#### **ORIGINAL PAPER**



# The Insight Knowledge of Fear and Adverse Effects of Mindfulness Practices

Bhikkhu Anālayo 1 0

© Springer Science+Business Media, LLC, part of Springer Nature 2019

#### **Abstract**

The insight knowledges, descriptive of meditative experiences in Theravāda *vipassanā* meditation, are the outcome of a historical development and are specific to this Buddhist tradition; the challenging experiences they describe are not representative of conceptions of the path to awakening in early Buddhism and are of no direct relevance to mindfulness-based interventions. Adverse effects of meditation are recognized in early Buddhism, where the response to a drastic case of mental imbalance leading to suicidal tendencies takes the form of recommending the cultivation of mindfulness. In fact, adverse effects can occur with a range of different meditation practices, which need not have any relationship to mindfulness. Although the practice of mindfulness is clearly not a panacea and in case of trauma and mental illness requires being combined with professional assistance, it has a potential to support and facilitate the facing of difficult emotions.

**Keywords** Adverse meditative experiences  $\cdot$  Anxiety  $\cdot$  Depression  $\cdot$  Fear  $\cdot$  Insight knowledges  $\cdot$  Joy  $\cdot$  Meditation accidents  $\cdot$  Mental health: progress of insight  $\cdot$  MBIs  $\cdot$  Religious suicide  $\cdot$  *Vipassanā* 

Studies of Theravāda meditation practice by Kornfield (1979) and Brown and Engler (1980) offered brief surveys of the so-called "insight knowledges". The scheme of these insight knowledges forms a central framework for Theravāda *vipassanā* meditation (Mahasi 1971; Ñāṇārāma 1983). It describes stages, some rather challenging, that insight meditation practitioners following Theravāda doctrinal directives might go through in their progress to stream-entry, the first of four levels of awakening recognized in Buddhism.

In a study of possible psychiatric complications of meditation practice, Epstein and Lieff (1981) noted the importance of taking into account these insight knowledges. In reference to the same set of insight knowledges, VanderKooi (1997, p. 32) commented that "the process of realizing *nirvana* is fraught with troubling and sometimes excruciating states ... [such as] sadness, irritability, extreme fear."

Whereas these publications related the insight knowledges mainly to traditional Theravada insight meditation practice, their possible relevance to mindfulness-based interventions

Published online: 17 July 2019

Barre Center for Buddhist Studies, 149 Lockwood Road, Barre, MA 01005, USA (MBI) in general has recently received attention. According to Grabovac (2015, p. 590),

some MBI participants may practice in a manner that is very close to traditional vipassana practice. This can occur when participants have prior knowledge of vipassana, or when the clinician delivering the MBI has the requisite theoretical understanding and personal experience in the Theravada vipassana traditions and incorporates this knowledge into MBI practice instructions.

Compson (2018, p. 1366) then proposed that the scheme of the insight knowledges is actually

a description of a psychological process accompanying meditative activities, whether or not they are undertaken in the context of a "Buddhist" training or retreat ... the process of meditative insight occurs whether one is practicing in a Buddhist framework or not.

Both authors consider it problematic when MBI practitioners are encouraged to keep practicing on their own, as home practice might lead to patients having to face the



potentially distressing experiences of the advanced insight knowledges when being alone and on their own. This would be in contrast to the ethical standards of modern psychology and medicine, which require proper monitoring of a therapeutic intervention and obtaining the patient's informed consent prior to initiating a treatment with potentially serious side effects. Barford (2018) then reasoned that, in view of this apparent danger, it needs to be ensured that mindfulness practitioners do not inadvertently become meditators.

In order to evaluate to what extent instructions in a standard MBI could lead to the meditative experience of the insight knowledges, an examination of the historical background to these experiences is a natural starting point. This can help to assess to what degree these experiences are the specific outcome of insight meditation undertaken within a Theravāda doctrinal framework only or else should be considered a general feature of mindfulness practices.

## The Insight Knowledges

The full scheme of insight knowledges according to Theravāda exegesis, as found in the *Visuddhimagga*, an essential manual for the Theravāda meditative path, comprises the following sequence of stages (Vism 587):

knowledge of delimitating mind and matter (nāma-rūpaparicchedañāna)

knowledge of discerning causality (paccayapariggahañāṇa)

knowledge of comprehension (sammasanañāṇa)

knowledge of rise and fall (udayabbayañāṇa)

knowledge of dissolution (bhangañāṇa)

knowledge of fear (bhayañāṇa)

knowledge of disadvantage (ādīnavañāṇa)

knowledge of disenchantment (nibbidāñāṇa)

knowledge of wishing for deliverance (muñcitu-kamyatāñāṇa)

knowledge of reflection (paţisankhāñāṇa)

knowledge of equanimity towards formations (saṅkhārupekkhāñāṇa)

knowledge of conformity (anulomañāṇa)

knowledge of change of lineage (gotrabhuñāṇa)

knowledge of the path (maggañāṇa)

knowledge of the fruit (phalañāṇa)

knowledge of reviewing (paccavekkhaṇañāṇa)

The insight progression schematized in this way can be summarized as involving the following dynamics: based on an initial differentiating between the bodily and mental aspects of the meditative experience and an appreciation of their causal interrelation, discernment of their impermanent nature in terms of their arising and passing away as well as their eventual dissolution leads to the arising of fear. Such experience of

fear has the function of stimulating disenchantment and the wish for liberation. Practicing further leads to a state of equanimity, based on which the breakthrough to stream-entry can take place.

# Historical Development of the Insight Knowledges

A more compact presentation of the progression of insight can be found in the *Paţisambhidāmagga*, a work considered canonical in the Theravāda tradition, although it apparently came into being too late to be included in the canonical Abhidharma collection of the same school. In terms of the development of Theravāda thought, the *Paṭisambhidāmagga* is earlier than Theravāda exegesis, such as the Pāli commentaries or the *Visuddhimagga*, but later than the Pāli discourses. Its presentation, which thus forms a precedent to the scheme described above, proceeds as follows (Paṭis I 53):

knowledge of comprehension
knowledge of contemplating rise and fall
knowledge of contemplating dissolution
knowledge of fear and disadvantage
knowledge of wishing for deliverance and equanimity
towards formations
knowledge of change of lineage
knowledge of the path
knowledge of the fruit
knowledge of deliverance
knowledge of reviewing

Besides not mentioning some of the knowledges of the previous list, the scheme in the *Paţisambhidāmagga* combines into one the knowledges of fear and disadvantage and again of wishing for deliverance and equanimity. Subsequent to the actual experience of stream-entry, it adds the knowledge of deliverance (*vimuttiñāṇa*). Of particular interest for the present exploration is the combining of fear and disadvantage into a single knowledge. This reflects less emphasis on fear as such, which in the fully evolved scheme of insight knowledge has become a stage of its own.

The main point to be taken away from this comparison is that the insight knowledges, in the form these are employed as a framework for contemporary *vipassanā* meditation, are the result of a historical process of growth (Anālayo 2012a). In fact, no such list can be found in the early discourses, although these texts do present precedents for the main dynamic underlying the progression of insight depicted in later exegesis. Before turning to such precedents, however, it needs to be noted that the outset and final part of the full scheme involves departures from early Buddhist thought.



According to the exposition offered in the *Visuddhimagga*, the first knowledge, nāmarūpaparicchedañāṇa, requires knowledge of delimitating "name and form," nāmarūpa. In early Buddhist thought, "name" stands for the mental factors of feeling tone, perception, intention, contact, and attention; it does not include consciousness (Anālayo 2019b). The exposition of this knowledge in the Visuddhimagga, however, defines "name" as corresponding to the four immaterial aggregates (Vism 593). These are feelings, perceptions, mental formations, and consciousness. In this usage, "name" comprises consciousness and thereby comes to stand for all that is mental. The Visuddhimagga then illustrates the effect of this particular knowledge with the example of cutting through something with a knife and thereby splitting it apart. In this way, the starting point for the cultivation of the insight knowledges involves an encouragement to establish a clear-cut body-mind duality.

The distinction between path and fruit as the two knowledges that represent the actual experience of stream-entry (or a higher level of awakening) also involves a departure from early Buddhist precedents. In fact, already the *Paţisambhidāmagga* understands these two knowledges to be of a momentary character (Paṭis I 69 and 71). This differs from the notion of path and fruit in early Buddhist texts, where the path can refer to the prolonged trajectory of practice that leads up to the breakthrough to stream-entry, possibly involving even years of practice rather than being a single mind moment, and the fruit in turn reflects the ensuing inner transformation (Anālayo 2012b).

The above goes to show that the way Theravāda exegesis conceptualizes the starting and culmination points of the progress of insight does not necessarily correspond to early Buddhist thought. This is not to take the position that there is something wrong with the *Visuddhimagga*'s scheme of insight knowledges. Instead, the point is only to note that this is a specific form of presentation on how insight unfolds.

