectiveness of DBT with this population, and there is emerging evidence of the effectiveness of modified DBT with other conditions such as binge-eating disorder and chronic depression (Fiegenbaum 2007). DBT is grounded in the philosophical view of dialectics—the idea that nature consists of opposing forces ("thesis" and "antithesis") the "synthesis" of which leads to new reality and a new set of opposing forces (Linehan 1993). It is the tension between these opposing forces in therapy that can produce therapeutic change. The key dialectic is the acceptance–change synthesis. Thus, clients are encouraged toward both a radical acceptance of themselves and the current moment and toward changing their behaviours and environments. Mindfulness skills are often taught within this context. These skills in DBT are broken into three "what" skills—observing, describing, and participating and three "how" skills—nonjudgment, focusing on one thing in the moment, and being effective. The goal of the "what" skills is being able to participate in life with awareness. The "how" skills refer to how this is done, through a nonjudgmental stance, focusing on one thing in the moment and being effective (doing what works or "skilful means"). Mindfulness, from a DBT perspective, includes both a radical acceptance of the present moment and doing what works (Robins et al. 2004). This approach draws mainly from Zen Buddhist traditions to develop a conceptualization of mindfulness.

Acceptance and Commitment Therapy

Within ACT, suffering is seen as emerging from normal verbal processes; therefore, this therapy is linked to a well-

researched basic theory of language, Relational Frame Theory (RFT) (Hayes 2004). According to RFT, suffering emerges from normal verbal processes because verbal beings are able to reconstruct aversive experiences, using language, in any environmental context. This suffering is amplified by cognitive fusion, the dominance of language over direct contingencies so that behaviour is verbally regulated rather than being regulated by the environmental context. The person thus lives "in their head" rather than in their life. The suffering may be amplified further by attempts at experiential avoidance or attempts to avoid private experiences (e.g., emotions, thoughts, sensations). Experiential avoidance of private experiences is usually unworkable because private experiences often relate to a person's history (e.g., a memory) and deliberate attempts to avoid a private experience are likely to bring about memories of that experience (e.g., thinking "don't get anxious" reminds the person of their anxiety). In addition, experiential avoidance is a distraction from effective action in the current environment (Hayes et al. 1999; Hayes 2002).

ACT is considered a mindfulness-based therapy because it promotes mindfulness or ongoing nonjudgmental contact with psychological and environmental events as a solution to the bind in which our verbal processes place us (Hayes 2006). Within ACT, mindfulness is seen as decreasing the dominance and literality of language (i.e., promoting cognitive defusion) and increasing willingness to maintain psychological contact with private experiences, as they occur in daily life (i.e., promoting acceptance). The following operational definition of mindfulness within ACT has been suggested: "defused, accepting, open contact with the present moment and the private events it contains as a conscious human being, experientially distinct from the content being noticed" (Fletcher and Hayes 2005, p.322). It is worth noting that within ACT an inductive approach to the definition of mindfulness is taken in which the definition of mindfulness is grounded in a testable behavioural theory. For example, the term *defused* in the previous definition is a technical term within RFT that is specific and widely applicable (in comparison to common sense language such as "nonjudgmental"). In addition, the ACT definition of mindfulness does not reference any particular method or technique (e.g., meditation). In fact, while mindfulness is central to ACT, traditional mindfulness practices such as sitting meditation may or may not be taught. Unlike MBSR, MBCT, and DBT, the development of ACT was not influenced by consciously drawing on Buddhist sources.

The overarching goal of ACT is to increase psychological flexibility or the ability to, while maintaining psychological contact with one's own experiences, persist or change in behaviour in the service of valued ends (Hayes 2004). ACT has been applied to a diverse range of issues including depression, social phobia, work stress, smoking, psychosis, chronic pain, and trichotillomania; systematic reviews of the literature have concluded that ACT demonstrates positive effects (Hayes 2006; Ost 2008). Further, there is evidence that the clinical effects of ACT are mediated by reductions in experiential avoidance, which confirms this model.

A Brief History of Buddhism

The religious, philosophical, and mind-training tradition that we know of as Buddhism began in Northern India 2,500 years ago with the teachings of a man by the name of Siddhartha Gautama. Gautama came to be known as "the Buddha", meaning "the awakened one". The Buddha was believed to have achieved final liberation from suffering, or enlightenment, and his teachings outline a path for others to follow to also achieve this liberation. Mindfulness is a key aspect of this path. Buddhism as it exists today forms three major schools: Theravada, Mahayana, and Vajrayana. The Theravada school dominates in Thailand, Sri Lanka, Cambodia, and Burma, whereas the Mahayana school dominates in China, Japan, Mongolia, Nepal and Tibet. The Mahayana school includes distinctive forms of Buddhism such as Chan/Zen Buddhism, Pure Land Buddhism, and Tibetan Buddhism. The Vajrayana "school" is not, strictly speaking, a separate school but a specialized subclass of Mahayana Buddhism. Tibetan Buddhism is a prominent example of Vajrayana Buddhism within the Mahayana fold. Vajrayana Buddhism is also found in China and Japan, known respectively by their native names of Zhenyan and Shingon. All three schools of Buddhism can be said to contain authentic teachings of the historical Buddha, although there are debates as to whether Theravada, chronologically the earliest tradition, is deemed "closer" to the original teachings of the Buddha.

