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# MINDFULNESS AS COMPLEMENTARY MEDICINE INTERVENTION

*A phenomenological enquiry on chronic patients' worldviews*

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## Declaration of own work

I, Stefano Poletti, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated and referenced in the thesis.

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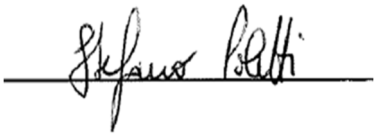

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## Synopsis

According to the increasing evidence on chronic patients' requirements and the growing emergency of global health welfare, in the last decades Mindfulness-Based Interventions meet both clinical and experimental interest as Complementary Medicine Intervention across various health disciplines and institutions, particularly in mental health. Different hypotheses on the concerned mediating-moderating variables have led to multifactorial models, mainly in the bio-medical and psychological-psychotherapeutic frameworks. Despite the rich theme of spiritual identity in both psychology and sociology, there is a lack of qualitative research addressed to these programs and aimed at exploring the coping strategies based on the spiritual qualities and needs of the person, through a phenomenological approach. Despite its secular mandate, considering the ethical commitment of Western Buddhist teachers and of Buddhist-inspired mindfulness trainers, it is arguable that the extensiveness of the program goes with a certain integration of Buddhist value systems, the associated soteriology and underpinning worldviews. The way these meaning and value systems are mediated by the protocols and how the practices are integrated within Christian populations still remain unclear. How the emergence of new spiritual attitudes are involved in the lived suffering of chronic patients, and how the evidence-based mindfulness therapeutic efficacy is mediated, paves the way to significant questions. Therefore, it becomes relevant to understand the meanings and the needs involved in the self-transformative process of mindfulness. The trainer's function is determinant in developing this healthcare practice, which is supposed to represent a reliable benefit for the patients.

Through a participant-phenomenological approach, the current study investigates the relationship between two different clinical conditions along with mindfulness-meditation in both clinical and non-clinical contexts. Interviewed participants belong to the sequent profiles:

I. Two severe chronic diseases: epilepsy and advanced cancer. Patients were attending both traditional therapies and the Mindfulness-Based Stress Reduction complementary treatment;
II. Three meditative conditions: novices recently introduced to mindfulness meditation, professional mindfulness trainers and advanced expert meditators.

The analysis is based on the themes emerged though some pilot interviews. Their purpose was to scrutinize the relationship between mindfulness and the following areas:

I. Reception of the hospital proposal: context, meetings, group connection and trainer guidance;
II. Autobiographical-self: disruptions, reconstruction and reintegration in narrative identity;
III. Transition in worldviews: changes in belief-systems throughout mindful awareness;
IV. Social identity and ethical perspectives: changes in attitudes through meditation;
V. Embodiment: body perception, body awareness and body ownership.

The presented study evaluates the effect of Buddhist spirituality with respect to resilience and coping mechanisms (Hill & Pargament, 2003; Elsass, Phuntsok 2009; Brown, 1987; Matthieu, 2007), addressing the ongoing application of mindfulness as a decontextualized adaptation of Buddhist teachings. Therefore, healthcare mindfulness applications are examined in their psychological, cultural and theoretical assumptions, in order to keep a critical and, if possible, constructive standpoint on mindfulness. A critical look on MBIs should embrace health-system institutions in connection with each concerned psycho-socio-cultural aspect. To this aim, individual coping strategies as relief from physical pain, as well as from psychological, moral or existential suffering are considered, calling into question each rooted cultural assumption and worldview.

The problem of how mindfulness as a minimal ingredient could function as a neutral technique independent of its origins is thus explored and discussed. The

matter is to understand if and how mindfulness is adapting, if not responding to some of the aforementioned cultural assumptions, fitting individualism and its performance-oriented framework. This work could contribute to answer these questions respect to the hospital environment as determinant factor in shaping the mindfulness application. In order to face this limitations, healthy mindfulness novices have been interviewed in order to be compared to cancer and epileptic patients. Recent phenomenological interview methods have been developed in order to support the contemplative lived experience with data, accessing its meaning and the associated qualitative dimensions (Petitmengin et al 2017). Adopting a phenomenological methodology, participants have been asked to explore how they perceived the influence of mindfulness meditation in their worldview along with their conception of life. Considering this objective, interviewees were invited to talk about their autobiography describing the more significant turning points in their lifespan. These critical transitions were considered as relevant information about changes in worldviews, often related with past or present physical, psychological or existential hardships.

To guide the research process, semi-structured in-depth interviews were conducted with:

- 10 oncologic patients following the MBSR program in early palliative care;
- 7 epileptic patients following an MBSR adapted program;
- 10 mindfulness trainers engaged in the conduction of the program within clinical environments;
- 15 expert practitioners experiencing pain-elicitation in experimental conditions;
- 4 Buddhist teachers.

All personal inferences on related-mindfulness qualities are investigated, following the narrative process of the interviewees, and trying to analyze what sense it make for them, either as engaged trainers or as needy patients. Deepening the inner experience of involved actors, the study scrutinizes the integration of Buddhist practices along with complementary medicine programs, of which the MBSR

represents the golden “ideal type”. Through a phenomenological-hermeneutic perspective, the research explores the narrative articulation of the supposed spiritual coping.

The results of this thesis prompt a whole spectrum of coping strategies in facing both psychological suffering and physical pain, as life reorganization, present-centered nonreactivity, embodied recentering, spiritual reconnection, social support and reintegration. These strategies raise questions on some common underlying mechanisms. Epileptic patients report a relevant change of perspective throughout the dialogical exchanges, together with a compassionate attitude, while cancer patients show a shift in worldviews centered upon existential gratitude and life valorization. Both conditions find time suspension during meditative practices as relevant in building resilience and responsibility while facing hardships, allowing self-legitimation and open acceptance.

Trainer’s charismatic personality, in all its complexity, emerges as a key factor in shaping the program meaning, in connection with each participant singularity. In particular, mindfulness trainers, meditation experts and chronic patients, share a similar autobiographical structure, characterized by a core disruption. The existential bewilderment which goes with these past turning points, in patients corresponds with the illness onset, in advanced meditation practitioners with loss of sense often interconnected with various shocking events or intuitions.

Finally, mindfulness shows to enhance patients’ trust in medical systems and treatments, cutting the distance between the attending physicians who took part in the programs, yet without conveying particular spiritual or religious worldviews. In fact, present-centered mindfulness practice allows an open reconnection with secular, spiritual or religious personal beliefs and values.

Limited to the Italian and French milieu, findings show how mindfulness in novices, still claiming a formal derivation from Buddhism, is producing a new phenomenon with uncertain tendencies, independent from Buddhist ethics, philosophy and soteriology. Along with the current research, interviewees’ narrative articulations are often centered upon a search for meaning, with an underlying theme:

the general search for a clearer understanding of existence or connection to the spiritual. That increasing clarity and reconnection with such an intimate and roughly defined theme, help in the experience of daily living. In cancer and epileptic patients, the lack of meaning is characterized by the biographical disruption of the disease and by the attempt to sew again the inner personality and to reconnect with a past integrity and spirituality.

Finally, a thematic analysis of interviews transcripts highlighted commonalities and differences among participants' perceptions of how mindfulness meditation influence was experienced within their worldviews.

**Keywords:** Mindfulness, Worldviews, Complementary Medicine, Chronic Pain, Phenomenology

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oil on canvas by Riccardo Cavallini, 30x40, 2017

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## Introduction

*"is that mindfulness as a concept has become so vague and elastic that it serves almost as a cipher into which one can read virtually anything we want"*
Venerable Bhikkhu Bodhi (2011)

*Clearly, extracting a spiritual and meditative discipline from its social and historical contexts in which it originates has radically changed the meaning, function, and fruition of mindfulness practices in the West*
(Purser, Handbook of Mindfulness, 2015)

"*Each citizen has the duty to pursue, in accordance with her possibilities and her choice, an activity or function aimed at enhancing the material or spiritual progress social welfare"*
(art 4 of the Italian Constitution)

Meditation is a remote phenomenon, recursive across many ancient cultures and traditions. Mindfulness grounds itself in ancient Eastern philosophy and spirituality, and is creating an independent field in Western approaches to healthcare, promising enhanced physical and mental wellbeing (Singh 2016). Besides, nowadays, mindfulness is increasingly developing in connection with healthcare research.

This work represents a critical, empirical inquiry into the meaning of mindfulness meditation in contemporary Western health-system. The mindfulness phenomenon testifies a new laic paradigm on religious attitudes after the New Age movements, secularizing the Buddhist legacy and calling for insights into the ethical, psychological and theoretical meaning of the contemporary contemplative experience. While Western spirituality increasingly embraces multiple individual theoretical beliefs, common worldviews are unconstrained by religious reference frames, disconnecting the individual beliefs from the religious traditions, reshaping the collective narrative framework. Once, religiosity was traditionally bound to a socially-shared, doctrinaire system, nowadays it is increasingly becoming a private, self-referential fact, urging questions regarding the meaning of contemporary spiritual experience and the values which frame it. Furthermore, its subjective phenomenology is swiftly enlarging the common belief-systems, mixing inter-trans-religious syncretism and spiritual pluralisms.

The globalized Western scenario goes along with a greater need to embrace spiritual and religious diversities (Oman 2016). For example, the expansion of spiritual-

religious beliefs in the American milieu has been scrutinized by Wuthnow (2005) in his book America and the challenges of religious diversity. Muslims, Hindus, Buddhists, and adherents of other non-Western religions are significantly represented in Western society, even if its background is considered principally Christian. The new heterogeneity suffers a lack of cultural integration in addressing religious pluralism. Wuthnow's work represents the first systematic assessment in Western challenges of religious and cultural diversity. Qualitative results showed how most Americans recognize the right of diverse groups to worship freely, while just few made the effort to learn about religions other than their own or to engage in constructive interreligious dialogue. Wuthnow stresses religious diversity strikes us at the very core of our personal and national theologies. Only by understanding this important dimension of our culture we will be able to move towards a more reflective approach to religious pluralism.