# The Progress of Insight in Early Buddhism

Leaving aside the starting and culmination points, the basic dynamics of the insight knowledges can be related to a recurrent description of a progression of insight found in the early discourses (Anālayo 2012a). This concerns the three characteristics of impermanence (anicca/anitya/無常/mi rtag pa), unsatisfactoriness (dukkha/duḥkha/苦/sdug bsngal), and not self (anattā/anātman/無我/bdag med pa).

The insight knowledges of rise and fall and of dissolution reflect insight into impermanence. The ensuing knowledges of fear, disadvantage, disenchantment, and wishing for deliverance can be subsumed under the header of insight into *dukkha*. The remaining knowledges leading up to the breakthrough to stream-entry can then be seen as actualizing insight into not self.

A sequential relationship between the three characteristics finds expression in a recurrent description in the early discourses. Although this sequential presentation is not the sole avenue for liberating insight, it does reflect a prominent model of progress to liberation. Instances of this presentation can be found in Pāli discourses and in each of the four Chinese  $\bar{A}gamas$ . In this way, the same basic idea is found in all of the five main discourses transmission lineages to which we still have access nowadays:

DN 33: aniccasaññā, anicce dukkhasaññā, dukkhe anattasaññā.

DĀ 9: 無常想, 無常苦想, 苦無我想.

MĀ 86: 無常想, 無常苦想, 苦無我想.

SĀ 1034: 無常想, 無常苦想, 苦無我想.

EĀ 37.10: 無常, 無常者即是苦, 苦者即是無我.

The formulation in these five texts is so similar that the first four could be translated with a single English phrase as follows: "perception of impermanence, perception of *dukkha* in what is impermanent, perception of not self in what is *dukkha*." The last one (EĀ 37.10) only differs in so far as it does not explicitly mention "perception," hence it could be translated as "impermanent, what is impermanent is *dukkha*, what is *dukkha* is not self." The basic import of all five passages is the same.

The cultivation of insight into impermanence lays the foundation. Based on awareness of impermanence, a practitioner comes to realize the ultimately unsatisfactory nature of what is of a changing nature. Such a realization of *dukkha* in turn leads to a diminishing of the tendency to appropriate things as "mine" and identify with them with a sense of conceit, corresponding to growing insight into not self.

# Fearfulness as a Form of Insight in the Visuddhimagga

Alongside such basic correspondence between the three characteristics and the insight knowledges, a difference particularly relevant to assessing potentially adverse effects of *vipassanā* meditation practices concerns fear. As mentioned above, it is only with the fully evolved scheme of the insight knowledges that fear becomes a stage of its own, thereby acquiring additional importance. The recognition of fear as a separate stage can easily give the impression that experiencing distress and dread is an indispensable element in the progress of insight.

In the depiction of the progression of the insight knowledges in the *Visuddhimagga*, the knowledge of fear (*bhayañāṇa*) finds illustration in the example of a timid person encountering something terrifying, such as a lion, a tiger, a bear, a ghost, a fierce



bull, a wild elephant in rut, a venomous serpent, a thunderbolt, a cemetery, or a battlefield (Vism 645). The *Visuddhimagga* in fact speaks of "great fear" (*mahābhaya*) when introducing this stage of insight, which occurs after the knowledge of rise and fall and the knowledge of dissolution.

Another illustration in the same context in the *Visuddhimagga* describes a woman with three sons who have been sentenced to death. The insight experience of the knowledge of fear compares to the mother witnessing how two sons have already been beheaded and the same fate is about to befall the third son, causing her to give up all hope. Yet another illustration of the same knowledge of fear depicts a pregnant woman who has already given birth to ten children. Nine of them have died and the tenth is presently passing away in her arms, as a result of which she gives up all hope for the one still in her womb.

These dramatic depictions bring out the extent to which, according to the *Visuddhimagga*, the knowledge of fear can come with a sense of hopelessness. Although in the progress of insight a perceiving of all conditioned phenomena as frightful leads on to equanimity and mental balance, the experience of this knowledge as such can be rather unsettling.

## **Instances of Fear in the Early Discourses**

The position of the early discourses on the progress of insight differs. In fact, no counterpart to the insight knowledge of fear can be found, although there are some passages that evoke a sense of urgency. One example is a discourse that takes up the four material elements (earth, water, fire, and wind) and the five aggregates (five key aspects of one's sense of identity). The discourse compares the four material elements to poisonous snakes and the five aggregates to five murderers (SN 35.197; SĀ 1172; EĀ 31.6; Or.15009/252, Nagashima 2009).

Another discourse provides rather stark images to illustrate the need for members of the monastic order to maintain pure moral conduct. According to its presentation, it would be preferable for a monastic to swallow a red-hot iron ball rather than partake of the food offered by the faithful while being of immoral conduct (AN 7.68; MĀ 5; EĀ 33.10). The discourse has several such stark images involving fire or other ordeals to drive home the dire consequences of accepting offerings without being worthy of them due to moral misconduct.

The images of poisonous snakes and murderers or of swallowing a hot iron ball are clearly meant to arouse a sense of urgency (Giustarini 2012). In this sense, there is a place for a sense of apprehension, namely in order to instill regard for the need to maintain ethical conduct and to embark on the path to liberation. At the same time, however, these images are not

descriptive of actual experiences of fear that need to be endured as an advanced stage in the progress of liberating insight.

Another relevant passage relates more closely to meditation practice; in fact, the parallel versions of the relevant discourse employ the expression "comprehension," corresponding to the terminology used for the knowledge of comprehension (sammasanañāna) in the scheme of insight knowledges. According to the parallel versions of this discourse, pleasant and agreeable experience through any sense door should be seen as impermanent, etc., in order to overcome craving. The Pāli version (SN 12.66) stands alone in additionally mentioning that such experiences should also be seen as "fearful" (bhayato). A reference to fear is not found in this context in the parallels extant in Chinese translation (SA 291) and in the form of Sanskrit fragment (sūtra 9, Tripāthī 1962). In other words, the emphasis on fear in of the Theravada version of this discourse does not receive support from its parallels.

Another relevant passage occurs in a Pāli discourse for which no parallel is known (SN 22.78). The discourse describes celestial beings who believe that they are permanent. On hearing the Buddha teach impermanence, these celestial beings experience fear on realizing that they are not eternal. This passage shows a teaching on impermanence to cause the arising of fear (*bhaya*), although this has no relation to meditation practice, let alone reflecting an advanced stage in the meditative cultivation of insight.

A whole discourse dedicated to the topic of fear records the Buddha's own pre-awakening experiences. The parallel versions describe how fear can arise when someone who withdraws into seclusion (a standard setting for engaging in intensive meditation practice) lacks proper moral conduct and several other qualities. Such fear is quite definitely not the outcome of insight meditation. Moreover, one of the qualities that can lead to fear when withdrawing into seclusion is forgetfulness, as opposed to mindfulness. Hence, in this case the practice of mindfulness would prevent the arising of such fear, rather than provoking it.

The same discourse continues by describing the Buddha's own pre-awakening practice to confront fear that might arise when hearing some unusual sound while living alone in a forest. In such a situation, the future Buddha would maintain his bodily posture without change until the fear had subsided:

Fear and dread came upon me while I was walking. I did not stand or sat down or lie down until I had subdued that fear and dread while walking.

(MN 4: tassa mayham ... cankamantassa tam bhayabheravam āgacchati. so kho aham ... n'eva tāva tiṭṭhāmi na nisīdāmi na nipajjāmi, yāva cankamanto va tam bhayabheravam paṭivinemi).



If fear and dread came upon me while I was walking, then at that time I did not sit or else lie down, determining to discard that fear and dread, and [only] afterwards did I sit [or lie] down.

(EĀ 31.1: 若我經行有畏怖來者, 爾時我亦不坐臥, 要除畏怖, 然後乃坐).

The two parallel versions continue with the same description if fear and dread arose in another bodily posture. Be it when standing, sitting, or lying down, the future Buddha remained in that very posture until the fear had been overcome.

When hearing an unexpected noise while living in a secluded forest, a natural reaction would be to change one's posture in order to investigate the source of the sound and prepare for any potential threat. In line with a basic pattern of mindfulness practice to meet whatever happens without immediately reacting, the future Buddha instead remained unmoving until he had overcome the fear. Here, again, fear is not an advanced stage of insight meditation. Instead, it is an obstruction that is faced and then overcome.