Mindfulness in Buddhist History

Mindfulness (Pali: *sati*; Sanskrit: *smrti*; Tibetan: *dranpa*), as a concept and practice, occupies a significant place in the overall schema of Buddhist meditative training. It is also defined in a variety of ways across the Buddhist schools and throughout Buddhist history. This section seeks to articulate the multiple understandings of mindfulness within Buddhism by drawing on all three major traditions of Buddhism in existence in the contemporary world—Theravada, Mahayana, and Vajrayana. Wallace (2006, 2007); Wallace and Hodel (2008) argues strongly for a contextually embedded understanding of Buddhist meditation, and this approach will be followed here. Mindfulness in the Buddhist context includes the following: simple bare awareness of moment to moment experience; "gatekeeping" awareness; remembering and

sustaining attention on a familiar object; a process of systematically recollecting a sequence of ideas; conjoined with introspective vigilance that monitors the stability and clarity of awareness; wisely directed attention that probes into the source of experiential content; and nondual coemergent awareness at the subtlest level of consciousness, free from all conceptual constructs and frames.

The Context of Mindfulness in Buddhism

In the Buddha's noble eightfold path, right mindfulness (*samma sati*) features as the seventh factor in an integrated ten-factored path of intellectual, ethical, meditative, and wisdom training. As such, any consideration of mindfulness in the Buddhist context cannot be divorced from the factors of the eightfold path with which right mindfulness is intimately bound. Also, the prefix "right" suggests that Buddhist mindfulness is not an ethically neutral practice but requires an ethical prejudgment of what is considered wholesome/skilful (*kusala*) and unwholesome/unskilful (*akusala*). In other words, a degree of ethical judgment is necessary to the proper practice of mindfulness as understood in Buddhism. This act of discernment and ethical judgment is the function of wisdom (Pali: *panna*; Sanskrit: *prajna*), a mental factor that intelligently discerns the ontological status of objects. In the context of ethics-based Buddhist mind training, wisdom provides knowledge of the causes, conditions, effects, and implications of experiential process, content, and behaviour, in terms of the ethical consequence (e.g., "does it lead to suffering or genuine happiness?"), purpose orientation (e.g., "does it lead to the goal of liberation and enlightenment?"), and universalizability (e.g., "can this be applied to others and across different contexts?"), resulting in a valid conclusion of how things really are (Dhammika 1990). The concept of "genuine happiness" (*sukha*) in Buddhism refers not to hedonic pleasure arising from pleasurable stimuli but to lasting human flourishing rooted in ethical, spiritual maturation in line with virtue that "underlies and suffuses all emotional states [and] embraces all vicissitudes of life" (Wallace 2007, p.2). Virtue implies ethical practice, and ethics is inseparable in practice from mindfulness:

> "Ethics relies on mindfulness. It [ethics] is described as the intention to guard. Mindfulness plays a very important role in achieving that because it remembers what it is that we are meant to be guarding. When you consider it from the perspective of the three trainings, ethics is the foundation or basis for the two latter trainings: those of concentration and wisdom. This quality of mindfulness, which is so important for ethics, is important for these also." (Tsering 2004b, p.41).

The wisdom that informs ethics and mindfulness is, in the first instance, conceptual in nature and consists in factual knowledge of how things truly exist, operate, give rise to effects, and affect the goal of liberation (*nibbana*) or enlightenment (*sambodhi*). Thus, wisdom is knowledge of what is to be abandoned and what is to be cultivated in terms of mental states and intentions, and verbal and physical behaviours. Such wisdom feeds into every moment and every act of mindfulness practice, ensuring that the type of mindfulness generated is "right" (*samma*).

As for the goals of Buddhist mind training, the common therapeutic outcome of happiness, fulfillment, or wellness in the present life is secondary to what is perceived as the larger purpose of complete freedom from suffering, including rebirth (*nibbana*) and the perfection of all positive qualities of the mind in a state of altruistic omniscience (*sambodhi*).

Preliminary Practices of Mindfulness

In the *Samanna-phala Sutta*, the Buddha describes the starting point of mind training as generating a robust sense of confidence in the path, which expresses itself in the act of "taking refuge" in the Buddha, Dhamma (the Buddha's teachings), and Sangha (the Buddhist community) (Walshe 1987, p.99). Out of this deep confidence in one's training pathway comes the practice of ethical living, avoiding the unwholesome and nurturing the wholesome. Such ethical living naturally leads to the bliss of blamelessness, a sense of freedom from blame, and resulting lightness of mind. The trainee then engages in mindful guarding the sense doors—visual, auditory, olfactory, gustatory, tactile, and mental—to prevent unwholesome states of mind that might propel unwholesome actions and lead to suffering. Accompanying this sense guarding is general mindfulness of everyday activities, being attentive, and watchful during daily tasks. As a result of all these practices, a sense of inner contentment develops that is conducive to deeper meditative training. At this point, the trainee is ready to begin the formal practice of mindfulness, including specific meditation practices.