Materialistic modern culture prevents adherents to religious or spiritual practices, perhaps generating a common ground (Oman, Singh 2016) which is quite unfertile in facing intractable life hardships associated with psychological suffering, moral struggle, existential bewilderment, chronic pain and end of life's issues. It has been shown that in front of hardships, people often reconsider religious diversity in order to sustain each other in adhering to spiritual rather than material values, or preserving regular worship (see Oman, 2016). A major misconception represents spirituality and religion as essentially the same thing. As a prior clarification, religion can be considered as a shared belief system which organizes a set of precise conjunctions and interconnections between a supernatural realm of existence and a phenomenal, natural realm of existence.

Followers are supposed to adhere to each feature of these sets of beliefs, adopting them as an interpretation of reality and of their life. Even when these beliefs, which actually are supposed to bond two apparently divided realities, assume a dogmatic character for the follower, they remain unquestioned. Another distinction characterizes religious systems: the one between followers and priests, where the latter assume a particular intermediary status.

On the other hand, spirituality can be considered as an intimate search for a transcendental or transcendent dimension within one's experience. Instead of adjusting or conforming to a certain doctrine, spirituality enhances a first-person, experiential approach to life itself as a sacred mystery. While the religion attitude demands the integration of particular beliefs by faith in the doctrine, spirituality stands as experimentally open to finding a sacred truth. Many religions do not encourage personal experience of the transcendent, confining their teachings to ritualistic issues and to proper moral behaviors. Rarely are religion and independent thought compatible, weakening individuals' development of intrinsic cognitive, psychological and affective resources and strengths. Being revealed by God or by His emissaries, religion stands as a power in the hand of its Fathers, building a cognitive system based on authority, and seldom sustained by an open debate and inquiry.

Considering different spiritual and cultural coping strategies can offer new directions towards an integrative, religious pluralism. Spiritual and religious differences urge a more radical inclusivity, in accordance with the Vedic statement: "*Truth is one, sages call it by many names*" (Rig-Veda, in Oman, Singh 2016). The authors find a similar disclosure quoting the Bhagavad Gītā: "*As people approach me, so I receive them. All paths lead to me*". Independently from the "truth" and from the "me", expanding the understanding of theism is prior to any integrative model. Zimmer (1953) and Tillich (1952) coined the world "transtheism" referring to a system of thought or religious philosophy beyond theism or atheism. The term has also been more recently applied to Buddhism (Rigopoulos 1993, p. 372; Houlden 2005, p. 390), Advaita Vedanta (Katz 2000, p. 177 ; Roodurmun, Ram 2002, p. 172) and the Bhakti movement (Karel 1993, p. 153). The term "transpolytheistic" has been proposed because Western monotheism does not "transcend" polytheism, but abolishes it (Katz 1981, p. 446). While according to Katz's criticism, "transtheism" is an artifact produced by comparative religion, Tillich uses transtheistic (Tillich 1952) as a Stoicist, moral attitude able to defeat existential and death anxieties.

The interplay of morality and religion still leaves many questions unsolved. It is not clear if, and how, one can exist without the other (McKay, Whitehouse 2015). A

series of conceptual constraints limit both scientific and philosophical inquiry. While approaching individual cognition, scientific investigation fails to decompose morality and religion into theoretically basic elements, neglecting many cultural factors and reaching universalist explanations as "prosocial behavior". For example, McKay and Whitehouse (2015) suggest to fraction the "religion" and "morality" categories into a bio-psychological set of traits that are able to ground individual cognition in the cultural net.

At the same time, the field of Contemplative Studies is promising a scientific link of the individual belief systems with underpinning cultural frameworks (Kirmayer 2015), as religion and spirituality. Contemplative practices seem to suitably fill the gap, being present in almost each culture, under different forms, namely practices, ethics and symbols. As a matter of fact, contemplative practices are defined by the achievement of contemplative states, which embody a religious shared representation, with an inner, spiritual vision of the world.

In the last decades Cognitive Sciences achieved a pivotal role in the analysis and definition of contemplative experiences, giving rise to Contemplative Sciences and opening questions on the nature of contemplative states, creating a circular, interdependent relation self-awareness and the construction of reality. The enquiry on meditative states have been studied thoroughly, involving the variety of existing meditation techniques, evaluating their application in clinical samples and exploring many possible underlying mechanisms.

The field of Contemplative Studies is becoming an interdisciplinary, cutting edge, multicultural discipline that focuses on the possible uses of contemplative states and mental training practices, principally to the extent of healthiness. The application of mindfulness, as an essential distillation of contemplative practices and wisdom traditions, has been integrated into many clinical approaches, becoming a standard practice in behavioral medicine and psychological treatments. Nevertheless, in the clinical practice, the usual reaction to the complexity of patients' deepest needs is their adaptation to the dominant cultural milieu, rather than the contrary: a patient-centered valorization of spiritual beliefs. Many studies show how these beliefs can be

regarded as personal, often intimate and therefore implicit, coping resources (Pargament, Raiya 2007). Though, when introduced, mindfulness programs suffer from a lack of comprehensiveness of contemplative history, theory and practice. This often limits the individual critical, empirical, evaluation and integration of mindfulness, thus limiting individual spirituality as a potential resource.

As shown in many studies (Koenig 2012; Büssing and Koenig 2010) both religious and spiritual backgrounds represent not only a culturally-constructed belief-system, but an existential need of people experiencing hardships such as advanced cancer. Contemplative methods are prone to be cursory and disconnected from their traditional environment, therefore patients often report dissatisfaction about the possibility to deepen these guided practices. This dissatisfaction is often related to their possibility to develop a disciplined practice, and to have a critical understanding of their origin, precise meaning and wider, existential sense. In order to explore the nature of the most beneficial elements for mindfulness healthiness a growing number of initiatives, such as the Brown University Contemplative Studies Initiative, address contemplative practices and contemplative states within their original contexts. At the same time, they consider the recent clinical medical applications and their scientific outcome, involving clinical conditions as a crucial challenge in taking possible advantages from Buddhism-inspired teachings. To this day, the promising connection between spirituality and health still suffers from a lack of definition, and thus, integration, of spiritual resources. Albeit many empirical studies have identified significant links between religion, spirituality and health, the nature of these associations is still veiled. Descriptive global indices on the frequency and duration of a spiritual or religious practice do not take account of the interaction with healthiness and wellbeing (Hill & Pargament, 2003).

Addressing this lack of clarity, many collaborations between Buddhist monks and Western psychologists are yielding new directions in psychological research (Davidson & Harrington, 2001; Houshmand et al. 2005; Walsh & Shapiro, 2006). A relevant contribution comes from a leading international institution engaged in bridging Buddhism with Western Sciences and spirituality. The Mind & Life Institute's mission

is “to alleviate suffering and promote humane and societal flourishing by integrating science with contemplative practice and wisdom traditions”. In the 80s, the 14th Dalai Lama, neuroscientist Varela and businessman Engle joined the extent of improving scientific ethics and progress in global well-being, giving way in 1987 to the Institute. In 2008 M&L Europe was established in order to develop a fully dedicated, trans-disciplinary community in the European scenario.

Communities including the fields of neuroscience, cognitive science, anthropology, philosophy, and applied research in health care are thus interconnected. That trans-disciplinary perspective involves contemplative practitioners representing multiple wisdom traditions. From the overarching neuroscientific discoveries of the IX century, the ongoing general need of a revolution in the framing paradigm of consciousness is concurring with the ongoing integration of the Eastern meditative traditions. A growing, refined investigation of contemplative and introspective methods is addressed in order to deepen the understanding of consciousness and subjectivity. On the one hand, science is the contemporary dominant framework in the investigation of reality, and it is widely believed to be promising in the improvement of global wellbeing. On the other hand, religious fundamentalism and sociocultural divergences has been threatening and damaging humanity for a long time, producing a huge amount of suffering. Therefore, the urging question for a comprehensive, inclusive cultural framework is a question of recognized priority (Kirmayer 2015). But these dimensions are weakly addressed by the scientific method, and an increasing number of scientists find that a science-based empirical observation, technologic methods, and objective analysis, “does not provide enough insights to contribute to human flourishing”. The Mind & Life Institute arises with this need to overcome scientific limits, standing within the scientific domain. But how will a revolutionary paradigm-shift happen within the same methodological paradigm? (Kuhn 1996).

The contemplative scientific community is based on the measurable effects of meditation on the human brain, health and wellbeing, but also on the development of positive qualities such as empathy, kindness and compassion. The focus given to ethical qualities derived from contemplative practice is supposed to nestle the

scientific study of mind in the first-person exploration, developing states able to make science more reflective, humane and able to promote a global societal flourishing.

Interdisciplinary dialogues between scientists, contemplative scholars and researchers are promising in encouraging connections, exchanges and advances in the field of Cognitive Sciences. According to the Buddhist tradition, the impact of these dialogues on professionals' lives depends on their personal engagement with meditation and with the awareness of its existential implications. But is this predominant descriptive, speculative attitude effective in producing both an individual and collective shift in less conflicting and "indivi-dualistic" worldviews?