Although not explicitly mentioned, it seems fair to propose that the future Buddha's way of overcoming fear involves an exercise found in the *Satipaṭṭhāna-sutta* and its *Madhyama-āgama* parallel, namely mindfulness of one's bodily postures (Anālayo 2013). The cultivation of some degree of proprioceptive awareness of the positioning of one's body would actually be required to ensure that one does not change posture. Moreover, a rootedness in the body through such mindfulness practice would offer a chief tool for facing fear. In fact, one of the benefits to be expected from the practice of mindfulness of the body is precisely the overcoming of fear:

One conquers fear and dread, one is not conquered by fear and dread. One dwells overcoming arisen fear and dread.

(MN 119: bhayabheravasaho hoti, na ca taṃ bhayabheravaṃ sahati, uppannaṃ bhayabheravaṃ abhibhuyya viharati).

One is able to tolerate fear; if fear arises, the mind does not become stuck in it.

(MĀ 81: 堪耐恐怖, 若生恐怖, 心終不著).

The descriptions of the Buddha's pre-awakening experiences and the above indication regarding the potential of mindfulness of the body to overcome fear reflect a rather different perspective on fear. Instead of its experience being an indispensable requirement in the progress of insight meditation, in these texts fear is rather an obstacle that can be overcome by cultivating mindfulness.

In sum, although there is a place for a healthy sense of apprehension in order to arouse a sense of urgency, it seems

fair to conclude that there is noticeable difference in attitude between the early discourses and later exegesis regarding the topic of fear as an integral dimension in the meditative cultivation of liberating insight.

#### Joyful Insight in the Early Discourses

The early Buddhist perspective on the progress of insight places considerable emphasis on joy instead of fear. One passage of interest in this context is a presentation of the doctrine of dependent arising that proceeds beyond the final link of *dukkha* (Bodhi 1980; Jones 2019). Sometimes referred to as "transcendental dependent arising," here *dukkha* forms the condition for the arising of confidence or faith, which in turn leads on to gladness, joy, tranquility, and happiness, and in this way eventually results in liberation.

With *dukkha* as the prerequisite there is confidence, with confidence as the prerequisite there is gladness, with gladness as the prerequisite there is joy, with joy as the prerequisite there is tranquility, with tranquility as the prerequisite there is happiness.

(SN 12.23: dukkhūpanisā saddhā, saddhūpanisaṃ pāmojjaṃ, pāmojjūpanisā pīti, pītūpanisā passaddhi, passaddhūpanisaṃ sukhaṃ).

With the arising of *dukkha* there is in turn confidence, with the arising of confidence there is in turn right attention, with the arising of right attention there is in turn right mindfulness and right knowing, with the arising of right mindfulness and right knowing there is in turn the guarding of the sense faculties ... the guarding of the precepts ... the absence of regret ... gladness ... joy ... tranquility ... happiness.

(MĀ 55: 習苦便有信, 習信便有正思惟, 習正思惟便有正念 正智, 習正念正智便有護諸根, 護戒, 不悔, 歡悅, 喜, 止, 樂).

On account of *dukkha* there is confidence ... guarding the precepts ... mindfulness ... clear knowing ... restraint of the senses ... restraint by the precepts ... freedom from anguish ... gladness ... joy ... tranquility ... happiness.

(Up 2005: sdug bsngal ba'i rgyus dad pa dang, tshul khrims yid la byed pa dang, dran pa dang, shes bzhin dang, dbang po sdom pa dang, tshul khrims sdom pa dang, gdung ba med pa dang, dga' ba dang, rab tu dga' ba dang, shin tu sbyangs pa dang, bde ba dang).

Alongside some minor differences, the three parallels agree in showing *dukkha* to be the starting point for a progression that leads to gladness, joy, tranquility, and happiness (which



eventually then issue in liberating insight). No reference to fear is found here at all.

The role of non-sensual types of gladness, joy, and happiness that emerges in this way is a recurrent topic in the early discourses, which time and again point to these factors as what leads to liberating insight (Anālayo 2007). Another relevant passage clarifies that, at least from an early Buddhist perspective, purifying and liberating the mind is productive of joy, rather than resulting in an unpleasant or even painful condition:

Defiled states will be abandoned, purified states will progressively increase, and one will dwell having established realization by one's own direct knowledge here and now of the consummation and abundance of wisdom; this will be a happy dwelling in gladness, joy, and tranquility, with mindfulness and with clear knowing.

(DN 9: samkilesikā ceva dhammā pahīyissanti, vodāniyā ca dhammā abhivaddhissanti, paññāpāripūrim vepullattañ ca diṭṭheva dhamme sayam abhiññā sacchikatvā upasampajja viharissati; pāmujjam ceva bhavissati pīti ca passaddhi ca sati ca sampajaññañ ca sukho ca vihāro).

Defiled states shall be extinguished, purified states shall be produced, and one dwells in a state of happy ease, with joy and delight, with mindfulness collected, with a unified mind, and with extensive wisdom.

(DĀ 28: 染汙法可滅盡, 清淨法可出生, 處安樂地, 歡喜愛樂, 專念, 一心, 智慧增廣).

Whereas this presentation focuses more on the final condition reached through the progress of liberating insight, according to another passage the "vehicle" that brings one to awakening is oriented towards fearlessness (rather than being productive of fear):

Its direction is called fearless (SN 1.46:  $abhay\bar{a} n\bar{a}ma s\bar{a} dis\bar{a}$ ).

Its direction is freedom from fear ( $S\bar{A}$  587: 離恐怖之方). Its skillful means is called fearlessness ( $S\bar{A}^2$  171: 無畏名方便).

The third version's reference to "skillful means," instead of a "direction," could be the result of the need to arrive at a five-character count when translating a verse into Chinese. The character  $\pi$  on its own conveys the sense of a "direction," but in combination with  $\pi$  it serves as the standard rendering for skillful means ( $up\bar{a}ya-kau\dot{s}alya$ ). This makes it quite possible that the Indic original had a reference to the "direction" in which the vehicle goes. Be that as it may, the three versions clearly agree on the topic of fearlessness or freedom from fear.

In addition to these discourse passages, a verse from the *Dharmapada* collections could be consulted. This verse is particularly relevant to the topic of the insight knowledges, as it directly takes up the expression "comprehension" (*sammasana*) as well as the expression "rise and fall" (*udayabbaya*). In the scheme of the insight knowledges, these two precede the experience of dissolution, which leads to fear. Here are the formulations of this verse in the three *Dharmapada* collections extant in Indic languages:

Gāndhāri *Dharmapada* 56: yado yado sammaṣadi, kanaṇa udakavaya, lahadi pridipramoju, amudu ta vianadu.

Pāli Dhammapada 374: yato yato sammasati, khandhānam udayavyayam, labhatī pītipāmojjam, amatam tam vijānatam.

Patna Dharmapada 61: yathā yathā sammasati, khandhānām udayavyayam, labhate cittassa prāmojjam, amatā hetam vijānato.

The three parallels agree in bringing up "comprehending" (sammasati/sammasadi) in their first line. The second line of the three verses then directs such comprehension to seeing the "rise and fall" (udakavaya/udayavyayam) of the aggregates. The knowledge of rise and fall (udayabbayañāṇa) is precisely what follows knowledge of comprehension (sammasanañāṇa) in the scheme of insight knowledges. Although the above verses are not about successive stages in insight, the similarity in terminology is nevertheless suggestive.

Going by the same scheme, next would be the stages of dissolution and fear. Yet, the next line in the verse rather speaks of gaining joy and delight. No reference to fear is found at all. The last line then relates such joy and delight to awakening, here referenced with the term "deathless." This thereby confirms that the joy described here (which is clearly of a non-sensual type) stands in place of the fear described in the scheme of insight knowledges. Although some room needs to be granted to poetic license, the main point that emerges from the verse is still telling.

In sum, instead of requiring the undergoing of fear and dread, from an early Buddhist perspective progress in insight can rather take the route of joy and delight, without thereby losing out on its potential to lead to awakening. In fact, joy is one of the seven factors of awakening (bojjhanga/bodhyanga/ 覺支/byang chub kyi yan lag). The seven mental qualities assembled under the header of being "factors of awakening" are precisely what leads to awakening. For these to include joy rather than fear provides a telling contrast to the insight knowledges, which include fear but do not explicitly mention joy.

The passages surveyed above show that the stress on fear in the scheme of insight knowledges is not the sole mode of cultivating insight recognized in the Buddhist traditions.



Although *vipassanā* meditation involving a progression through the insight knowledges certainly yields results, it needs to be kept in mind that, for those less inclined to find experiences of fear and dread supportive of their practice, there are alternative options. These alternatives also involve mindfulness and can similarly lead to awakening.

In this way, the cultivation of insight meditation leading to experiences of dissolution and fear depends on a specific attitude and corresponding instructions in the context of Theravāda *vipassanā* meditation. Such experiences do not necessarily result from mindfulness practices undertaken within a Buddhist framework and aimed at progress to awakening, which the above passages instead relate to joy and gladness.