Mindfulness in Theravada Buddhism and Early Pali Texts

The *Samyutta Nikaya* is a collection of ancient texts written in the Pali language. In the *Samyutta Nikaya*, the Buddha describes mindfulness or *sati* thus: "And what, bhikkhus [monks], is the faculty of mindfulness? Here, bhikkhus, the noble disciple is mindful, possessing supreme mindfulness and discretion, one who remembers and recollects what was

done and said long before." (Bodhi 2000b, p.1671). From this passage and the etymology of the Pali word *sati*, Wallace (2006)) argues that mindfulness or *sati* primarily denotes "recollection" or "memory" and includes both retrospective memory of the past and prospective memory of the present and future. This entails that mindfulness engages with concepts rather than being mere nonjudgmental awareness of the present (p.61). Also, Wallace rightly suggests that the *Milindapanha*, dated between first century B.C.E. to first century C.E., represents the earliest attempt within Buddhism to define the meaning of mindfulness. In this text, monk Nagasena in response to the question of King Milinda describes that mindfulness "…when it arises, calls to mind wholesome and unwholesome tendencies, with faults and faultless, inferior and refined, dark and pure, together with their counterparts … [and] follows the courses of beneficial and unbeneficial tendencies: these tendencies are beneficial, these unbeneficial; these tendencies are helpful, these unhelpful" (Wallace 2006, p.61).

Buddhaghosa, widely regarded as the most influential commentator of Theravada Buddhism, writes in the fifth century C.E. that mindfulness's characteristic is "…not wobbling … [whose] function is not to forget … [and] is manifested as guarding … like a pillar because it is firmly founded, or as like a doorkeeper because it guards the eye-door and so on." (Buddhaghosa 1976, p.524). The *Abhidhammatha Sangaha*, a scholastic compendium on Buddhist psychology and philosophy dated approximately between the tenth and twelfth centuries, proclaims that mindfulness or *sati*, while deriving from a root meaning "to remember", is in fact a mental factor signifying "presence of mind" and "attentiveness to the present" rather than "the faculty of memory regarding the past" (Bodhi 2000a, p.86). Nevertheless, in resonance with Buddhaghosa, the *Abhidhammatha Sangaha* concedes that mindfulness has "… the characteristic of not wobbling, i.e., not floating away from the object. Its function is absence of confusion or non-forgetfulness. It is manifested as guardianship, or as a state of confronting an objective field" (Bodhi 2000a, p.86). This definition of mindfulness, a familiar definition within Theravada Buddhism, appears late in Buddhist history after centuries of commentarial interpretation specific to Theravada Buddhism. Yet this fact alone need not automatically preclude this definition from being an authentic reflection of the Buddha's own conception of mindfulness.

In order to understand the context of mindfulness, it is necessary to access the earliest Buddhist texts. Kuan (2008)) identifies at least four definitions of mindfulness in the earliest stratum of precommentarial Buddhist texts, a collection known as the *Pali Nikayas* and their counterparts preserved in Chinese translation, known as the *Agamas*. These texts were composed several centuries after the Buddha's time and reflect sectarian interpretive bias and inevitable historical baggage. Be that as it may, they represent the earliest historical sources of our modern understanding of the Buddha's teachings. From the *Pali Nikayas* and the *Agamas*, Kuan (2008)) identifies mindfulness as "simple awareness" (p.41), a moment-to-moment application of bare attention that neither linguistically nor conceptually elaborates on the bare facts of observed experience. This kind of awareness is often described as nonjudgmental, or not making value judgments on experienced content and present-focused, or centered on the present occurrence of experience without interference from past or anticipated images. Also, simple awareness is non-elaborative and relatively unencumbered by language or conception, giving it a directness of access to experiential content. It is free from identification with experienced content by virtue of its intentional witnessing stance. Taken together, these features of simple awareness—nonjudgmental, present-focused, non-elaborative, nonidentification—give mindfulness in its basic form a quality of "non-superficiality" (*apilapana*) or more literally "not floating away" (Nyanaponika Thera 1986, p.44) and correspond roughly to the description of mindfulness within ACT as "accepting", "open contact with the present moment", "defused", and "experientially distinct from the content being experienced" (Fletcher and Hayes 2005, p.322). In Theravada *vipassana* meditation, this simple awareness is believed to progressively lead the practitioner to direct observation of the impermanence and selflessness of experience, through development of sustained momentary concentration (Sayadaw 1991). This description of simple awareness is perhaps the most commonly understood meaning of the term *mindfulness*, as popularized in the West by Kabat-Zinn (1990, 2003) and others (see e.g., Hayes et al. 1999; Hayes 2006; Linehan 1993). That said, to conflate mindfulness with simple awareness, as has often been done in contemporary writings, is to miss other essential dimensions of mindfulness articulated in the texts and meditation manuals of Buddhist traditions (Analayo 2003; Brahm 2006).

The second dimension of mindfulness Kuan identifies in the earliest Buddhist texts is what he describes as "protective awareness" (p.42), where mindfulness acts as a "gatekeeper" that exercises sense restraint (*indriya-samvara*) over the stimuli of the six sense modalities—the first five being the eye, ear, nose, tongue, and tactile senses, and the sixth being the mind sense itself. Buddhist psychology divides the body and mind (which form the basis for designating a person) into dynamic processes of form, feeling, perception, mental formation, and consciousness. In turn, the process of consciousness is distinguished into eye, ear, nose, tongue, tactile, and mental consciousness, where consciousness per se is not an intrinsically existing entity but an emergent phenomenon arising out of the interaction of the eye, ear, nose, tongue, body, and mind sense faculties with their

respective sensory objects of visual form, sound, smell, taste, touch, and mental object. Mindfulness then, as the protective awareness that exercises sense restraint over the six senses, does not simply register the bare facts of sensory experience but also adds to sensory experience an element of discernment. Mindfulness as protective awareness evaluates whether a particular experience of form, sound, smell, taste, touch, and mental object conduces to skilful or unskilful mental states that in turn lead to either genuine happiness (*sukha*) or suffering (*dukkha*). Skilful states include constructive emotions such as loving-kindness and compassion, while unskilful states are afflictive emotions such as anger and desirous attachment. When sensory stimuli are received and discerned by the protective awareness of mindfulness as potentially leading to unskilful states, attentional energy is removed from those stimuli. As a result, additional unskilful states and unskilful actions do not occur. Stimuli that are discerned by the protective awareness of mindfulness to be conducive to skilful mental states and actions are encouraged to nourish those very states.