In order to address this transformation, meditation has to be seriously approached, examined and scrutinized, starting from its very first person practice. Critical health conditions offer a chance to that transformation, since to deal with pain and suffering puts our very identity at stake, together with our beliefs and, therefore, with our limits in understanding, accepting and integrating reality for "what it is". Jon Kabat-Zinn introduced and tested the Mindfulness-Based Stress Reduction program (MBSR) at the University of Massachusetts Medical Center (Kabat-Zinn 1990), paving the way to an incredible number of clinical and non-clinical empirical applications (Kabat-Zinn 2003; 2005; Segal, Williams & Teasdale, 2002; Sauer et al., 2013).

In medicine, Mindfulness-based Interventions are used in the treatment of various psychophysical disorders as chronic pain, hypertension, insomnia, depression, and anxiety disorders (Chiesa and Malinowski 2011; Grossman et al. 2004; Sedlmeier et al. 2012). Since that time, mindfulness praise has increasingly grown leading to it being called a "movement", also depicted as a substantial "revolution" (Time magazine February n.3/2014) going on across the United States (Pickert 2014), where its media hype has, until recently, been uncritically celebratory and positive (Purser et al. 2016).

Conversely, skeptics consider research in meditation as pre-scientific and (Giommi, Barendregt 2014), lacking a consistent examination of contemplative insightfulness and meaning for long-term practitioners. Progressively, qualitative methods are recognized as a privileged way to test theories in meditation research, due to the unsuitability of conventional measures. In particular, designs that take into

account the meditators' personalities, their personal biographies and the peculiarity of the adopted techniques, are needed (Sedlmeier et al. 2016).

Critics about dangers of the so-called "mystification of mindfulness" denounce the inappropriate extraction of a "traditional baggage" from its socio-cultural framework, degenerating it into a version compatible with the secular Western *Weltanschauung* (Wilson 2014). Both enthusiastic and skeptical points of views in mindfulness meditation are remarkably expanding, without a serious research of the lived experience of mindfulness and its meaning for those who practice it. While its superficial, fashionable tendencies are abundantly discussed (Purser et al. 2016), its integration in the medical systems is far from being fully acknowledged, in particular in the European milieu. The progresses in mindfulness-based Complementary Medicine approaches are proceeding slowly. It has been shown how chronic conditions are associated with relevant existential and spiritual needs (Koenig 2012; Knox 2015a). Many patients who could benefit from it are completely unaware of its existence, often facing hardships in solitude and without a consistent spiritual support.

With regard to that golden, discussed, standard of mindfulness, this work explores its integration among people experiencing cancer and epilepsy. While many mindfulness scientific studies are addressing the cancer condition, few have been applied it with epileptic patients. Approaching these needs is relevant in helping people experiencing such hardships and with this evidence, is possible to further discuss spirituality within the Western cultural milieu (Kirmayer 2015).

Religiously accommodative and oriented treatments are increasingly introduced in the clinical panorama too. Considerable theoretical, clinical, and empirical work emerged to support religiously-oriented therapeutic interventions. But rather than including individual religion and spirituality, many third-wave traditions have engaged in spiritual themes inspired from Eastern religious traditions (Hathaway, Tan 2009).
Spirituality and religiosity have often been considered as relevant coping factors, in particular for chronic cancer conditions (Büssing et al. 2008; Büssing et al. 2009; Hebert et al. 2009; Nairn, Merluzzi 2003; Phelps et al. 2009; Ross et al. 2009; Thune-Boyle et al. 2006) and, less, for epilepsy (Giovagnoli 2006). In connection with self-

confidence and resilience, spiritual or religious coping can be crucial in determining both short and long term outcomes (Pargament, Koenig, Perez 2000; Pargament, Raya 2007; Thiago et al. 2015). Chronic conditions challenge social identity consistency, revealing its vulnerability and strength (Gash 2017). Each radical challenge can potentially unveil the deep, hidden resources of personal resilience, often connected with the spiritual or religious belief system (Abu-Raiya et al. 2015). This is particularly true in chronic conditions, where the medical approach cannot frame and treat the problem within the biomedical paradigm (Good 1994; Good, Delvecchio-Good 1981).

The application of religious or spiritual oriented programs in Western health systems urges questions on their congruency with the more represented Christian background. Adopting such treatments in that context involves conceptual, if not metaphysical, challenges. A recent study shows how of people with chronic pain diseases, 20% hadn't a partner to talk about spiritual-religious needs, 23% desire to talk with a chaplain about their spiritual needs, while 37% want to talk with their medical doctor about these needs (Büssing et al 2009). Büssing and Koenig (2010), on the base of these and others reliable data, suggest to reconsider health care professionals pivotal role and functions; for example, the authors claim the desirability of a more harmonious interplay with pastoral services, namely, chaplains.

Moreover, few studies have been conducted on the experience associated with meditative practices, limiting the possibilities for contemplative sciences to study the results of contemplation at the different stages of practice in different clinical conditions. Both clinical and experimental research reports have recurrently overstated the beneficial efficacy of mindfulness-based interventions, overshadowing some methodological weaknesses (Goyal et al. 2014). Some reports on functional and cerebral changes have in some way determined some kind of scientific legitimacy for contemplative studies as well as for the "science of mindfulness". They are founded on psychology and neuroscience, which have known a new media exaltation to the glory of the efficacy of mindfulness. Certainly, Mindfulness is a fashionable object of interest on the internet, in journals, in books and in magazines, supplying the demand and the curiosity for that particular Eastern practice. The American Psychological Association

launched two journals, Psychology of Religion and Spirituality in 2010 and Spirituality in Clinical Practice in 2014, together with many books, as the two-volume APA Handbook of Psychology, Religion, and Spirituality (Pargament, 2013). As stated by Rosenberg (in Kasser & Kanner 2004) "*What and how much we consume stems more from unconscious choices, than from mindful deliberation*", and paradoxically, mindfulness could serve as an antidote to consumers' incertitude (Bauman 2000; Davies 2015).

In 2007, the National Institute of Health (NIH) estimated that $4 billion were spent on meditation (Barnes et al. 2008): secular mindfulness has become part of a self-help business, offering a key to existential *angst* (Heidegger 2001) of mainly the white, upper-middle classes (Drougge 2016). But still, how this kind of meditation training helps individuals in facing hardships, is it prior to the wider social paradigm? Despite this prevalence of Mindfulness-based Interventions, a growing number of studies consider some associated virtues, as, for example, compassion (e.g., Pace et al., 2009; Desbordes et al., 2012), equanimity (e.g., Desbordes et al., 2014), and acceptance (Voskuijl, Ring 2014). While a better cognition of non-Buddhist contemplative practices is recommended (Dahl et al., 2015), a recent interest for the psychosocial elaboration and development of spiritual identity is growing (Smith et al. 2003; Kiesling et al. 2006; Pargament et al. 2001; Pargament, 2007; Weber & Pargament, 2014).

The Psychology of Religion is framing the psychological dimension of religiosity as a personal attitude towards a transcendent principle as postulated by the symbolic-religious system existing in an eventual cultural context (Golasmici, 2011). Thus, spirituality itself, even at a personal level, becomes understandable only as a phenomenon that takes root into precise historical, socio-cultural and anthropological contexts (Aletti, 2003) which furnishes the language and cultural background to define the relationship with the sacred (Terrien, 1982). Still, it is interesting to note that many models neglect these aspects, and attribute spirituality and religiosity to the psychological dimension *per se* (MacDonald, 2000; Piedmont, 1999; Saucier & Skrzypinska, 2006) opening the way to an universalism which transforms the search

for meaning into a predetermined design (e.g. Zinnbauer & Pargament, 2005). This universalization risks reducing spirituality to its psychological dimension, simplifying the complexity of a phenomenon which emerges within the encounter of the subject and her socio-cultural environment. If we look at mindfulness as a human capacity, free from any historical or cultural constraint, it brings us to an "innatist" philosophy, in perfect concordance with individualistic, consumerist values (Purser et al. 2016). Rather than challenging our deeply rooted Western cultural values and critical assumptions developing a framework, the majority of clinical mindfulness training programs are informed by biomedical models of stress and well-being (Kirmayer 2015). In fact, mindfulness medicalization has shaped programs which frame stress as an individual pathology, shifting attention from cultural context.

The dominant biomedical paradigm fosters an individualistic approach to the disease, addressing personal well-being as an individual responsibility, out of systemic variables. This individualistic worldview has "overstated internal pathology while understating environmental stressors" (Goddard 2014, in Purser et al. 2016). Considering mindfulness as an autonomous "mental fitness", reinforces reductionist conceptions of psychological distress, maintaining institutional structures that contribute to social suffering. Moreover, limiting spirituality to its psychological function in the personal economy does not account for spirituality in its existential and socio-cultural meaning, but for the way individuals "use" it to face suffering and psychological difficulties. This assumption may pave the way to interventions based on an aprioristic definition of the therapeutic effectiveness of the religious/spiritual stimulus', indicating an ideological conception of spirituality as a central aspect of the personal maturation (Vergote, 1997). Such an assumption implies philosophical and metaphysical consequences which makes social and clinical integration of spiritual practices prone to value-positions, eroding the principle of technical neutrality (Bergin, 1991) and urging for a consensual definition of therapeutic objectives. Secular mindfulness underestimates ethics, conceiving it as a universal property developed through that practice again supporting an individualist view, unrelated with cultural contexts (Kirmayer 2015).