#### A Fatal Meditation Accident

Although the early discourses do not have a counterpart to the insight knowledge of fear, they clearly recognize the possibility that meditation practice can lead to serious problems. An illustrative episode found in several discourses and *Vinayas* (texts on monastic discipline) reports meditation practice having fatal consequences. A recommendation of the perception of the body's lack of inherent beauty, given by the Buddha himself to apparently newly ordained monastics, had the result that some of these monastics developed excessive aversion toward their own bodies. They presumably became so depressed and aversive toward their own bodies that in the end several of them committed suicide.

Comparative study of this episode shows that its description has gone through various stages of exaggeration and dramatization in different transmission lineages (Anālayo 2014). Nevertheless, the core story, common to the different versions, does relate the recommendation of a particular meditative theme by the Buddha to suicides among his monastic disciples. In evaluating this incident, it is significant that the Buddha is on record for just giving a general recommendation without detailed instructions. This can be seen by comparing the relevant passage in the two discourse versions:

At that time the Blessed One spoke in various ways to the monastics, giving them a talk on the absence of beauty, speaking in praise of the absence of beauty, and speaking in praise of cultivating the absence of beauty.

(SN 54.9: tena kho pana samayena bhagavā bhikkhūnam anekapariyāyena asubhakatham katheti, asubhāya vaṇṇam bhāsati, asubhabhāvanāya vaṇṇam bhāsati).

At that time the Blessed One spoke to the monastics on contemplating the absence of beauty; he praised contemplation of the absence of beauty, saying: "Monastics, one who cultivates contemplating the absence of beauty, cultivates it much, attains great fruit and great benefit."

(SĀ 809: 爾時世尊為諸比丘說不淨觀, 讚歎不淨觀言: 諸比丘,修不淨觀, 多修習者, 得大果大福).

In these two discourses, the recommendations come without any detailed instructions. This impression can be explored further by turning to versions of this episode extant in canonical texts on monastic discipline: the *Vinayas* of the Dharmaguptaka (T 1428), Mahāsāṅghika (T 1425), Mahīśāsaka (T 1421), Mūlasarvāstivāda (T 1442), and Sarvāstivāda traditions (T 1435).

He spoke by way of countless means to the monastics on the cultivation of the absence of beauty, he praised the cultivation of the absence of beauty, he praised giving attention to the cultivation of the absence of beauty. (T 1428:以無數方便與諸比丘說不淨行, 歎不淨行, 歎思惟不淨行).

Then the Blessed One spoke to the monastics about contemplation of the absence of beauty.

(T 1425: 時世尊為諸比丘說不淨觀).

At that time the Blessed One spoke to the monastics on attaining great fruit and benefit by cultivating the contemplation of the absence of beauty.

(T 1421: 爾時世尊告諸比丘修不淨觀得大果利).

He spoke to the monastics on contemplation of the absence of beauty, praising the cultivation of the contemplation of the absence of beauty: "Monastics, you should cultivate the contemplation of the absence of beauty; because of cultivating, much cultivating this contemplation, one attains great fruit and benefit."

(T 1442: 為諸茲芻說不淨觀, 讚修不淨觀: 汝諸茲芻, 修不淨觀, 由於此觀修習多修習故得大果利).

At that time the Buddha said to the monastics: "Cultivating the contemplation of the absence of beauty one attains great fruit and great benefit."

(T 1435: 是時佛語諸比丘: 修習不淨觀得大果大利).

The penultimate of these passages, the Mūlasarvāstivāda *Vinaya* (T 1442), is the only one to report a direct injunction given by the Buddha to the monastics (the same holds for a version of this *Vinaya* extant in Tibetan translation: P 1032 *che* 120b). Since no such direct injunction is found in the second discourse passage translated above (SĀ 809), which stems from a collection of discourses that was also transmitted by Mūlasarvāstivāda reciters, it seems fair to consider this variation a later element and for this reason not give it too much weight.



What emerges from a comparison of the different versions is a general recommendation that the cultivation of the absence of beauty is a fruitful practice. The problem seems to have been that these monastics engaged in its actual practice without having received proper instructions and without an adequate understanding of early Buddhist meditation in general and its recurrent emphasis on the need for balance of the mind.

## **Aversion Toward the Body**

The *Satipaṭṭhāna-sutta* and its *Madhyama-āgama* parallel, for example, accompany a contemplation of the anatomical parts of the body as bereft of beauty with a simile that describes looking at various grains (a simile not found in a third parallel extant in the *Ekottarika-āgama*):

It is just as a person with good eyes who has opened a double-mouthed bag full of different sorts of grain, such as hill rice, red rice, beans, peas, millet, and white rice, which [the person] would examine: 'This is hill rice, this is red rice, these are beans, these are peas, this is millet, and this is white rice.'

(MN 10: seyyathā pi ... ubhatomukhā mutoļī pūrā nānāvihitassa dhaññassa, seyyathidam sālīnam vīhīnam muggānam māsānam tilānam tandulānam. tam enam cakkhumā puriso muñcitvā paccavekkheyya: ime sālī ime vīhī ime muggā ime māsā ime tilā ime tandulā ti).

It is just as a clear-sighted person who, on seeing a vessel full of various seeds, clearly distinguishes them all, that is: 'rice, millet seed, turnip seed, or mustard seed.' (MĀ 98:如器盛若干種子,有目之士悉見分明,謂稱,粟種,蔓菁,芥子).

The simile conveys nuances of balance, showing that the purpose of the practice is to arrive at an equanimous attitude toward the body that is similar to looking at various grains. Just as rice and millet will not be seen as sexually attractive, in the same way they will also not provoke a reaction of repulsion. This serves to clarify that any emphasis on the lack of beauty of a human body is meant to lead to freedom from both repulsion and attraction.

Although the *Ekottarika-āgama* parallel to the *Satipaṭṭḥāna-sutta* does not have this simile, it achieves a comparable effect by concluding its instruction in the following manner, after having listed the different anatomical parts to be contemplated:

One should contemplate and know them all as not worth being attached to. In this way, monastics, one should contemplate the body, experiencing joy in oneself by removing evil thoughts and being free from worry and sadness.

(EĀ 12.1: 皆當觀知, 無可貪者. 如是, 諸比丘, 當觀身,自娛樂, 除去惡念, 無有愁憂).

Such instructions would have prevented the arising of revulsion toward the body and forestalled that some monastics would try to get rid of the body by committing suicide. Without such instructions on the proper cultivation of mindfulness of the body, however, a reaction of revulsion is less surprising in the ancient Indian setting, where an attitude of disgust toward the body was fairly common in ascetic circles. The Jains, a group of ancient Indian renunciants in several respects similar to the Buddhists, highly valued ascetic practices. A recurrent feature of accomplished saints in the Jain tradition is the undertaking of intentionally starving oneself to death (see, e.g., Bilimoria 1992; Caillat 1977; Laidlaw 2005; Settar 1990; Skoog 2003; Tatia 1968; Tukol 1976; and on religious suicide in India in general Filliozat 1967; Oberlies 2006; Olivelle 1978; Sircar 1971; Thakur 1963). Commenting on the attitude toward the body in India in general, Olivelle (2002, p. 190) explained that "ascetic discourse presents the body as impure in its very essence, the source indeed of all pollution."

In such a setting, the idea of wanting to get rid of the impure body would have been pervasive and must have influenced those monastics who eventually committed suicide. They were clearly unaware of the importance of balance when trying to step out of obsession with bodily beauty. Although such a stepping out can be a helpful form of practice for those who have embarked on a life of celibacy, it needs to be implemented without succumbing to the opposite extreme of loathing the body.

The episode thereby serves as a stern warning against the dangers of misunderstanding and consequently mishandling meditation practices by reading personal assumptions and preconceptions into general recommendations or even brief instructions. It also points to a potential loss of balance if meditators overdo things in an attempt to force results.

# The Body and MBIs

The particular problem highlighted in the episode discussed above is unlikely to occur in a setting where the body is valued rather than deprecated. Instructions for Mindfulness-Based Stress Reduction (MBSR), for example, could hardly be fostering an attitude of disgust with the body. The attitude toward the body commended by Kabat-Zinn (2018, p. 1980), in relation to the MBSR body scan, takes the following form:

when we practice the body scan ... we truly give ourselves over to *listening* to the body in a disciplined and loving way and persevere at it for days, weeks, months,



and years as a discipline and as a love affair in and of itself.

The recommendation to develop a loving relationship to the body differs from the overall thrust of traditional satipatthāna/smrtyupasthāna meditation (Anālayo 2019d); it certainly does not involve a deconstruction of the body as being bereft of beauty. For this reason, MBSR instructions could hardly trigger disgust with the body and have detrimental repercussions comparable to the episode above. Hence, the possibility that someone practicing MBSR would for this reason be in danger of acting in ways similar to the suicidal monastics can safely be set aside. In fact, a recent survey by Wong et al. (2018), undertaken with the explicit aim to quantify adverse effects of MBSR and MBCT, comes to the conclusion that both can be regarded as fairly safe interventions.