The third dimension of mindfulness Kuan identifies is “introspective awareness” (p. 51). This is where mindfulness acts as a kind of introspective vigilance (*sampajanna*) that monitors the presence or absence of various mental states that “colour” the mind in each moment. When protective awareness fails to guard the mind from unskilful states, mindfulness as introspective awareness dislodges potentially harmful states and replaces them with beneficial wholesome states. In this case, mindfulness functions as wisely directed attention (*yonisomanasikara*) where attentional energy is intelligently redeployed into counteractive or antidotal states that are skilful and conducive to peace. Such conscious redeployment of attention is an important aspect of mindfulness in practice. Within Buddhism, these practices are contrasted with our usual practice of unwise attention (*ayonisomanasikara*), where sensory stimuli are indiscriminately allowed to lead the mind into unskilful states and consequent suffering.

The fourth dimension of mindfulness Kuan describes is “deliberately forming conceptions” (p. 52), where attention is used to give energy to beneficial, wholesome thoughts and images in a deliberate attempt to positively restructure the mind. Here, mindfulness is seen as recollection, an act of forming inspiring conceptions (*anussati*). In doing so, mindfulness serves as an agent that catalyses the transformation of mental energy, through the intentional use of skilful or virtuous thoughts in a procedure of analytical reflection and construction. An example of this is found in meditative practices involving the conscious development of loving-kindness (*metta*) directed to all sentient beings, without boundary or discrimination.

These four dimensions of mindfulness found within the earliest Buddhist texts are distinct but not mutually exclusive in practice. In large part, they corroborate and give credence to the commentarial definitions of mindfulness exemplified by Buddhaghosa, Nagasena, and the *Abhidhammatha Sangaha*. The cognitive and emotional space opened by the deployment of simple, moment-to-moment bare awareness creates the foundation for the subsequent steps of protective, introspective, and deliberate conception-forming awareness. Without the initial bare registering of stimuli from all six senses, the intelligent discernment of mindfulness will not have the opportunity to execute its evaluative function in a responsible and responsive manner. This responsive discernment is different from a reactive rejection or indulgence in experience, rooted as it is on clear sight into the nature, potential, and pitfall of experiential stimuli. This intelligent discernment can then continue to work on the mind through its meta-cognitive, meta-affective introspection of mental states, removing harmful, unskilful states that have arisen while generating beneficial skilful states that are not yet there. In a more sustained, reflective, and focused manner, mindfulness can also deliberately construct wholesome thoughts, concepts, and images as a way of engendering and consolidating skilful states in the mind. In Buddhist terms, mindfulness as deliberate concept formation serves to nourish the “seeds” of positive, wholesome emotional energy conducive to both temporal happiness and ultimate liberation of mind (*nibbana*).

Mindfulness in Later Buddhist Thought: Mahayana Sino-Japanese and Sanskrit Texts

Mindfulness is highly valued in Chinese and Japanese Mahayana Buddhist traditions, in particular the Chan and Zen schools of China and Japan, respectively.

A Chan text, attributed to the Fourth Ancestor Dayi Daoxin (580–651 C.E.), describes the practice of maintaining “unified mindfulness without deviation”, where the practitioner’s body is “the basis for close scrutiny” in order to contemplate its lack of permanency and independent existence, thus reflecting its nature to be like “sheer empty space” (Daoxin, cited in Loori 2004, p.198). The essential task is to “use the eye that is empty and pure to fix the mind on seeing one thing constantly day and night without interruption, exclusively and zealously without moving” (p.199). Comparing this description with the early Pali textual accounts (Pali Nikayas), it appears that mindfulness in Chan entails simple awareness (i.e. “eye that is empty and pure”) sustained exclusively and keenly on one focal object without cognitive interruption or distraction over a period of time. It also appears that mindfulness involves deliberate forming of conceptions (i.e., of impermanence, lack of independent existence, and empty space) in order to

elicit insight into the nature of reality. Another Chan account, attributed to the Fifth Ancestor Daman Hongren (601–674 C.E.), speaks of mindfulness as a state of cognitive silence where "false thoughts" have ceased following sustained awareness of the mind, creating conditions conducive to the generation of the "wisdom of serene illumination (i.e., perfect knowledge or illumination of all things without mental discrimination" (Hongren, cited in Loori 2004, p.209). Here again, mindfulness is maintenance of simple awareness over a sustained period, with the mind itself as focal object, so as to elicit a mental silence conducive to insightful knowledge.

Dogen, a twelfth-century Japanese Zen master, takes a somatically oriented stance. Dogen sees the body as a vehicle through which enlightenment is attained, not as a hindrance as is the tendency in earlier Theravada Buddhism. He refers to mindfulness of the body, the first of the four foundations of mindfulness, as seeing the "impurity of the body" or the "skin bag on which you meditate at the moment" as the "entire universe" (Dogen, cited in Kim 2004, p.100). In the spirit of nonduality, he stresses that the "body's mindfulness" is the "body's, and not any other's, mindfulness" (p.101). Mindfulness in this context appears to echo the nonjudgmental, non-elaborative, present-centered attention of simple awareness, which in this case, neither identifies with nor constricts its identity to a localized, delimited body.