The article "Beyond McMindfulness" (Huffington Post) calls into question the efficacy, ethics, and narrow interests of corporate mindfulness programs (Purser and Loy 2013), starting the "mindfulness backlash" (North 2014; Roca 2014). At the same time, Buddhist scholars and teachers recently discuss and contrast the gold standard for secular mindfulness-based interventions, namely its Kabat-Zinn's definition: "*paying attention in a particular way: on purpose, in the present moment, and non-judgmentally.*" Comparing it to the different Buddhist conceptualizations of mindfulness, it has been regarded as a reductive assertion, naïve in its attempt to divide meditation from Buddhism. Being indissolubly inspired and bonded to the Buddhist tradition since the very principle, MBSR programs cannot be defined as "Buddhist meditation without the Buddhism" since it is co-extensive, if not identical, with the teachings of the Buddha (Kabat-Zinn 2011).

A growing number of questions among contemplative scientists discuss the overstated scientific claim on mindfulness effectiveness (Heuman 2014; Purser and Cooper 2014). A recent reliable meta-analysis on randomized controlled trials obtained 18,753 citations of which 47 matched their inclusion criteria. The results of mindfulness treatments in various situations were moderately effective, comparable with other active therapies, such as drugs and exercises (Goyal et al. 2014). Some researchers state that the public enthusiasm is going beyond scientific evidence (Heuman 2014), emphasizing proportions and circularly supporting beliefs without any factual evidence. Moreover, there is evidence that mindfulness studies spin their positive results, while minimizing negative exits (Coronado-Montoya et al. 2016).

The Western Buddhist community (i.e. scholars, teachers, and practitioners) are increasingly worried about the long-term implications of mindfulness and the secularization of the Buddhist path. Some teachers share the belief that the West is moving too quickly to Buddhist practices, trivializing the adapted teachings within the Western consumerist model. Health professionals engaged in promoting mindfulness advocate that such rapid secularization is necessary in order to make meditation more widely available and relevant to our society. There is no doubt that spiritual and meditative disciplines, out of their socio-anthropological and historical original

context, are radically altered in their meaning, function, and fruition. Buddhist teachings adjusting to the West fail to fit the pluralistic nature of Western society, lacking in preserving its authenticity, integrity, and canonical authority, producing a defensive reaction which limits its unavoidable migration and transformation. "East" and "West" are relative categories, which have always found in their middle a fruitful meeting and cultural exchange. As it has always happened throughout history, Buddhism is mixing with foreign dominant values, making the nature of this exchange and the ongoing relationship between the "two" uncertain, and the auspicated common benefit undefined (Kirmayer 2015). Therefore, should mindfulness programs be employed as a technique to accommodate Western, positivist individualisms?

Mindfulness universalization (Wallis 2011; Rosenberg 2007) goes with the neglect of Buddhist ethics (Hickey 2010) and runs the risk of distorting its original practice and therefore of exposing practitioners to inadvertent harm (Hutchinson, Dobkin 2009). As a matter of fact, it is worth remembering Kabat-Zinn's statement: "*Mindfulness is not a technology. It is a way of being, a way of seeing, a way of knowing".* The open question is how to pursue a self-transcendent ethics (Vago & Silbersweig, 2012), without overlooking the fundamental relational dimension of mindfulness and life itself (Gallagher, 2008; Thompson, 2016).

But, at the same time, far from being a mere open-ended practice, meditation discipline follows precise instructions which often include articulated structures and maps of the mind that suggest a model for experiences meaning (Kirmayer 2015). Meditative technologies can be conceived as methods of scrutinizing subjective identity and relational personhood coherent with Foucault's sense. Meditative states may embody not only a physiological phenomenology associated with particular trainings, but the entire cultural dimension which produced them through body and discourse practices (Fuchs 2017), within peculiar metaphysical narrations. Meditative practices implies models that frame their phenomenology, which is hermeneutic from its very beginning; far from being neutral and non-evaluative. A background interpretive framework shapes their ethical and theoretical meaning. Our cultural entanglement denies each attempt of pure abstraction: we need to be encultured in

both discursive and bodily practices, in order to give significance to the complexity of thoughts and feelings (Kirmayer 2015). On the one hand, Mindfulness practice has been assimilated as something concerned with the first-person perspective together with its possible transformation, through a self-help rhetoric that have characterized its benefits. On the other hand, Buddhism aims at states of consciousness intended to lead to deep, irreversible insights into oneself, nature, and reality inconsistencies, dissolving the permanent, separate sense of self as a real identity. The adaptation to a Western historical context could not be problematic per se, namely for its uncritical use of Buddhist concepts (Purser et al. 2016), but in the constraints it plays in confronting the practitioner with fundamental, existential questions (Vörös 2016). Talking about the old-fashioned "dark night of the soul" seems increasingly a sufficient antidote to unpleasant, even terrifying phenomena (Lindahl et al. 2017).

Looking at the ways in which the link between Western mindfulness and Buddhism are intertwining, it would be desirable to develop a critical framework able to interrogate and challenge our deeply rooted cultural values and assumptions. I hope that this research will enrich the emerging field of mindfulness studies, with the confidence that secular mindfulness meditation can be integrated and reoriented in order to enhance common growth, particularly for people experiencing hardships. I also believe that the following questions are pivotal both for mindfulness practice and for its study: *"*what could be more influential than the way an individual, a family, a community, a nation, or an entire culture conceptualizes reality? Is there anything more powerful than the shape and content of human consciousness and its primary interpretation of the nature of things? When it comes to the deepest questions about human life and existence, does anything surpass the final implications of the answers supplied by one's essential *Weltanschauung*?*"* (Naugle 2002, p. 345).

## Researcher positioning

As an involved social actor, the researcher is personally engaged in contemplative practices, scrutinizing their ethical implications and their critical integration in contemporary Western culture. Actively participating to their application in scholars, health professionals and medical patients, accordingly with the increased interest in literature and in the growing evidence of their healthiness, he partially believe in their usefulness in helping people experiencing hardships, as well as in preventing exhaustion in demanding working milieus. His prior connection with contemplative practices is related with their direct interrogation about life's meaning, sense and purpose, and to their intuitive rather than conceptual character.

As a participant, the researcher attempted an "interpretive autoethnography" (Denzin 2014; Jones, Adams, Ellis 2016), trying to distinguish his engagement with the programs, his resonances with participants' emotions and his interpretative activity based on previous research interests-commitments. To this aim, he applied the phenomenological reduction, trying to recognize what appeared to his mind in the most reflexive way possible to him at that moment. Stating a principal, critical point, that spontaneous attitude is connected with his own training in meditation and psychology. Concurrently, taking part in the groups he gained a first-person perspective, interviewing participants he gained a second-person dialogical perspective, and finally he gained a third-person attitude during the analysis. Naturally, during the last phase, he attempted to put a necessary distance from data approximating the "objective-observer" attitude. So, at the same time, the field of this enquiry has been "inside" and "outside" him, thus connecting these "not one, not-two" realities (Varela 1976). However, there is a structural, invariant gap between the "two", which actually was useful in discerning a solipsistic work on one's own perceptions from an effective analysis of an empirical research. He actually tried to grasp a phenomenon in its "objective" appearance *to him*. Basically, the nature of his inquiry effort has been "negative," grounded on the attempt to recognize and limit his own categories. Each content salience elicited his deeper considerations about life, driving them with theoretical and scientific background knowledge. Being the structure of

intentionality immanent to the knowledge activity, his situatedness offered everything needed to collect perceptual information, already intertwined with few interpretations. Basically, the effort has been a negative one, i.e. the attempt to do not grasp on personal categories, even if already there: but while recognizing some of them, he necessarily was blinded to others.

Throughout the entire research, this encounter between explicit and implicit or tacit knowledge, dealt with the unknown. Of course, after these three years, the researcher is not the same as he was at the beginning of his PhD, and his questions went really beyond his expectations. In the same way, it is assumable that his cognitive background as well as his emotional repertoire and reactive-feelings to the context has changed a lot. So, evaluating the "goodness" of the following interpretive findings, he is pleased to welcome the helpful "criterion of uncertainty", as proposed by Emden and Sandelowski (1999), assuming a constructivist position and openly acknowledging that claims about research findings are "tentative at best and might be impossible to show otherwise".

The researcher should probably say then, that this criterion better corresponds to a co-constructivist approach, i.e. to the idea that there is no knowledge independent from shared explicit-implicit knowledge, beliefs and worldviews. It is still possible for each one to take into critical consideration predetermined, conditioned background knowledge. Felt-meanings can shape contingent views which actually can shed some light on a phenomenon, starting from the awareness of its principle, which is grounded on the observer. At the same time, the observer is not extrinsic to the context observed, disclosing meanings in an interdependent way, and, precisely, in a co-productive creation of meaning.

Thanks to the specificity of the Social Science PhD program, the reseacher increasingly acknowledge the useful incertitude relative to qualitative research, which makes it extremely richer than predetermined data, still can mutually enrich and be enriched by them through methodological triangulations.

Following Kenneth Pike's definition (1967), the researcher have been surprised by the congruent match between the *emic* nature of this study and its *etic* interpretive

framework, or by the link that bridges my perspective of the phenomenon and by the complexity of that phenomenon, in its singularity and in the invariant character of its experience.

Looking at the co-variant, co-evolving enaction of data collection and their analysis, the researcher had to find the right words in the abstraction process of a very rich verbatim repertoire. This has been very energy consuming, since, avoiding a grounded-theory approach, the researcher's responsibility has to be taken into account while interpreting data, making it accessible for both naïf and specialized readers. Adhering to the interviewees' lexical repertoire, he tried to shape the discussion faithfully, avoiding psychological constructs overuse and misuse. In this way, he could keep the contact with the very experience of the involved social actors, describing their explicated lived-experience instead of confirming hypotheses or proposing explicative models *on* them, which actually is the real goal of this in-depth qualitative work.