MBSR and other MBIs also do not have a self-evident relationship to the type of fear and dread described in the *Visuddhimagga*'s treatment of the insight knowledges. There is in fact considerable evidence that MBIs tend to be effective in *reducing* anxiety and depression (Goldberg et al. 2018; Hofmann et al. 2010; Khoury et al. 2013; Nyklíček and Irrmischer 2017; Wang et al. 2018), rather than causing it. Moreover, the cultivation of mindfulness can at times be particularly effective for participants with severe depressive symptoms (Arch and Ayers 2013; Roos et al. 2017; Williams et al. 2014), and a reduction of such symptoms could in principle even be achieved by the very practice of insight meditation (Adhikari 2012).

Besides, the insight knowledges tend to occur only after prolonged practice under intense retreat conditions, and even under such conditions only manifest for a minority of those participating in such a retreat (Kornfield 1979). In other words, they are certainly not the norm even for someone intensively practicing Theravāda vipassanā meditation in retreat conditions, let alone someone practicing at home the type of mindfulness exercises usually taught in MBIs. Research on such home practice of MBSR rather points to a growing ability to adopt a balanced observational stance that is less influenced by the hedonic tone of experiences, rather than reflecting signs of the onset of the insight knowledges (Kerr et al. 2011). In this way, the challenging type of experiences that some Theravada practitioners might encounter during intensive insight meditation is not automatically applicable to MBIs in general. Lustyk et al. (2009, p. 28) pointed out that

case reports of psychotic episodes precipitated by meditation occurred in participants attending intensive meditation retreats rather than brief mindfulness interventions. These retreats are not only rigorous in the intensity and duration of meditation practiced, but any adverse effects of M[indfulness] M[editation] are confounded by factors such as sensory deprivation, loss of sleep,

and fasting, all of which may serve as precipitants for a psychotic episode. Thus, it is difficult to interpret the direct nature of the relationship between meditation and adverse outcomes based on these and similar reports.

#### The Potential of Mindfulness

The lack of balance evident in the attempt by the monastics to get rid of their bodies through suicide led the Buddha to recommend mindfulness of breathing in 16 steps. This involves the experiences of joy, happiness, and gladness (Anālayo 2019c), qualities already mentioned above in relation to the early Buddhist mode of cultivating insight in general. In other words, here the cultivation of mindfulness served as a means to regain balance rather than being responsible for the seriously unbalanced practice of the suicidal monastics. Given the apparent potential of mindfulness to counter depression, it seems indeed quite meaningful for the Buddha to commend the cultivation of mindfulness of breathing, with its emphasis on pleasant wholesome mental states, as an antidote to the mental negativity that had affected the monastics in question.

Although the early Buddhist approach to mindfulness of breathing in particular and the progress of insight in general gives much room to joy and happiness, it does not follow that the regular practice of insight meditation must invariably entail joyful experiences. The instructions for the second satipatṭhāna/smṛṭyupasthāna in the Satipaṭṭhāna-sutta and its two parallels cover the mindful experience of feeling tones (vedanā) that are unpleasant or painful, not just those that are pleasant (Anālayo 2013).

A central aspect of the cultivation of mindfulness in general is to be with what is, and that is inevitably not always a pleasant experience. The underlying rationale, from an early Buddhist viewpoint, is that recognizing the presence of a defilement is indispensable for being able to do something about it (MN 5; MĀ 87; T 49; EĀ 25.6). Hence, a central task of mindfulness is precisely to reflect accurately the presence of defilements and personal difficulties.

From the perspective of progress toward liberating the mind from defilements, mindfulness is invariably commendable, independent of the hedonic tonality of one's experience. This position emerges in a discussion of the seven awakening factors, six of which can be assigned to two different groups. Three awakening factors (investigation-of-dharmas, energy, joy) are commendable when the mind is slightly sluggish, whereas the other three (tranquility, concentration, equipoise) are suitable when the mind is slightly agitated. In this context, the following statement is made for the awakening factor of mindfulness (which pertains to neither of these two groups):



I say that mindfulness is always useful. (SN 46.53: *satim ca khvāhaṃ ... sabbatthikaṃ vadāmi*).

The mindfulness awakening factor is always of use. (SĀ 714: 念覺分者一切兼助).

I say that mindfulness is to be cultivated at all times. (Up 7003: *dran pa ni thams cad du 'gro ba'o zhes nga smra'o*).

This statement needs to be considered within its context, where the question at stake is progress to awakening. In fact, the cultivation of the awakening factors is based on having overcome states reckoned as "hindrances" for meditation and thereby having progressed to a level of meditation where the mind is balanced and stable. It is based on such a balanced mental condition that the cultivation of the awakening factors takes place. In this setting, mindfulness is invariably commendable.

The whole idea of progress to awakening reflects a basic difference in the evaluative frameworks adopted by Buddhist soteriology and modern psychology, respectively. From an early Buddhist viewpoint, true "health" is to be reached through awakening, with which all unwholesome influxes (āsava/āśrava/ 滿/zag pa) in the mind will be eradicated. This is the case to such an extent that a Pāli discourse proposes:

Such persons are difficult to find in the world who even for a moment can reckon themselves free from being diseased in the form of mental disease, except for those who have destroyed the influxes.

(AN 4.157: te ... sattā dullabhā lokasmiṃ ye cetasikena rogena muhuttam pi ārogyaṃ paṭijānanti, aññatra khīṇāsavehi).

This discourse contrasts this with the far more frequent cases of persons who can reckon themselves free from bodily disease even for several years. From the viewpoint of this passage, all those who have not yet reached awakened can be reckoned as "diseased." Those who have reached full awakening, in contrast, are truly healthy.

Since full awakening involves complete realization of emptiness, the conception of health that emerges in this way involves depersonalization, something that from the viewpoint of some modern psychologists could rather appear pathological. Conversely, the conception of mental health in modern psychology, with someone living a happy family life with satisfying sexual relationships and other sensual enjoyments, could from a Buddhist perspective be considered rather a case of falling short of being truly healthy.

Such differences in perspective need to be kept in mind when evaluating Buddhist mindfulness practices. The way different perspectives can affect research on adverse effects of meditation can be illustrated with the following observation by a mindfulness meditator: "my family objects to my participation in the Buddhist way, but they enjoy being around me more." Shapiro (1992, p. 65) includes this among cases where "individuals that listed an adverse influence often noted that there was a positive aspect to it."

It is open to discussion how far this description can be considered an adverse effect *of meditation*. A conversion to Buddhism without engaging in any meditation practice would probably have called up similar objections from the family. Moreover, it seems to be precisely a positive personality change due to the meditation practice that led the family members to enjoy the company of the meditator more than earlier.

#### **Adverse Effects of Meditation Practice**

Adverse effects of meditation practice have been documented in several cases (e.g., Anderson et al. 2019; Cebolla et al. 2017; Dyga and Stupak 2015; Lomas et al. 2015; Schlosser et al. 2019; Sherrill et al. 2017). The effects of mindfulness-related practices are clearly not invariably beneficial (Britton 2019; Lindahl et al. 2017). In the words of Perez-De-Albeniz and Holmes (2000, p. 55), "meditation is not free from side-effects, even for long-term meditators." In fact, at times "meditation may act as a stressor in vulnerable subjects," as noted by Kuijpers et al. (2007, p. 462).

In addition to the practice of mindfulness in the context of insight meditation, adverse results can also occur, for example, with Transcendental Meditation (Castillo 1990; French et al. 1975; Lazarus 1976; Otis 2017), visualization practices (García-Trujillo et al. 1992), *yoga* (Yorston 2010), *qigong* (Ng 1999; Shan 2000), the Latin American Arica meditation (Kennedy 1976), or Jewish mysticism (Greenberg et al. 1992). The potential for adverse effects is not just due to specific features of mindfulness practices, but rather is a problem relevant to meditation practices in general and to other health-related practices. As noted by Baer et al. (2019, p. 11),

in well-established approaches to health and wellbeing, including psychotherapy, pharmacotherapy, and physical exercise, some participants suffer serious harm or get meaningfully worse. The same appears to be true for meditation in contemplative traditions.

Moreover, in several cases previously diagnosed psychological disorders led to unsettling experiences upon engaging in meditation practices (see, e.g., Chan-Ob and Boonyanaruthee 1999; Disayavanish and Disayavanish 1984; Sethi and Bhargava 2003; Walshe and Roche 1979). In some of these instances, the challenges of undertaking an intensive meditation retreat became further exacerbated when



the meditators in question also intentionally curtailed their sleep and undertook fasting. Such effects do not stand in a direct causal relationship to mindfulness.