In the Pure Land traditions of China and Japan, the quintessential meditative practice is "remembrance of the Buddha", a practice of mindfulness directed to a familiar and positively evaluated object by means of recitation of Amitabha Buddha's name. In Buddhist cosmology, multiple Buddhas are said to reside in multiple pure environments perceivable only to advanced meditators and Amitabha is arguably the most prominent of these Buddhas in Chinese Mahayana Buddhism. More elaborate practices involve simultaneous visualizations of the Buddha's form and environment in tandem with mindful recitation, which can be silent or vocalized at various volume levels (Thien-Tam 1991; Shaw 2009). At more profound levels of practice, recitation and/or visualization is blended with insightful examination of the experiential context of recitation, in other words, enquiring into "who or what is doing the recitation?" In all these practices, attention is focused on either one object or a sequence of objects to the exclusion of distracting thoughts and sensory stimuli. While such mindful recitation and visualization techniques vary and abound in Pure Land texts, their essence remains the same throughout—mindfulness as a sustained deployment of attention to a familiar object or a series of objects, exemplifying deliberate forming of edifying conceptions to shape cognition and affect in positive directions. At deeper levels, such mindfulness evinces a meta-analytic function that shifts awareness away from content to context, resulting in nonidentification of consciousness with a substantial "self" or "person".

Mindfulness is also discussed in Mahayana Buddhist Sanskrit texts, such as the "Stages of Meditation" (Sanskrit: *Bhavanakarama*) by Kamalashila (ninth century C.E.) and "Ornament of Clear Realisation" (Sanskrit: *Abhisamaya-lankara*) attributed to Maitreya and recorded by Asanga (fourth century C.E.). These are scholarly treatises composed of noted Buddhist masters based on canonical teachings of the Buddha preserved in the Sanskrit *sutra*. In these works, mindfulness is depicted as a form of concentrative attention, where attention is directed again and again to a so-called virtuous object with which the mind gradually familiarizes. A virtuous object is not dogmatically imposed but carefully determined and accepted on the basis of a process of rigorous study, experiential reflection, syllogistic reasoning, and logical examination. All virtuous objects of meditative practice are those that have been decided to be wholesome, skilful, conducive to liberation and enlightenment, and oriented away from affliction and suffering. The function of mindfulness is to place the mind on the familiar virtuous object over and over again, sustaining this effort for as long as possible in spite of the multiple distractions of attention from its focal object.

The two routes that mindfulness can take in this process are the pathway of placement, or stabilizing meditation, and the pathway of analytical meditation. Placement meditation involves sustained attention and focus on a singular focal object without reasoning or analysis (e.g., concentrative focus on the breath). Analytical meditation involves the use of multiple reasons and inferences to support the focal object or intended purpose of the meditation (e.g., attentively analyzing, without distraction to other mental objects, the supportive reasons and sequential stages of developing universal compassion). With diligent and sustained practice, attention is then able to hold its focal object for as long as it likes without the slightest distraction, at which time a deep familiarity of the mind with its object is said to have occurred. When a state of blissful physical and mental pliancy accompanies this single-pointed focus where subjective awareness and objective awareness are experienced as undifferentiably fused, the meditator is said to have attained calm abiding (*samatha*) (Lodro 1992). Alternatively, when blissful pliancy of body and mind results from analytical meditation upon the basis of previously attained calm abiding, the meditator is said to have achieved special insight (*vipasyana*). In the process of arriving at calm abiding, mindfulness is supported by the mental factor of introspection or vigilance (*sampajanna*), which overlooks the mind to monitor whether attention has strayed from its object. If so, vigilance quickly returns the

mind to its focal object and mindfulness on the object is reestablished.

Through the application of mindfulness in this way, deeper stages of mental concentration can be achieved on the basis of previously attained calm abiding. These stages of concentration are divided into form and formless states known respectively as *rupa-jhana* (P.) or *-dhyana* (Skt.) and *arupa-jhana* (P.) or *–dhyana* (Skt.). These states, while certainly very different from everyday consciousness, are seen as occurring at a relatively coarse level (i.e., in comparison to the subtle natural awareness to be discussed in the next section). Form concentrative states are characterized initially by rapture and bliss accompanied by inner stillness, and later by increasingly pure equanimity, mindfulness, and single-pointedness, free from thought proliferation. Formless concentrative states are characterized by expansive, increasingly amorphous and abstract states of consciousness that defy categorization into either perceptual or nonperceptual modes. At the peak of this series of concentrative states is the cessation of all sensation and perception, a timeless stopping of all factors of personality and experience that can be described as a kind of quasi-“non-experience”. Buddhist texts describe, as a state of incredible bliss and dissolution of cognitive boundary parameters, an experience that the meditator can only surmise after having emerged from it (Brahm 2006; Lodro 1992).