In this attempt of taking participants' experiences into light, the researcher felt the great responsibility and opportunity to give dignity to each of them, making it harder to reach an overall invariant structure, since from the beginning, each subjective singularity seemed to me irreducible in its complexity. So the bridge between him and the observed phenomenon had to deal both with the overall complexity and with the multiplicity of the accounts.

Within that bridge emerges the whole disclosure of the methodological discussion, which results from the researcher's effort to avoid subjective and objective reductionism. For the researcher the former was more seductive than the latter, applying Husserlian *epoché* method. From a phenomenological perspective, in everyday life, we experience physical objects, persons, or even ideas, as simply real, or straightforwardly real. Starting with that evidence the phenomenological analysis (Armezzani 2009) explores experience "out" of the natural attitude, shifting the attention from objects to itself. But, can we suspend the natural attitude to explore the experience? The gesture of *epoché* is not so far from some contemplative practice techniques, and of philosophical investigation. Suspension, associated with letting go and attention redirection, builds up the mindfulness attitude, directing and sustaining

attention on a selected object, detecting mind wandering and distractors, disengaging attention from them and shifting attention back to that object (Depraz et al. 2000). Through this exercise, open monitoring attention allows a non-grasping attitude which deflect from mental and emotional fixations.

## Organization of the Manuscript

In order to help the reader in following the structure of this work, the thesis is partitioned in the three following parts:

**Part A:**

In PART A the background literature and the context factors in chronic diseases are framed, describing the MBSR as an integrative and complementary medicine intervention. A review of literature briefly summarizes the mindfulness-program state of art, focusing on some important research findings generated in this area.

**Part B**:

PART B reports the qualitative enquiry of the addressed samples, involving the qualitative research on Buddhist teachers and meditation expert practitioners in one side, epileptic and oncological patients involved in a MBSR program in the other side.

**Part C:**

Finally, in PART C the whole qualitative findings are connected in their structural invariants and are discussed through a constructivist, hermeneutic approach.

# PART A

## LITERATURE FRAMEWORK,

## CONTEXT AND

## RESEARCH QUESTION

**Part A** frames the background literature and the contextual factors of chronic diseases, describing MBSR as an integrative and complementary medicine intervention.

In **Chapter I** a literature review briefly summarizes the mindfulness-program state of art, focusing on some important research findings generated in this area. In particular, the chapter examines epileptic and cancer chronic conditions in their psychological dimensions and needs. Starting from the mindfulness-based approach as a complementary medicine intervention, the literature review addresses mindfulness meditation and the meaningful related research findings to date. The review concludes by combining these topic areas. Both theoretical and empirical literature relevant to the connection of mindfulness meditation approaches with theoretical and deontological criticalities are then discussed in literature.

Grounding itself in the field of Contemplative Sciences, **Chapter II** provides an overall description of the alternative paradigm started with Francisco Varela's life and philosophical, scientific works. Varela's epistemological model is approached considering key features of "a process that elevates a system from its limits". In particular, Varela's praiseworthy integration of first and third person approaches put his personal engagement in mindfulness practice at stake.

Finally, **Chapter III** presents the themes explored through the interviews and discusses them in the following order: worldviews and spiritual hypotheses, existential suffering (inclusive of physical pain, psychological struggle, and social stigma), autobiographical disruption and narrative-self. This chapter describes the qualitative methodology in both its usefulness and constraints, deepening each specific areas involved in this research.

# I

# INTEGRATIVE MEDICINE FOR CHRONIC CONDITIONS AND SPIRITUAL NEEDS

## 1.1 Contemplative Sciences and the mindfulness-based approach

Mind-body practices as complementary medicine approaches are yielding a burgeoning evidence of meditation effects on mind, brain, body, and behaviors, through clinical applications and experimental designs. In the 70s, the MBSR program began its development in order to treat chronically ill patients (Kabat-Zinn 1990; Harrington, Dunne 2015). Since then, mindfulness-based interventions have increasingly integrated into the mainstream field. As discussed in the introduction, mindfulness is addressed either as a healthy tool or as a problematic issue (Purser et al. 2016). But if we consider the lack of evidence which counterbalances the mindfulness-hype, then other methodological evaluations seem mandatory. A recent systematic review of mindfulness meditation programs (Goyal et al. 2014) shows small improvements in anxiety, depression, and pain with moderate evidence and small improvements in stress/distress and the mental health component of health-related quality of life, with low evidence when compared to nonspecific active controls.

Mindfulness training and other meditation practices seem to improve cognitive, emotional and behavioral aspects, with a regulatory function. Brain-imaging studies show how mindfulness practice correlates with emotional regulation and self-awareness. Lastly, several studies show many correlations with morphological and functional changes in the brain activity and improved immune functions. Usually, principal beneficial effects involve the learning of coping and resilience strategies which allow a better management of distress in relation to dysfunctional patterns of reaction to critical situations. In general, coping can be considered based on:

1. re-appraisal, i.e. cognitive re-adaptation of personal assumptions to new more functional and critical interpretations;

2. behavioral dysfunction, i.e. on the adaptive reduction or elimination of personal stressors;
3. readapting the affective and emotional personal reactivity to specific stressors;
4. redirecting the activity towards positive occupations which are able to enhance self-efficacy and self-confidence.

The shift of personal strategies can be viewed as a change centered upon a particular aspect, or on the whole transformation of the way to perceive, conceive and feel reality. For example, the denial or distraction facing a hardship can involve resistance to reconsider one's identity, as the situation challenges some personal nuclear constructs about a particular definition of reality (Kelly 1955). Facing a traumatic event as, for example, cancer diagnosis, immediately implies a radical overturning of personal goals, undermining personal efficacy, confidence and, consequently, self-esteem. Spontaneous strategies can directly address and control the cause of the problem: for example, after a cancer diagnosis, almost each patient has spent a significant part of his or her time learning information on his or her particular diagnosis, trying to learn new, more adaptive behaviors (concerning aspects such as nutrition and physical activity). That strategy is aimed at eradicating the cause of the problem. Advanced cancer and epileptic patients normally lose that hope, as they manage many "up and down" phases during their long-lasting, chronic problem. As a secondary strategy, these patients usually try to handle the problem by avoiding all the sources of stress, in particular those related to physical and psychological health.

Folkman and Lazarus (in Robinson 2005) defined these cognitive, problem-focused coping strategies as follows:

1) taking control;
2) seeking information;
3) evaluating the pros and cons.

Strategies centered on the control of critical emotions involve (Brannon, Feist 2009):

1) releasing pent-up emotions;
2) distracting oneself;

3) managing hostile feelings;
4) practicing meditation;
5) using systematic relaxation procedures.

Emotion-focused coping is a strategy aimed at relieving oneself by reducing, or preventing, the emotional reaction to a stressor (Carver 2011). The five emotion-focused coping strategies identified by Folkman and Lazarus (in Robinson, Jenefer 2005) are:

1) disclaiming;
2) escape-avoidance;
3) accepting responsibility or blame;
4) exercising self-control;
5) positive reappraisal.

Among others, some alternative ways to build up a coping strategy are:

1) seeking social support;
2) reappraising the stressor in a positive light;
3) accepting responsibility;
4) using avoidance;
5) exercising self-control;
6) distancing.

All the aforementioned strategies rely on personal characteristics, such as psychological skills, socio-cultural milieu, family support, etc… Their complex articulation and connection produces the individual's resilience, i.e. the personal ability to adapt, as far as possible, to life challenges and adverse conditions (Weiten & Lloyd 2008; Snyder 1999).

As an example, humor and irony can be considered a personal way to face situations (Worell 2001, p. 603; Martin, Rod 2001; Tariq, Khan, 2013; Booth-Butterfield et al. 2014). That and others personal qualities, can be shaped by psychological, familiar, or socio-cultural factors, giving rise to specific abilities to cope, in a functional

way, with negative experiences. The process of resilience is supposed to be attainable by everyone, in accordance with personal values and beliefs (Imel, Wampold 2008).

Many approaches depict it as something that should ground on personal resources, by identifying a structured system with gradual discovery of the personal, unique possibility to deal proactively with hardships (Zeidner, Endler 1996). Far from avoiding or counterbalancing negative states with positive ones (such as anxious worry, catastrophic rumination, or depressive mood), resilience is supposed to stand with them, tackling the situation accepting and facing the "full catastrophe of living" (Kabat-Zinn 2013). Resilience is not concerned with optimism, but with hope and trust in one's inner resources (Block, Block 1980; Klohnen 1996; Werner & Smith 1992; Wolin & Wolin 1993; Snyder 1999).

While it can be inconvenient to refer to personal "resiliency" as a personality trait, resilience is increasingly viewed as a complex, multilayered capacity to interact proactively with the environment (Masten 1994) promoting personal resources and avoiding risk factors (Zautra, Hall, & Murray 2010). For example, non-resilient ways of reacting can include erupting with anger or imploding with overwhelming negative emotions, becoming numb and unable to react. On the contrary, just becoming upset about a disruptive change can be per se more beneficial: taking into account the troublesome state can adjust more functionally to the current pattern to cope with the issue. On the contrary, to become instinctively angry and numb leads to self-victimization and undermines responsibility, weakening coping methods even when the peak period of crisis has passed.