Regarding the intensive practice of insight meditation, Kornfield (2011, p. 92) reported that

We have had many thousands of people at our retreats over the years. Out of these, about a dozen have had true psychotic breaks. For the most part, these were people who had been previously hospitalized for mental illness. When people who have had serious mental illness come to do meditation practice, sometimes they find themselves reliving their mental crises.

In other words, adverse effects do occur, but they are not the rule. Their occurrence can reflect pre-existing problems and/or unbalanced approaches to practice. In a survey of various aspects of meditation practice, Vieten et al. (2018, p. 18) reported that "adverse events are relatively rare," in fact "reports of fear and terrors were the least commonly reported type of experience among respondents in our survey," adding that, of course, "this does not mean that such reports should be ignored." Such reports should indeed be taken serious and recent publications reflect a steadily growing interest in exploring manifestations and implications of adverse effects of meditation practice, both in the academic field and in popular publications. This has by now achieved recognition as an important and promising field of research that is of considerable public concern.

In contrast, the study by Vieten et al. surveyed a range of other areas of potential research related to meditation that, even though they clearly reflect the experience of a large number of meditators, have so far apparently not been researched at all. In other words, the importance accorded to adverse effects of meditation practice is not proportional to the frequency of their occurrence among meditators. Instead, it seems to reflect in particular an awareness of their ramifications.

Regarding the ramifications of adverse effects of meditation, it can be helpful to keep in mind that becoming aware of difficult emotions and challenging mental states is an integral dimension of mindfulness practices. As explained by Engler (2003, p. 43),

mindfulness meditation is an "uncovering" technique based on the same procedures that guide psychodynamic inquiry: removal of censorship on mental content and affect ... [hence,] especially when practiced intensively in retreat settings, it cannot help but access suppressed, repressed, or dissociated material.

In a study of three cases where meditation led to uncovering repressed traumas, related to sexual abuse in childhood, Miller (1993, p. 178) reported that all three

individuals described their experiences as a necessary part of their continued growth and healing. They expressed no regrets over the unveilings that occurred through their practice of meditation. Despite the emotional pain and intensity of their experiences, all three chose to continue to practice meditation.

Another aspect to be taken into consideration is the need for a proper training in mindfulness in order for its effects to be reflected accurately in research. For example, a brief mindfulness training given to someone in the midst of a seriously challenging situation can hardly be expected to be fully effective. A case in point is an introduction to mindfulness, shorter than the usual MBI format, administered while patients were undergoing chemotherapy. It is hardly surprising to find that, as a result of this intervention, the patients' experience of distress increased. Reynolds et al. (2017, p. 1300) commented that

given that cultivating a different mindset to life experience is challenging, it may be that three 90-min sessions are insufficiently 'potent' to enable this shift ... another possibility is that the 'present-moment' focus of mindfulness is best not introduced during acute situations ... thus, it might be that initiating mindfulness training is more useful before or after acute situations rather than during them.

The potential of mindfulness to engender a helpful perspective in the face of a challenging situation like chemotherapy would indeed require more training than just three sessions and such training needs to be initiated well before being in such a highly distressful situation in order to be fully beneficial. As already noted by Dobkin et al. (2012, p. 47),

when 'mindful', one is less likely to avoid unpleasant emotions or interpersonal problems. This may require adjustment and integration before the person is comfortable 'staying with' what arises ... similar to psychotherapy, issues may be 'stirred up' and circumstances may be experienced as worse before they settle and get better.

In relation to trauma, Treleaven (2018, p. 67) explained that:

The positive empirical findings mindfulness has gamered do not automatically extent to posttraumatic stress. While avoiding traumatic stimuli can prolong suffering, it is also an intelligent, survival-based response to managing it. Simply asking someone to pay more attention to their traumatic pain—without nuance or guidance—may invite them into a vortex they cannot escape.



In the words of Kocovski et al. (2009, p. 85), "the danger of over-applying mindfulness as a treatment for psychopathology exists." In fact, there appears to be some overlap between traumatic experiences and mindfulness practices, insofar as both can involve a loss of the sense of being in control (Ataria 2018). As summed up by Treleaven (2018, p. xxv), although "mindfulness doesn't cause trauma—it's the practice of mindfulness meditation, offered without an understanding of trauma, that can exacerbate and entrench traumatic symptoms."

Clearly, the potential of worsening the situation by indiscriminate recommendations of mindfulness practice needs to be taken serious. If used with the required circumspection, however, mindfulness practices can have an advantage over other forms of meditation that similarly can have adverse effects, as the very cultivation of mindfulness can provide a means, or at least a side-support, to face mental difficulties that have arisen. In other words, when evaluating the possibility of mindfulness practices to lead to psychosis, the potential of mindfulness practices for treating psychosis also needs to be taken into account (Shonin et al. 2014), as evidenced from a meta-analysis of relevant studies (Potes et al. 2018).

Taking advantage of this potential needs to be coupled with a clear recognition that specific problems related to trauma or mental illness require enlisting professional help. At times, this entails setting aside the practice of mindfulness in order to be able to handle appropriately a problem that has surfaced, until it becomes possible to resume mindfulness practice again. In this way, although mindfulness is definitely not a solution for any situation, nevertheless, learning to face the unpleasant and skillfully work with it are integral dimensions of its cultivation.

In sum, an evaluation of adverse effects experienced by some participants in mindfulness-related practices needs to bear in mind that the type of meditation practice promoted in *vipassanā* circles is not necessarily a reflection of mindfulness practices in general; in fact, it involves an understanding of mindfulness that differs from current MBI applications and from early Buddhist thought (Anālayo 2019a). Hence, there is a need to unravel in detail the circumstances and history behind adverse effects of mindfulness practices, in order to find a middle path between ignoring such effects and overstating their significance. Adopting such a middle path position can help avoid that the important concern to raise awareness of potential drawbacks does not go overboard and result in what Vörös (2016 p. 78) has described as a possible

shift from the *mythization phase*, in which mindfulness is presented as panacea for all the ills and evils of contemporary society, to the *demonization phase*, in which it will be stigmatized as something too unpredictable and hazardous for clinical purposes.

**Acknowledgments** The author is indebted to Chris Burke and Jack Kornfield for comments on a draft version of this article.

#### **Compliance with Ethical Standards**

**Conflict of Interest** The author declares that he has no conflict of interest.

**Ethical Approval** This article does not contain any studies performed by the author with human participants or animals.

Abbreviations AN, Anguttara-nikāya; DĀ, Dīrgha-āgama (T 1); Dhp, Dhammapada; DN, Dīgha-nikāya; EĀ, Ekottarika-āgama (T 125); MĀ, Madhyama-āgama (T 26); MN, Majjhima-nikāya; P, Peking edition; Paṭis, Paṭisambhidāmagga; SĀ, Saṃyukta-āgama (T 99); S², Saṃyukta-āgama (T 100); T, Taishō edition; Up, Abhidharmakośopāyikā-ṭīkā; Vism, Visuddhimagga.