In Mahayana Sanskrit and later texts, the application of mindfulness is inextricably linked to the cultivation of the mind of enlightenment (*bodhicitta*) and the realization of emptiness (*sunyata*). The mind of enlightenment is the motivation to attain enlightenment for the benefit of all sentient beings and is considered the quintessential entryway into Mahayana practice. Emptiness is the final ontological status of persons and phenomena referring to their lack of autonomous, unitary, reified existence independent of any conceptual framework. Since compassion is the root of *bodhicitta*, Kamalashila advocates constant mindfulness of compassion both during and outside formal meditation sessions: “Whether you are engaged in one-pointed meditation or pursuing your ordinary activities, meditate on compassion at all times, focusing on all sentient beings and wishing that they all be free from suffering” (Gyatso 2001, p.63). In this regard, mindfulness attends to the suffering of all sentient beings and generates the volitional and affective state of *bodhicitta*, the root of which is universal compassion. This process is achieved by integrating previously analyzed meanings and rigorously arrived-at conclusions (conclusions thus seen as factual) with the moment-to-moment development of mindful attention.

The development of *bodhicitta* both in meditation and in action is the aspect of training termed *method* (*upaya*). This is one of a pair of essential trainings required for enlightenment. The accumulation of merit (*punna*) or positive mental potentials through training in method needs to be conjoined with the accumulation of wisdom (*prajna*) through training in special insight. This wisdom is of indirect, conceptual and direct, nonconceptual (or perceptual) types, both of which are realizations resting on a correct view of emptiness induced by proper study, reflection, and analytical meditation.

With regards to the realization (both conceptual and perceptual) of emptiness through special insight, Shantideva (1997), an eighth-century Buddhist master, describes the practice of mindfulness in terms of the “close placement” of attention on the body, feelings, mind, and phenomena in a way that exactly mirrors the four foundations of mindfulness given in the *Satipatthana Sutta* and related texts of early Pali literature (Bodhi and Nanamoli 1995; Bodhi 2000a, b). The crucial difference here is that mindfulness is not simply paying bare attention to the domains of body, feelings, mind, and phenomena, but close precise attention to these four experiential processes coupled with a penetrative analysis of their final lack of inherent existence (Skt: *svabhava-śunyata*).

According to Buddhist epistemology, the cognitive comprehension of this final nature of experience, its lack of inherent existence, is first meditated through a generic image or mental concept. Through progressive analysis and reflection, this generic image of emptiness of inherent existence becomes more and more “transparent”, giving way to a direct perception of emptiness free of conceptual mediation (Klein 1986; Rabten 1992). As practice advances, the increasing power of concentration coupled with increasingly refined understanding of emptiness results in a union of calm abiding (*samatha*) and special insight (*vipasyana*). At first, a conceptual realization of emptiness takes place through the power of this union. With further practice, a direct perceptual realization of emptiness can occur. However, the direct perceptual realization of emptiness can occur if and only if the accumulated potency of merit (i.e., history of skilful acts and cultivated *bodhicitta* and compassion) is sufficiently strong. If it does occur, the direct perceptual realization of emptiness is of such transformational significance that it is said to permanently eradicate all manifest unskilful emotions and their seeds. The person is then irrevocably on the path that ultimately culminates in enlightenment (Tsering 2004a, b, pp. 67–68).

To summarize, mindfulness within the Mahayana school is synonymous with an attentional control process that serves to habituate the mind to positively evaluated and factually concordant focal objects, which can include objective concepts (e.g., the notion of impermanence, emptiness of inherent existence) and images (e.g., visualized image of a Buddha figure) and subjective states (e.g.,

wholesome states of loving-kindness and compassion). In so doing, mindfulness ultimately leads to a sustained, focused, and total integration of attention with its object that is believed to result in a transformation of the structure of mind itself in the direction of wholesomeness, virtue, and cessation of suffering.

Mindfulness in the Vajrayana School: Later Indo-Tibetan Texts

Vajrayana Buddhism is a subclass of Mahayana Buddhism that emphasizes sophisticated methods of advanced meditation traditionally regarded as more rapid and powerful means to enlightenment. As such, many key Mahayana texts and teachings are essential ingredients of the Vajrayana path. For example, Sanskrit compositions by classical masters such as Kamalashila and Asanga are cited extensively in the fifteenth-century Tibetan encyclopedic manual covering the entire graduated path to enlightenment—the Lamrim Chenmo—composed by Je Tsong Khapa (2000, 2002, 2004). The essential inclusion of the mind of enlightenment and view of emptiness in Mahayana mindfulness training is exemplified in the Lamrim Chenmo as well as a concise Tibetan text, *The Song of the Four Mindfulnesses* (Gyatso and Gyatso 1975). With regards to cultivating the mind of enlightenment, Tsong Khapa (2004) upholds the need for systematic, rigorous, and sequential familiarization of the mind with a structured meditative process beginning with universal equanimity, through generation of universal loving-kindness and compassion, to activation of the altruistic intention and finally mind of enlightenment (*bodhicitta*).

In classical Indo-Tibetan Buddhist texts, especially in a genre of literature known as the *mahamudra dohas* and *tantras*, a more subtle understanding of mindfulness emerges. Arguably, such understandings of mindfulness have been foreshadowed in the historically earlier Pali *suttas*, where different terminology may have been in place to describe such advanced levels of mindfulness. The Pali terms *ñana* (usually translated as insight-knowledge) and *atammayata* (here translated as nonfabricative awareness) come to mind. Be that as it may, the *mahamudra* texts speak of mindfulness as having evolved from a contrived, effortfully engendered type of present-moment attention to a natural, uncontrived, spontaneously arisen awareness that is inseparable from every moment of experience (Thrangu 2004). Saraha describes this natural state of transparent, spacious, unconstructed awareness that is absent of any trace of inherent self or substance variously as "non-minding", "the unborn", and "beyond the intellect", according to their progressive degrees of subtlety and spontaneity (Thrangu 2006). It is essential to distinguish the subtle natural awareness articulated here from simple awareness or bare, nonjudging attention discussed. While simple, nonjudging awareness takes place at ordinary and coarse levels of consciousness characterized by the incessant activity of everyday thoughts, sensations, and emotions, subtle natural awareness only functions when all coarse levels of cognitive-emotional activity have completely ceased.