While to adequately adapt to a chronic, hard condition needs for quietness, a frequent reaction usually goes from anxious hyper-activity to depressive hypo-activity. Since negative feelings such as fear, anger, anxiety, distress, helplessness, and hopelessness decrease problem-solving abilities, they therefore weaken resiliency. Furthermore, constant fears and worries *per se* weaken people's immune system and increase vulnerability to illnesses (Siebert 2005, pp. 2-4). Hormones play another relevant part in the stress process. For example, during a stressful situation, cortisol increases in males while females, on the contrary, show decreased levels and increased

limbic activity (Wang et al. 2007). These results may support the idea that, respect to the “fight-or-flight” reaction, females administer a “tend-and-befriend” reaction. The "fight-or-flight" response aligns with the sympathetic activation (increased focus levels, adrenaline, and epinephrine). Conversely, the "tend-and-befriend" reaction may accord with the tendency of women to protect their relatives and offspring. However, although these two reactions support a genetic difference in behavior, one should not assume that males cannot implement "tend-and-befriend" behaviors or that females cannot put into practice "fight-or-flight" behaviors.

Finally, some protective factors such as family support, schooling, community belonging, social connection and cultural integration enhance resilience in a cumulative way (Leadbeater, Dodgen & Solarz 2005). These factors are likely to play a pivotal function in sustaining personal ability to deal with adversities, which is built upon (Fredrickson, Branigan 2005):

1) The ability to make realistic plans and being capable of taking the steps necessary to follow through with them;
2) A positive self-concept and confidence in one’s strengths and abilities;
3) Communication and problem-solving skills;
4) The ability to manage strong impulses and feelings.

These factors are said to be not necessarily inherited and that they can be developed in any individual.

The US NIH is supporting studies on the application of mindfulness in treating a wide spectrum of pain conditions, as, for example, irritable bowel syndrome, overeating and obesity, insomnia, myocardial ischemia, and substance abuse (US Center for Complementary and Alternative Medicine Third Strategic Plan, 2011–2015). Other studies address its impact in supporting smoke abstinence and healthier eating habits.

In a nutshell, mindfulness bio-physiological, psychological mechanisms of action are crucial in the framework of mind-body interventions, urging translational[1] research and designs, together with maximally informative clinical research. These recommendations are presented in both US and European sanitary plans (Europe 2020) and fit the scientific evidence-based practice with relevant potential to enrich other fields of biomedical research.

With regard to the golden standard of mindfulness, is it suitable for the conditions of cancer and epileptic patients? Would it improve the quality of life in both cancer and epileptic patients? Does mindfulness influence these conditions by changing behaviors, promoting overall health, modifying lifestyles, or does it involve a combination of these factors? This work calls for the development of mindfulness interdisciplinary designs and for the integration of qualitative outcomes.

The lack of scientific evidence of mindfulness efficacy and safety depends on low financial incentives for practitioners, health systems and trainers, as well as difficulties in measuring outcomes (Rapgay, Bystrisky 2009). On the other side, a naïve trust in mindfulness beneficial effects can also affect patients. The validation of mindfulness-based programs have been principally reviewed by evaluating active controlled randomized clinical trials, summarized in both systematic reviews and meta-analyses.

The comparative effectiveness and efficacy of mindfulness and transcendental meditation is addressed respect to psychological stress and well-being, with relevant methodological issues (Purser and Loy 2013). Goyal et al. (2014) observed that only 3% of the published trials studied accomplished the inclusion criteria, leaving only 47 trials of MBSR or transcendental (mantra-based) meditation included in the review. While MBSR studies showed some evidence of improvement in depression, anxiety, and pain (and low evidence in mental health–related quality of life and stress/distress), Goyal et al. discovered both low evidence of no effect or insufficient evidence of effect for improvements by MBSR or transcendental meditation in any of the other variables of wellbeing or psychological stress. Moreover, they found general insufficiencies of

[1] Translational research combine disciplines, resources, expertise, and techniques to promote enhancements in prevention, diagnosis, and therapies in order to improve the global healthcare system significantly. The term refers to the "translation" of basic scientific findings in a laboratory setting into potential treatments for health disease.

reported design characteristics, limiting the possibility of a refined estimation of implicated bias. Most of the examined trials were not registered, they lacked of standardized trainings, and specified criteria for mindfulness trainers inclusion. Some of them did not even define primary and secondary outcomes. In addition, various studies often do not operationalize and measure the practice of meditation by study participants (Schulz et al. 2010). Despite the focus on RCTs using active controls, Goyal et al. were unable to detect a specific effect of meditation on most outcomes, as the majority of evidence grades were insufficient or low. These evidence grades were mostly driven by two important evaluation criteria: the quality of the trial and inconsistencies in the body of evidence. Trials primarily had the following four biases: lack of blinding in the outcome assessments, high attrition, lack of allocation concealment, and lack of intention-to-treat analysis. The reasons for inconsistencies in the body of evidence may have included the differences in the particular clinical conditions and the type of control groups the studies used. Another possibility is that the programs had no real effect on many of the outcomes that had inconsistent findings.

Despite these limitations, the literature of mindfulness-based programs shows an overall reduction of anxiety, depression, and pain in some clinical populations. But Goyal et al. strongly encourage the preparation of the clinician in order to talk with patients about the possibility to take part in a meditation program: for example, the clinician should evaluate the effect the program could have in addressing psychological stress. Clinicians should acknowledge that meditation practices can result in moderate reductions of some dimensions of psychological stress and they should be prepared to discuss with their patients the possible, specific effect it could have in treating psychological stress.

Additionally, the recommendations for future research include a wider inclusion of remaining methodological and conceptual problems. All sorts of meditation, such as mindfulness meditation, transcendental meditation and mantra meditation, are accompanied by the assumption that more time spent meditating will yield larger effects, but consistent evidences on long-term meditators are still lacking.

Furthermore, many forms of meditation require an expert, or mentor or guide, or master, in order to receive right, personalized instructions and build up group assembly (the community of practice, or *sangha*, in the Buddhist Sanskrit terminology). The overlapping of daily practice and the training of a guide, should bring to a fuller competency of the skills of practice. In turn, the completion of the practice should lead to better outcomes. The conjunction of the trainer aptness and know-how, the amount of practice, and the development of specific, meditative skills, require further qualitative deepening, often limited by the general shortness of the offered clinical trainings (normally around two months, as happens with the MBSR).

Another extremely relevant point to analyse is the function and competency of a trainer. Goyal et al. (2014) were unable, in their review and meta-analysis, to evaluate the extent to which trainer expertise affects clinical outcomes, since often these qualifications are not specified. In order to verify the relevance of the amount of practice, the main aspects which should be recorded are the amount of training provided by instructors, the amount of training received by patients and the amount of home practice completed by patients.

Finally, a more refined enquiry of the improvement of the dimensions related to "mental health" is needed in order to better address stress-related behaviors: e.g., how acceptance, compassion, and non-reactivity are supposed to build up resilience, emotional regulation and coping strategies? Both physical and psychological threats can either damage or contribute to our biological and psychological integrity, and therefore to our sense of well-being. It is arguable that our reaction to these challenges is based on our self-confidence and on social heuristics and worldviews of one's culture (Gash 2017). Certainly, this can be regarded as a complex factor which involves all our psychological history and psycho-social environment.

Agger (2015) examined Buddhist ways of coping, underscoring the need to engage with the cultural semiotics of suffering, namely idioms of distress, memory practices, and modes of coping that contribute to the meaning of symptoms and to ways of managing distress and maintaining calmness or equanimity (Kidron 2012). More attention is being paid to the cultural embedding of traumatic experiences in order to

find new methods of intervention that build on local strategies. This falls in line with a critical use of western diagnostic instruments for assessing trauma in a cross-cultural context (Elsass, Phuntsok 2009). Elsass and Phuntsok interviewed Tibetan torture survivors' to explore their use of spirituality to overcome that difficult situation. The interviews to eight lamas showed a significant influence of the Tibetan culture, described as characterized by an articulated perspective of suffering, more complex than the units of Western rating scales for Post-Traumatic Stress Disorder (Elsass, Phuntsok 2009). In this study, the reliability of scientific instruments is accompanied by precise assumptions and preconceptions, which are crucial in addressing cross-cultural factors. For example, in our Christian cultural milieu, evidence has shown a connection between spirituality, religiosity and psycho-physical wellbeing (Fiori et al. 2004). Since beliefs are determined by contextual factors, people with Christian backgrounds who derive benefits from religious or spiritual practices, may perceive God as a mediator. This belief can in turn increase the perception of personal control. For example, Fiori et al. (2004) showed how, in elderly people, spiritual turning points and their interpretation were connected to changes of perceived control. But, with respect to the "spiritual framework" of mindfulness-based approaches, God as an external mediator of self-cohesion and self-resilience seems contradictory to producing benefits.

Considering the quantitative outcomes within the Western scenario, the correlations between health and mindfulness or spirituality look promising (Martinez, Smith & Barlow, 2007; Pargament, 2007; Post & Wade, 2009; Desrosiers et al., 2013). Ospina et al. (2007) reported on a US survey that shows a significant stress and anxiety reduction in many medical symptomatologies in five categories of meditation practices: Mantra meditation, Mindfulness meditation, Yoga, Tai Chi, and Qi Gong.