#### References

- Adhikari, K. (2012). Study of effect of vipassana on anxiety and depression. *International Journal of Psychology and Behavioral Sciences*, 2(6), 274–276. https://doi.org/10.5923/j.ijpbs.20120206.11.
- Anālayo, Bh. (2007). Sukha. In W. G. Weeraratne (Ed.), *Encyclopaedia of Buddhism, volume 8* (pp. 164–168). Sri Lanka: Department of Buddhist Affairs. http://www.buddhismuskunde.uni-hamburg.de/pdf/5-personen/analayo/encyclopedia-entries/sukha.pdf.
- Anālayo, Bh. (2012a). The dynamics of Theravāda insight meditation. In K. Chuang (Ed.), 佛教禪坐傳統國際學術研討會論文集 [Buddhist meditation traditions: an international symposium] (pp. 23–56). Taiwan: Dharma Drum Publishing Corporation. https://www.buddhismuskunde.uni-hamburg.de/pdf/5-personen/analayo/dynamicsinsight.pdf.
- Anālayo, Bh. (2012b). Purification in early Buddhist discourse and Buddhist ethics. *Bukkyō Kenkyū*, 40, 67–97 https://www.buddhismuskunde.uni-hamburg.de/pdf/5-personen/analayo/purification-in-early-buddhist-discourse.pdf.
- Anālayo, Bh. (2013). *Perspectives on satipaṭṭhāna*. Cambridge: Windhorse Publications https://www.buddhismuskunde.uni-hamburg.de/pdf/5-personen/analayo/perspectives.pdf.
- Anālayo, Bh. (2014). The mass suicide of monks in discourse and Vinaya literature. *Journal of the Oxford Centre for Buddhist Studies*, 7, 11–55 http://www.buddhismuskunde.uni-hamburg.de/pdf/5-personen/analayo/mass-suicide.pdf.
- Anālayo, Bh. (2019a). How mindfulness came to plunge into its objects. *Mindfulness, 10*, 1181–1185. https://doi.org/10.1007/s12671-019-01152-4.
- Anālayo, Bh. (2019b). In the seen just the seen: Mindfulness and the construction of experience. *Mindfulness*, 10, 179–184. https://doi.org/10.1007/s12671-018-1042-9.
- Anālayo, Bh. (2019c). Meditation on the breath: mindfulness and focused attention. *Mindfulness*, 10. https://doi.org/10.1007/s12671-019-01169-9.
- Anālayo, Bh. (2019d). Mindfulness-based interventions and the four satipaṭṭhānas. *Mindfulness*, 10, 611–615. https://doi.org/10.1007/s12671-019-1097-2.
- Anderson, T., Suresh, M., & Farb, N. A. S. (2019). Meditation benefits and drawbacks: Empirical codebook and implications for teaching. *Journal of Cognitive Enhancement*, 3(2), 207–220. https://doi.org/ 10.1007/s41465-018-00119-y.
- 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.
- Ataria, Y. (2018). Mindfulness and trauma: Some striking similarities. Anthropology of Consciousness, 29(1), 44–56.
- Baer, R., Crane, C., Miller, E., & Kuyken, W. (2019). Doing no harm in mindfulness-based programs: Conceptual issues and empirical findings. *Clinical Psychology Review*, 71, 101–114. https://doi.org/10. 1016/j.cpr.2019.01.001.
- Barford, D. (2018). Dark night of the soul: Duncan Barford explains why mindfulness is associated with risk of severe negative psychological effects. *Therapy Today*, 29(6), 34–37.
- Bilimoria, P. (1992). The Jaina ethic of voluntary death. *Bioethics*, 6(4), 31–355.
- Bodhi, Bh. (1980). *Transcendental dependent arising, a translation and exposition of the Upanisa sutta*. Kandy: Buddhist Publication Society.
- Britton, W. B. (2019). Can mindfulness be too much of a good thing? The value of a middle way. *Current Opinion in Psychology*, 28, 159– 165. https://doi.org/10.1016/j.copsyc.2018.12.011.
- Brown, D. P., & Engler, J. (1980). The stages of mindfulness meditation: A validation study. *The Journal of Transpersonal Psychology*, 12(2), 143–192.
- Caillat, C. (1977). Fasting unto death according to the Jaina tradition. Acta Orientalia. 38, 43–66.
- Castillo, R. J. (1990). Depersonalization and meditation. *Psychiatry*, 53(2), 158–168.
- Cebolla, A., Demarzo, M., Martins, P., Soler, J., & Garcia-Campayo, J. (2017). Unwanted effects: Is there a negative side of meditation? A multicentre survey. *PLoS One*, 12(9), e0183137. https://doi.org/10.1371/journal.pone.0183137.
- Chan-Ob, T., & Boonyanaruthee, V. (1999). Meditation in association with psychosis. *Journal of the Medical Association of Thailand*, 82(9), 925–930.
- Compson, J. (2018). Adverse meditation experiences: Navigating Buddhist and secular frameworks for addressing them. Mindfulness, 9, 1358–1369. https://doi.org/10.1007/s12671-017-0878-8
- Disayavanish, C., & Disayavanish, P. (1984). Meditation-induced psychosis. *Journal of the Psychiatric Association of Thailand*, 29(1), 1–12.
- Dobkin, P. L., Irving, J. A., & Amar, S. (2012). For whom may participation in a mindfulness-based stress reduction program be contraindicated? *Mindfulness*, 3, 44–50. https://doi.org/10.1007/s12671-011-0079-9.
- Dyga, K., & Stupak, R. (2015). Meditation and psychosis: Trigger or cure? Archives of Psychiatry and Psychotherapy, 17(3), 48–58. https://doi.org/10.12740/APP/58976.
- Engler, J. (2003). Being somebody and being nobody: A reexamination of the understanding of self in psychoanalysis and Buddhism. In J.
  D. Safran (Ed.), *Psychoanalysis and Buddhism: An unfolding dialogue* (pp. 35–79). Somerville: Wisdom Publications.
- Epstein, M., & Lieff, J. D. (1981). Psychiatric complications of meditation practice. *The Journal of Transpersonal Psychology*, 13(2), 137–147.
- Filliozat, J. (1967). L'abandon de la vie par le sage et les suicides du criminel et du héros dans la tradition indienne. Arts Asiatiques, 15, 65–88.
- French, A. P., Schmid, A. C., & Ingalls, E. (1975). Transcendental meditation, altered reality testing, and behavioral change: A case report. *Journal of Nervous and Mental Disease*, 161(1), 55–58. https://doi. org/10.1097/00005053-197507000-00007.
- García-Trujillo, R., Monterrey, A. L., & González de Rivera, J. L. (1992). Meditación y psicosis. *Psiquis*, 13(2), 75–79.

- Giustarini, G. (2012). The role of fear (bhaya) in the Nikāyas and in the Abhidhamma. *Journal of Indian Philosophy, 40*(5), 511–531. https://doi.org/10.1007/s10781-012-9164-1.
- Goldberg, S. B., Tucker, R. P., Greene, P. A., Davidson, R. J., Wampold, B. E., Kearney, D. J., & Simpson, T. L. (2018). Mindfulness-based interventions for psychiatric disorders: A systematic review and meta-analysis. *Clinical Psychology Review*, 59, 52–60. https://doi.org/10.1016/j.cpr.2017.10.011.
- Grabovac, A. (2015). The stages of insight: Clinical relevance for mindfulness-based interventions. *Mindfulness*, 6, 589–600. https://doi.org/10.1007/s12671-014-0294-2.
- Greenberg, D., Witztum, E., & Buchbinder, J. T. (1992). Mysticism and psychosis: The fate of Ben Zoma. *British Journal of Medical Psychology*, 65, 223–235.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A metaanalytic review. *Journal of Consulting and Clinical Psychology*, 78(2), 169–183. https://doi.org/10.1037/a0018555.
- Jones, D. T. (2019). Preconditions: The Upanisa Sutta in context. *Journal of the Oxford Center for Buddhist Studies*, 17 (forthcoming).
- Kabat-Zinn, J. (2018). Proprioception—the felt sense of the body. *Mindfulness*, 9, 1979—1980. https://doi.org/10.1007/s12671-018-1028-7.
- Kennedy, R. B. (1976). Self-induced depersonalization syndrome. *American Journal of Psychiatry*, 133(11), 1326–1328.
- Kerr, C. E., Josyula, K., & Littenberg, R. (2011). Developing an observing attitude: An analysis of meditation diaries in an MBSR clinical trial. *Clinical Psychology & Psychotherapy*, 18, 80–93. https://doi.org/10.1002/cpp.700.
- Khoury, B., Lecomte, T., Fortin, G., Masse, M., Therien, P., Bouchard, V., Chapleu, M.-A., Paquin, K., & Hofmann, S. G. (2013). Mindfulness-based therapy: A comprehensive meta-analysis. Clinical Psychology Review, 33(6), 763–771. https://doi.org/10.1016/j.cpr.2013.05.005.
- Kocovski, N. L., Segal, Z. V., & Battista, S. R. (2009). Mindfulness and psychopathology: Problem formulation. In F. Didonna (Ed.), *Clinical handbook of mindfulness* (pp. 85–98). New York: Springer Publishing.
- Kornfield, J. (1979). Intensive insight meditation: A phenomenological study. The Journal of Transpersonal Psychology, 11(1), 41–58.
- Kornfield, J. (2011). Bringing home the Dharma, awakening right where you are. Boulder: Shambala Publications.
- Kuijpers, H. J. H., van der Heijden, F. M. M. A., Tuinier, S., & Verhoeven, W. M. A. (2007). Meditation-induced psychosis. Psychopathology, 40, 461–464. https://doi.org/10.1159/000108125.
- Laidlaw, J. (2005). A life worth leaving: Fasting to death as telos of a Jain religious life. *Economy and Society*, 34(2), 178–199.
- Lazarus, A. A. (1976). Psychiatric problems precipitated by transcendental meditation. *Psychological Reports*, 39(2), 601–602. https://doi.org/10.2466/pr0.1976.39.2.601.
- Lindahl, J. R., Fisher, N. E., Cooper, D. J., Rosen, R. K., & Britton, W. B. (2017). The varieties of contemplative experience: A mixed-methods study of meditation-related challenges in Western Buddhists. *PLoS One*, 12(5), E0176239. https://doi.org/10.1371/journal.pone.0176239.
- Lomas, T., Cartwright, T., Edginton, T., & Ridge, D. (2015). A qualitative analysis of experiential challenges associated with meditation practice. *Mindfulness*, 6, 848–860. https://doi.org/10.1007/s12671-014-0329-8.
- Lustyk, M. K. B., Chawla, N., Nolan, R. S., & Marlatt, G. A. (2009). Mindfulness meditation research: Issues of participant screening, safety procedures, and researcher training. Advances in Mind-Body Medicine, 24(1), 20–30.
- Mahasi, S. (1971). *Practical insight meditation; basic and progressive stages*. Kandy: Buddhist Publication Society.