Several other terms for this subtle awareness are used in this context (Thrangu 2004). First, the term *coemergent awareness* is used to highlight the integrated nature of uncontrived empty awareness that flows with every moment of consciousness, without separation, beginning, or end. Second, the term *coemergent appearances* is used to point to the same uncontrived empty awareness flowing with every moment of perceptual activity through all six sensory channels. Third, the term *coemergent thoughts* is used to signify the uncontrived empty awareness copresent with every cognitive act of thinking, where thoughts arise and pass away free from all solidification and without any reference to a subjective self *behind* the thoughts and objective substance *within* the thoughts or *in* the awareness itself. Two points of clarification are warranted here. First, the term *thoughts* here does not refer to ordinary thinking in our everyday sense where thoughts are experienced as solid, real, substantial and autonomously existing. Also, the awareness that is "coemergent" with these insubstantial thoughts is not the ordinary, simple awareness discussed in a previous section. Second, the word *empty* in the foregoing sentences does not mean "nothingness". Rather, it denotes the absence of any inherent, independent, unchanging existence findable solely from the side of any object in question. In other words, things do appear and exist, but not in the way we think it normally does. Normally, we grasp things as standing alone, existing inherently and autonomously from their own side without the need for conceptual and linguistic imputation. Seen in this light, mindfulness as subtlest uncontrived awareness is not experienced as an entity existing inherently from its own side, independent of mental designation. Such awareness is not only free of any idea of a self or person; it is free of any notion of itself being an inherently existing entity.

The mastery of uncontrived natural awareness is not accomplished without union of calm abiding and special insight developed on the basis of tantric and/or mahamudra meditative techniques. These advanced practices aim to elicit and use the subtlest level of consciousness possible to powerfully penetrate into the final mode of existence of all things. This subtlest level of consciousness, also known as "clear light" mind or "timeless awareness", is usually only manifest when gross levels of consciousness have absorbed into their ground state. This is possible in an attenuated form during deep dreamless sleep, sneezing, fainting, and sexual climax in ordinary experience, and in a full

unmediated form when consciously and precisely brought to expression through tantric and mahamudra meditation (Gyatso 1995; Yeshe 1987). In this process, mindfulness as simple awareness, protective awareness, introspective awareness, deliberate conception forming, and concentrative focusing are all used in a coordinated and blended way to elicit this subtlest clear light mind that indivisibly and blissfully realizes the emptiness of inherent existence of all things. This indivisible clear light of bliss is the timeless natural awareness that is effortlessly coemergent with itself, all appearances, and thoughts. In this profound union of clear light and bliss, emptiness and appearance, primordial purity and spontaneous presence lies the culmination of mindfulness as practice, path, and fruition (Norbu 1990, 2006).

Mindfulness: Dialogical Foundations for Future Research?

A Buddhist Operational Definition of Mindfulness

Within Buddhism, mindfulness has been understood in a number of ways and applied in a variety of contexts that have not been translated into clinical psychology. Is further translation possible and if so, is it desirable? What future research opportunities might this present? We suggest that if further translation is possible and desirable, a logical starting point is reviewing our definition of mindfulness and reviewing the overarching context in which mindfulness is applied. We have suggested that there are a number of additional elements of mindfulness present in Buddhist contexts not yet incorporated into a psychological definition. Can these additional elements be incorporated into an operational definition of mindfulness that could be used in psychological research, and if so, what would that look like? As a beginning to this dialogue, we contribute this as a possible operational definition of mindfulness within the Buddhist traditions: "Mindfulness is nonreactive, nonelaborative, nonreified awareness that has meta-cognitive functions, monitoring ongoing awareness and discriminating wisely between aspects of awareness content so that awareness and behaviour can be directed according to the goals of genuine happiness, virtue, and truth. Thus, mindfulness can be focused on present moment experience, sustaining attention on a familiar, factually concordant and positively evaluated object or on systematic recollection of constructive ideas, in a way that is volitionally generated or spontaneously emergent". For mindfulness to be of the spontaneously emergent type, a rigorous and profound process of contemplative training involving what Buddhism terms *clear light mind* is necessary. We stress that this is an initial attempt to integrate Buddhist understandings of mindfulness into an operational definition and should be further improved and tailored to research purposes. If this Buddhist-informed definition, or something like it, was used as the operational definition of mindfulness in psychological research, what new research possibilities might this open up?