Yet, in Western participants, Pargament & Hahn (1986) and Pargament et al. (1990) highlighted some negative aspects in relation to religious and spiritual struggles, concerning some theoretical issues as the divine conception of the world, and the sense of the sacred, questioning the existence of God or of moral absolutes. These are mainly related to divine protection, sense of connection with a transcendent power,

religious support, and pursuit of forgiveness, worship and reframing of difficulties as ethical challenges (Ehman et al. 1999; Rippentrop et al. 2005; Bergin, 1983; Braam et al. 1999; Koenig 2013, 1998; Lucchetti et al., 2011; Rizzuto 2007). Few studies investigated the interaction between spiritual/religious struggle and spiritual/religious coping, showing ambiguous outcomes (Abu-Raya et al. 2015). Either considering contemplative practices as religiously accommodative oriented treatments (Hathaway & Tan, 2009) or as independent of any religious systems (Kabat-Zinn, 1990), the function of individual resources and religious orienting systems is still unclear. It is therefore unknown whether and when the spiritual/religious dimension is harmful to the patient. Allport and Ross, for example, described the extrinsic religious orientation (1967) as dysfunctional in developing spiritual coping-strategies when identity threatening circumstances occur, as it is derived from social prescriptions systems. On the other hand, a genuine and authentic spiritual orientation seems to integrate absolute values as intimate facts (Zinnbauer & Pargament, 2005) founding an ethical personality based on the pursuit of virtues of trans-cultural relevance (Dahlsgaard, Peterson & Seligman 2005). To estimate the healthiness of religious practices, some qualitative insights based on individual accounts are required, since the positive or negative therapeutic quality of the spiritual/religious stimulus is strictly interrelated to individual experience, which may be ambivalent, indifferent or idiosyncratic (Koenig, 2016). Until now, mindfulness has demonstrated a good adaptability to individual's backgrounds, showing interesting outcomes in many and various contexts.

As largely known, the Mindfulness-Based Stress Reduction program has been structured on Kabat-Zinn's past experiences tied to Vipassanā meditation, Zen meditation and Yoga practices. Kabat-Zinn stressed few core aspects transversal to all these background experiences in order to distill few key coping factors: to bring attention to the occurring experience, in the present moment, in a nonevaluative way (Kabat-Zinn 2013). Nowadays, the widespread use of these principles rise the question if they can be applied to meditation itself, in a reversed way (Posner 2011).

The term "mindfulness" derives from the Pali term *sati*, which is a nuclear element across Buddhist traditions (Van Gordon et al. 2015). In Buddhist teachings,

*sati*, or mindfulness, is a principle targeted to develop self-knowledge, basis of the Buddhist path towards the liberation from the existential condition of suffering (Karunamuni, Weerasekera 2017). Bringing attention to whatever is happening can happen sitting on a straight-backed chair or, as in the Eastern habit (and in particular in the Hindu and Buddhist traditions) sitting cross-legged on the floor on a cushion.

Then, either eyes-closed or open, the attention is addressed to the sensations of the breath (thus including the proximity of the nostrils, the movements of the abdomen, the throat, etc... (Wilson 2014). Along with this process, the instruction is to avoid any controlling-attitude on the breath or on thoughts, but rather to simply notice the spontaneous, rhythmical process of breathing. Then, as the mind flow brings the attention somewhere else, the instruction is to be aware of that shift, and gently bring back the attention to the breath. Following these spontaneous, wandering movement of attention, the practitioner should cultivate an accepting attitude, namely a non-judgmental, nonevaluative reaction to this out of control, automatic drift (Kabat-Zinn 2013). Many other objects of attention different from breathing patterns can suit the goal, for example, concentering on the various parts and areas of the body: directing the attention in each district and noting the sensations and feelings that emerge and transform in the present moment. Otherwise, attending the movements of the body through Yoga *asanas,* or walking meditation (Kabat-Zinn 2013). Others supports can be sounds, sensations, thoughts, feelings and daily actions (Gunaratana 2011). Normally the MBSR starts with an introductive well-known experience: each participant is invited to mindfully taste and eat a raisin (Teasdale et al. 2007; Ihnen, Flynn 2008).

Together with “sati”, the roots of Buddhist meditation, from which Mindfulness originates and is inspired, have to be connected with the Sanskrit term *smrti*: its meaning within the Vedic tradition was "to remember," "to recollect," "to bear in mind" the sacred scriptures. Also *sati* means to remember the existence of the *dhammas* (Satipatthāna-sutta), ie. the Pali term to address the true nature of all phenomena (Sharf 2014). *Sati* allows the deep awareness of *dhammas* as phenomena related to other phenomena, therefore showing their relative, interdependent

character. According to the *satipaṭṭhānas*, *sati* highlights each phenomenon existence in relation to the whole variety of phenomena, and, hence, to existence itself. This has little to do with the "bare attention" hyped construct, as contemporary popular translation of *sati*: its roots settle in the existential discrimination of the phenomenal world as a co-emergent, interdependent whole (Sharf 2014). Dunne reports that a growing number of Buddhist scholars translate it as "retention", or “memory” (Bikkhu Bodhi). Interestingly, this translation brings back to the Heideggerian remembrance (*Andenken*), where the reflective consideration of the thought takes place as a memory recall.

As argued by Poletti (2017) with respect to the transcendental dimension of time-consciousness, meditation may suspend the self-confirmatory activity which constitutes the predictive process (in accordance with the previous discussion on Kantian transcendental apriori, Khachouf, Poletti & Pagnoni 2013). The Buddhist soteriological system describes unreleased-stored reactions or dispositions (Skt, *samskaras*) held in deep memory (Skt, *alaya vijnana*), as boosting attachments increasing existential suffering (Skt, *dukkha*). Therefore, the individual inclinations to act (Skt, *vrittis* and *vasanas*) are said to be shaped by the retention of the marks left by past actions and their effect, i.e. the overall memory. In that framework meditation is then said to help in letting-go these impressions, purifying the ongoing activity of time-consciousness, which is supposed to originate interdependently with these impressions. Buddhist philosophy entangles time and consciousness with relevant outcomes for the individual existential suffering. In early Madhyamika Buddhism, Nagarjuna undermined, through logical inferences, time’s existence, showing how it can never be directly grasped, but only imagined (Garfield 1995). Through a more insight-centred approach, Dogen defined “being-time” as a unified activity where Being unfolds itself *as* beings, and time unfolds Being *as* beings (Kim 2000).

Considering Being and time as immanent to the activity of space-awareness, Dogen based his practice on “forgetting oneself.” The meaning of that principle (that will shape the whole Zen Soto School) goes with the “letting-go” inner gesture, often retrieved by Varela himself. To let go the “specious-present”, means to “forget” time-

consciousness structure and thus, reducing it to minimal movement. Deconstructing the retention-protention loop, meditation is supposed to devoid the entire time-impression of its becoming character, tracing it back to the "sameness", "suchness" or "thusness" (Skt. *Tathātā*). The clarification of past retentions allows the limitation of the incoming ones, "letting-go" the recording activity of the self. The self is indeed said to rise together with the threefold structure of retention-primal impression-protention, boosting our personal certainties, worldviews and thirsts/desires (Skt, *trishna*).

The beliefs we bring into the ongoing experience are often recognizable as dualistic, being marked by past impressions, and reciprocally marking the incoming ones, determining the karmic influences which strengthen our dualistic beliefs and worldview. Dualism is said to come from the pre-reflective separation between one's self and the "external world." The central feeling of being "someone" achieves a dualistic acceptation only inasmuch as it is supported throughout a self-confirmatory process based on attachment. Self-attachment is then considered rooted in the illusory salience of what is going to happen, its anticipation and the craving nourished by retained desires and fears. Both Hinduism and Buddhism reduce existential craving to this transcendental activity, which intensifies the conditions of incoming suffering (Skt. *dukkha*) as it does not take into consideration impermanence (Skt. *anitya*) and self-emptiness (Skt, *anatman*). Meditation is then supposed to promote their acknowledgement through the refined inspection of the occurring experience. As discussed by Poletti (2017), time-consciousness is radically at stake in Buddhism, undermining any ego-centered conception. Madhyamika Buddhism offers a refined awareness of time-consciousness construction and articulation (Garfield 1995). In accordance with the Husserlian *epoché,* Buddhist meditation is supposed to recall the interpretive-oriented attention back to the noetic side of intentionality. Overcoming subjective conceptions, interpretations, representations, beliefs and worldviews, that contemplative path aims at abandoning ego-centered actions and perceptions. This principle was essential in shaping Francisco Varela's own worldview, as it will be discussed in chapter II (page 96).

It is then worthy to look through further translations of *sati*/*smrti*: attention or self-recollection (Kornfield 2001), awareness, concentrated attention (Ven. Mahasi Sayadaw, in Collected Wheel Publications, Vol. XXIV, 2013), inspection (Guenther 1992), mindful attention, recollecting mindfulness (Dalai-Lama, Berzin 1997), secondary consciousness, presence (Austin 2014, p.83). Austin himself created the neologism of re-mindfulness (Austin 2014). Finally, mindfulness as the mere state of being aware, can also be considered as a synonym of wakefulness, attention, alertness, prudence, conscientiousness, awareness, consciousness, observation. In a more psychological framework, mindfulness has been defined as a coping strategy that contrasts the avoidance of negative emotions, and at the same time allowing an emotional regulation, near to the original Buddhist "equanimity" (Desrosiers 2013; Hayes, Feldman 2004). In a similar way, Bishop et al. (2004) proposed a two-component model of mindfulness:

- the first pertains to the attentional self-regulation (attention maintained on the immediate experience), and increases the acknowledgment of the mental phenomenal experience;
- the second pertains to the specific orientation adopted toward the present experience, and is characterized by open curiosity and acceptance.

The first component of attentive self-regulation implies increasing awareness towards the ongoing experience, recognizing the constant transforming field of mental objects, namely sensations, feelings and emotions, thoughts. The second component involves the maintenance of a specific attitude of curiosity about the experienced mental objects, without attaining a particular state, not even relaxation, but rather to just notice each arising phenomena.

Mindfulness has often been considered either as a mental state, or a set of skills and techniques (ibidem). Mindfulness can also be considered a state or a trait construct (Gehart 2012). Measuring the construct through many scientific studies, an operational definition has been suggested (Black 2009; Gehart 2012) following three main domains:

1. mindfulness as a trait, dispositional property, mindfulness as a personal inclination to enter into mindful states;
2. mindfulness as a state of awareness which results from a specific training, i.e. from the state of being aware of the present moment;
3. mindfulness meditation as a practice itself.