- Miller, J. J. (1993). The unveiling of traumatic memories and emotions through mindfulness and concentration meditation: Clinical implications and three case reports. *Journal of Transpersonal Psychology*, 25(2), 169–180.
- Nagashima, J. (2009). The Sanskrit fragments Or. 15009/251–290 in the Hoernle collection. In S. Karashima & K. Wille (Eds.), Buddhist manuscripts from Central Asia, the British library Sanskrit fragments, volume 2 (pp. 258–286). Tokyo: International Research Institute for Advanced Buddhology, Soka University.
- Ñāṇārāma, M. S. (1983). The seven stages of purification and the insight knowledges, a guide to the progressive stages of Buddhist meditation. Kandy: Buddhist Publication Society.
- Ng, B.-Y. (1999). Qigong-induced mental disorders: A review. *Australian and New Zealand Journal of Psychiatry*, 33, 197–206.
- Nyklíček, I., & Irrmischer, M. (2017). For whom does mindfulness-based stress reduction work? Moderating effects of personality. *Mindfulness*, 8(4), 1106–1116. https://doi.org/10.1007/s12671-017-0687-0.
- Oberlies, T. (2006). Das Sterben 'lebender Toter': zur Genese des Instituts des Freitods und zum Umgang der indischen Rechtstradition mit ihm. *Acta Orientalia*, 67, 203–228.
- Olivelle, P. (1978). Ritual suicide and the rite of renunciation. Wiener Zeitschrift für die Kunde Südasiens, 22, 19–44.
- Olivelle, P. (2002). Deconstruction of the body in Indian asceticism. In V. L. Wimbush & R. Valantasis (Eds.), *Asceticism* (pp. 188–210). New York: Oxford University Press.
- Otis, L. S. (2017). Adverse effects of transcendental meditation. In D. H. Shapiro & R. N. Walsh (Eds.), *Meditation: classic and contemporary perspectives* (pp. 201–208). New York: Routledge (originally published 1984).
- Perez-De-Albeniz, A., & Holmes, J. (2000). Meditation: concepts, effects, and uses in therapy. *International Journal of Psychotherapy*, 5(1), 49–58.
- Potes, A., Souza, G., Nikolitch, K., Penheiro, R., Moussa, Y., Jarvis, E., Looper, K., & Rej, S. (2018). Mindfulness in severe and persistent mental illness: A systematic review. *International Journal of Psychiatry in Clinical Practice*, 22(4), 253–261. https://doi.org/10. 1080/13651501.2018.1433857.
- Reynolds, L. M., Bissett, I. P., Porter, D., & Consedine, N. S. (2017). A brief mindfulness intervention is associated with negative outcomes in a randomised controlled trial among chemotherapy patients. *Mindfulness*, 8, 1291–1303. https://doi.org/10.1007/s12671-017-0705-2.
- Roos, C. R., Bowen, S., & Witkiewitz, K. (2017). Baseline patterns of substance use disorder severity and depression and anxiety symptoms moderate the efficacy of mindfulness-based relapse prevention. *Journal of Consulting and Clinical Psychology*, 85, 1041– 1051. https://doi.org/10.1037/ccp0000249.
- Schlosser, M., Sparby, T., Vörös, S., Jones, R., & Marchant, N. L. (2019). Unpleasant meditation-related experiences in regular meditators: Prevalence, predictors, and conceptual considerations. *PLoS One*, 14(5), e0216643. https://doi.org/10.1371/journal.pone.0216643.
- Sethi, S., & Bhargava, S. C. (2003). Relationship of meditation and psychosis: Case studies. Australian and New Zealand Journal of Psychiatry, 37(3), 382.
- Settar, S. (1990). Pursuing death: Philosophy and practice of voluntary termination of life. Dharwad: Karnatak University, Institute of Indian Art History.
- Shan, H. H. (2000). Culture-bound psychiatric disorders associated with qigong practice in China. Hong Kong Journal of Psychiatry, 10(3), 12–14
- Shapiro, D. H., Jr. (1992). Adverse effects of meditation: A preliminary investigation of long-term meditators. *International Journal of Psychosomatics*, 39(1–4), 62–67.
- Sherrill, H. N., Sherrill, J., & Cáceda, R. (2017). Psychotic mania induced by diffuse meditation. *Psychiatry Research*, 258, 604. https://doi. org/10.1016/j.psychres.2016.12.035.

- Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014). Do mindfulness-based therapies have a role in the treatment of psychosis? *The Australian and New Zealand Journal of Psychiatry*, 48(2), 124–127. https://doi.org/10.1177/0004867413512688.
- Sircar, D. C. (1971). Religious suicide. In D. C. Sircar (Ed.), Studies in the religious life of ancient and medieval India (pp. 206–220). Delhi: Motilal Banarsidass.
- Skoog, K. (2003). The morality of sallekhanā, the Jaina practice of fasting to death. In O. Quarnstrom (Ed.), Jainism and early Buddhism, essays in honor of Padmanabh S. Jaini (pp. 293–304). Fremont: Asian Humanities Press.
- Tatia, N. (1968). On samlekhanā or suspension of aliment. In A. N. Upadhye et al. (Eds.), *Sri Mahavir Jaina Vidyalaya golden jubilee volume* (pp. 139–142). Bombay: Sri Mahavira Jaina Vidyalaya Prakasana.
- Thakur, U. (1963). *The history of suicide in India, an introduction*. New Delhi: Munshiram Manoharlal.
- Treleaven, D. A. (2018). Trauma-sensitive mindfulness, practices for safe and transformative healing. New York: W.W. Norton & Company.
- Tripāṭhī, C. (1962). Fünfundzwanzig sūtras des Nidānasaṃyukta. Berlin: Akademie Verlag.
- Tukol, T. K. (1976). Sallekhanā is not suicide. Ahmedabad: L.D. Institute of Indology.
- VanderKooi, L. (1997). Buddhist teachers' experience with extreme mental states in western meditators. The Journal of Transpersonal Psychology, 29(1), 31–46.
- Vieten, C., Wahbeh, H., Cahn, B. R., MacLean, K., Estrada, M., Mills, P., Murphy, M., Shapiro, S., Radin, D., Josipovic, Z., Presti, D. E., Sapiro, M., Bays, J. C., Russell, P., Vago, D., Travis, F., Walsh, R., & Delorme, A. (2018). Future directions in meditation research: Recommendations for expanding the field of contemplative science. *PLoS One*, 13(11), e0205740. https://doi.org/10.1371/journal.pone. 0205740.
- Vörös, S. (2016). Sitting with the demons—Mindfulness, suffering, and existential transformation. *Asian Studies*, 4(2), 59–83. https://doi. org/10.4312/as.2016.4.2.59-83.
- Walshe, R., & Roche, L. (1979). Precipitation of acute psychotic episodes by intensive meditation individuals with a history of schizophrenia. American Journal of Psychiatry, 136, 1085–1086.
- Wang, Y. Y., Li, X. H., Zheng, W., Xu, Z. Y., Ng, C. H., Ungvari, G. S., Yuan, Z., & Xiang, Y. T. (2018). Mindfulness-based interventions for major depressive disorder: A comprehensive meta-analysis of randomized controlled trials. *Journal of Affective Disorder*, 229, 429–436. https://doi.org/10.1016/j.jad.2017.12.093.
- Williams, J. M. G., Crane, C., Barnhofer, T., Brennan, K., Duggan, D. S., Fennell, M. J. V., Hackmann, A., Krusche, A., Muse, K., Von Rohr, I. R., Shah, D., Crane, R. S., Eames, C., Jones, M., Radford, S., Silverton, S., Yongzhong, S., Weatherley-Jones, E., Whitaker, C. J., Russel, D., & Russel, 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.
- Wong, S. Y. S., Chan, J. Y. C., Zhang, D., Lee, E. K. P., & Tsoi, K. K. F. (2018). The safety of mindfulness-based interventions: A systematic review of randomized controlled trials. *Mindfulness*, 9, 1344–1357. https://doi.org/10.1007/s12671-018-0897-0.
- Yorston, G. A. (2010). Mania precipitated by meditation: A case report and literature review. *Mental Health, Religion and Culture, 4*(2), 209–213. https://doi.org/10.1080/713685624.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