Beyond Therapy

Within the Buddhist traditions, mindfulness is seen as a key part of the path to liberation for all sentient beings. We might ask: how might we implement mindfulness in ways beyond psychological therapy with clinical populations? What possibilities might there be for using mindfulness to enhance the everyday wellbeing of ordinary people? How could mindfulness by employed in solutions to social problems such as violence and racial prejudice? How can mindfulness enhance and build positive relationships? Future research might also ask: how might we study what is known in Buddhism as subtle states of consciousness and how might we apply such states in ways that ameliorate suffering and actualize human potential? In particular, it might be worth investigating what the Buddhist goals of liberation and enlightenment entail beyond what we currently know of psychological health and wellbeing. Such investigations can involve scientifically established measurements of behaviour and neural correlates, potentially integrated with rigorous and systematic measurement of first-person observations of subjective experience. Already, ACT has been applied to racial prejudice with promising results (Lillis and Hayes 2007) so the extension of mindfulness beyond the therapy room has begun. Also, writings on the application of mindfulness in politics, economics, and global issues such as climate change have filtered into our cultural space and raised questions on how mindfulness practice can have potential wider repercussions beyond the individual (Kang 2009; Magnuson 2008; McLeod 2006). In the coming years, mindfulness may play a key role in the emerging field of positive psychology as well as in targeting problems beyond therapy, such as prejudice, and in fostering prosocial altruism, constructive social engagement, and social renewal.

Mindfulness—a Part of the Path

Within the Buddhist traditions, mindfulness is not applied in isolation but rather is supported by and supports the development of wisdom and ethics. Similar to (but not to be equated with) Buddhist notions of wisdom, within DBT mindfulness incorporates effective action or doing what works (Robins et al. 2004) and within ACT emphasis is placed on workability (Hayes et al. 1999). There are also

parallels between Buddhist notions of nonidentification with a substantial "self" and ACT in which conceptualized self, or attachment to a literal conception of self, is undermined (Hayes 2002). As discussed above, the Buddhist view of and meditation on selflessness additionally involves the undermining of reification of all physical and mental processes as inherently, unimputedly existing. In addition, similarities may be drawn between ethics training within Buddhism and the emphasis within ACT on committed action toward valued ends (Hayes et al. 1999), though it should be understood that Buddhist ethics, departing from ACT, proposes universally valid principles of behaviour (and applicable to all sentient life) rather than personally chosen ones. In Buddhism, these ethical principles and values are not optional but compulsory for anyone choosing to participate in Buddhist mind training. These parallels between Buddhism and ACT are made more interesting by the fact that the development of ACT did not involve consciously drawing upon Buddhist traditions, and the parallels between the two may thus reflect the importance of these themes and concepts in the amelioration of suffering (Hayes 2002). Research investigating how mindfulness supports and is supported by wisdom and ethics practices would be valuable in developing further understanding within psychology about the context in which mindfulness is best practiced. For example, research questions could include: does regular mindfulness practice lead to changes in the way the world is viewed, such as seeing phenomena as impermanent and the self as nonexistent? Does ethical living enhance mindfulness practice? Does regular mindfulness practice spontaneously lead to greater compassion and altruistic behaviour?

Mindfulness and Memory

In the Buddhist tradition, the definition of mindfulness is closely tied to memory. There is evidence that mindfulness training is associated with improvements in working memory in high stress situations (Jha et al. 2010) and that mindfulness increases the tendency to remember specific rather than general autobiographical events (Heeren et al. 2009). The investigation of the effects of mindfulness on memory is recent and more research is required. This is consistent with the understanding of mindfulness in Buddhism.

Mindfulness as Discernment

One significant difference between Buddhist and psychological conceptions of mindfulness that warrants further investigation is the idea of mindfulness as discerning and involving ethical judgment. For example, while ACT might advocate an accepting stance towards all experiential content including emotions of anger, pride, jealousy, or lust, Buddhist training unequivocally espouses the conscious skilful counteracting of such afflictive emotions (*kilesa*) with their opposites, mediated by mindfulness and introspective vigilance. For Buddhism, certain psychological states are rigorously discerned to be toxic to the mind and clearly identified as "poisons" to be nullified. This is not seen as a process of avoidance or suppression but an application of wise attention, discernment, volition, and emotion to transform destructive states and tendencies into constructive ones. This "discerning" aspect of mindfulness is not as prominent in Western psychological definitions. It may be useful to investigate empirically whether there are functional differences between experiential avoidance as it is defined in ACT and the kind of mindful discernment advocated in Buddhism.

The Importance of Philosophical Underpinnings

There are necessarily challenges in dialogue between two disciplines with such different histories, assumptions, cultural baggage, and philosophical underpinnings. Dialogue between Buddhism and psychology has played an important role in the emergence of third-wave therapies incorporating mindfulness. To ensure that further dialogue between Buddhism and psychology continues to be useful, it is necessary that both disciplines are explicit and honest in terms of philosophical underpinnings, assumptions, and cultural baggage. While contemporary psychology is a relatively young science, Buddhism is a 2,500-year-old tradition that includes philosophical, ethical, psychological, and religious elements. Further, participants in the dialogue need to be cognizant of their own roles as scientists, clinicians, and mindfulness practitioners. The commitment to explicit acknowledgement of philosophical underpinnings within ACT and DBT is a useful beginning, as is the empirical and philosophical enquiry of the emerging field of contemplative science (Wallace 2007; Wallace and Hodel 2008).

General Conclusions

It is hoped that this review of mindfulness within the Buddhist traditions will prove useful to researchers and clinicians alike and will stimulate further and original research on mindfulness within psychology. It is also hoped that this review exemplifies ongoing dialogue between contemplative traditions (Buddhism in particular) and modern science, and contributes to an emerging contemplative science grounded on solid empirical research and reflective inquiry.

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