I will follow this threefold definition giving some principal definition for each domain.

1. According to the trait-like definition, mindfulness can be considered a quality of consciousness which emerges from specific practices, but which is not reducible to them (Brown et al. 2007). In order to sustain this trait-construct, many measures have been developed based on self-reporting questionnaires (Hick 2010):

- Kentucky Inventory of Mindfulness Skills (KIMS)
- Freiburg Mindfulness Inventory (FMI)
- Mindful Attention Awareness Scale (MAAS)
- Mindfulness Questionnaire (MQ)
- Cognitive and Affective Mindfulness Scale (CAMS)
- Philadelphia Mindfulness Scale (PHLMS)
- Revised Cognitive and Affective Mindfulness Scale (CAMS-R)

2. According to the state-like definition, mindfulness can be considered as a non-elaborative, non-judgmental, present-centered awareness in which each sensation, feeling or thought that arises in the attentional field, is noticed and accepted "as it is" (Bishop et al. 2004). In order to sustain this state-construct, two principal measures have been developed based on self-reporting scales (Hick 2010; Tanay, Bernstein 2013):

- The Toronto Mindfulness Scale (TMS), which measures mindfulness as a state which emerges and is maintained by a regular practice;
- The State Mindfulness Scale (SMS) which distinguishes the state mindfulness of mind, and state mindfulness of body.

3. Finally, mindfulness as a practice implies both formal and informal practices, as well as non-meditation-based exercises. Formal meditation centers attention on body, breath or sensations, on the moment-to-moment basis (Hick 2010). Informal mindfulness can be considered as the application of mindful attention in everyday activities. Mindfulness as a practice has been defined as (Marlatt & Kristeller 1999):

- a modality of attention originated in Buddhist meditation practice;
- a minimal way of paying attention: on purpose, in the present moment, and non-judgmentally;
- a complete shift of attention to the present, ongoing experience;

In many other works more tied to its Buddhist inspirational origins, minduflness is framed as a practice able to move closer to self-knowledge and wisdom (Karunamuni, Weerasekera 2017). Acknowledging the ancient model of the mind, generally known as the five-aggregate model, Karunamuni (2015) explored it as a potential theoretical resource that could guide meditation/mindfulness interventions, clarifying the nature of the self-manifesting subjective experience. The five aggregates (San. *Skandhas*) are distinguished in:

1. *Material* form (Pāli *rūpa*), i.e. the physical body and external matter where material elements are continuously moving to and from the material body;
2. Feelings (Pāli *vedanā*), i.e. the pleasantness, unpleasantness or neutrality reaction to sensorial experiences;
3. Perceptions (Pāli *saññā*), i.e. the conceptual representations derived from the sensorial experiences, thus giving attributions to the objects (e.g. shape, color, etc.);
4. Volition (Pāli *sankhāra*), i.e. the mental imprints and conditioning triggered by the mental or physical actions, which circularly produce other bodily, verbal, or psychological actions;
5. Sensory consciousness (Pāli *viññāna*), i.e. the discriminative awareness where the afferent input from the senses, thought included, are merged together.

This model describes mental dynamics as a result of the interplay of these five elements, which shape and condition the experience with previous associations, thus producing *karma* and suffering (San. *dukkha*).

As the brief, aforementioned review shows, since its original meaning is manifold and multilayered, Mindfulness can be defined in many ways; moreover, the translation process offers others interpretive possibilities. Each selective interpretation is based on who is studying mindfulness and how she is applying and observing it (Brown et al. 2007). Nevertheless, a common, official approval encourages mindfulness as a Buddhist-inspired practice, with the endeavor of a social commitment and a kind of individual, ethical engagement. This commitment happens through a constant, present awareness, oriented to fulfill a virtuous life, built on "right speech, intention, action, and livelihood" (Purser et al. 2016). For sure, Buddhism is supposed to offer a soteriological solution to human, existential suffering. The start-point is the deep, embodied insight into the essential nature of reality.

The path results from the outcome of this constant effort, and its direction appears to be constructed on the basis of the same integration of ethical and moral strength. The aim corresponds to a full, spontaneous realization which results from the aforementioned moral, existential awareness development, i.e. the transformative training and the cultivation of some ethical principles. In a nutshell, these principles are all linked to the recognition:

- That suffering is the very main character at stake in our life (*dukkha*);
- Of the possibility of a wise realization of the impermanent nature of existence (*anitya*);
- Of the illusoriness of self as a separate being (*anatman*);

The turning point is established by an inner vision which can be, depending on the Buddhist sect, sudden and irreversible, or gradual. In both early *Chan* and *Dzogchen* Buddhism realization met great attention in crucial debates. Often it has been conceived either as a progressive achievement -which needs an intensive study and practice within a certain tradition- or as a direct realization -based on the clarity of

a deep, instantaneous insight (Sharf 2015). This inner vision is defined as the enlightenment of the original principle of ignorance (*avidya*). This term is supposed to produce the division between an illusory construction, the self, and an illusory, objective reality.

Nowadays these philosophical Buddhist topics are acknowledged and intellectually discussed, but still treated in a conceptual, speculative way. Their experiential deepening is left to individual's initiative, and even when practice is recommended, there is a lack of considerations about the form of life implicated with the experiencing of selflessness. The inner-vision of no-self is traditionally non-conceptual and embodied in a disruptive transformation of the experience. The inescapable and incessant sense of self does not disappear with the intellectual acknowledgement of its illusoriness (Kirmayer 2015). The meditative discipline is needed to get beyond it. The point is not cognitive-centered, i.e. to think in a different way or hold different beliefs, but to transform the whole worldview and the entire mental, affective and behavioral repertoire. The core of the whole questions revolves around the enactive conjunction of cognitivism and behaviorism within their sociocultural environment (Panaïoti 2015). Sure enough, "seeing things as they truly are" also implies simultaneous that there is no difference between the subjective character of experience and the others' experience. The realization of non-duality is enabled by the practice of the principles of forbearance (San. *kshanti*), loving kindness (San. *karuna, maitrī*), which involves acceptance and enables the compassion for all sentient beings. In Buddhism, the liberation from suffering is acknowledging its factual presence as a real problem which touches everyone: its very universal character allows compassion because we are in touch with others' suffering since is not different, ultimately, from our own suffering.

All these principles are somehow widely discussed and progressively treated out of an exotic appeal to them. But Western secularized culture is increasingly approaching the rational side of Buddhism, i.e. its vast and refined philosophical system, while its religious side, i.e. the relation with the transcendence and with the sacred, still does not raise so much interest. As a matter of fact, the dialogue between

Buddhism and Western Universities is based on scientific evidence, i.e. on the study of mindfulness-based clinical and non-clinical approaches and the recording of morphological and functional changes in expert meditators physiology. This means that through its scientific account, a substantial dilution of its core principles is proceeding with the adaptation to our historical, sociocultural, and scientific background (Purser et al. 2016). This makes mindfulness widely available and implies an exterior emphasis, positioning our observation in an external object, rather than in the internal one (since the inner identity is principally at stake in Buddhist practices).

This third-person perspective characterizes the whole Western culture in its scientific and technological development, an effort that aims to increase the constant progress of society and its institutions. Science, technology, and economic growth pave the way to a materialistic and consumerist social mainstream, urging questions on Western means of spirituality (Purser et al. 2016). The supposed secularization process depicts a global limitation in entering the domain of interiority and moral wisdom addressed by Buddhism. The salutary health benefits of mindfulness-based interventions have overcome skepticisms, alleviating both psychological and medical suffering. But the dialogues between Buddhism and cognitive neurosciences, psychiatry and clinical psychology, have not put at stake the Western metaphysical system, mainly linked to a materialist scientific paradigm (Kirmayer 2015, p. 451).

The well-known brain-based explanations have assimilated these practices by depicting social, contextual, and value-based aspects as social constructions which affect the brain dynamics (Kirmayer 2015; Kirmayer and Crafa 2014). As discussed during the first Mind & Life Workshop of Contemplative Phenomenology (Nemours, June 12-16, 2017), Contemplative Sciences, as Western scientific approaches to contemplative disciplines, investigate meditation through a naturalistic paradigm, and therefore, with an external, objective point of view. On the contrary, phenomenology integrates the lived experience, reaching a parallel scientific dignity based on the suspension of any belief about what is experienced (*epoché*), thus allowing reliable descriptions. At the same time, Phenomenology relies on the self-transformation of phenomenologists, thus sharing some similarities with Eastern contemplative

practices, particularly in their secularized Western version and partial reinterpretation (Bitbol 2012).

Finally, in a nutshell, the integration of Buddhist-inspired concepts and practices in popular Western culture follows the increasing popularity of mindfulness-based approaches. Originating in localized Asiatic traditions, these practices have recently been shaped by their western modernization and globalization. Their scientific adjustment to Western society is putting aside the spiritual and religious background from where these practices have been extracted (Lopez, 2008, 2012; McMahan, 2008). Therefore, Contemplative Sciences consider Buddhism rigorous, empirical philosophy nearer to science than religion, contributing to the "Buddhist modernization" phenomenon (Sharf, 2015). On the one hand, phenomenological psychology promotes a nontheistic ontology somehow compatible with many forms of materialism. While on the other hand, Buddhist ethical system promotes a disenchanted answer to modern existential incertitude (Batchelor, 1993; 2012). Distilling its "essence" in a cosmopolitan acceptation, without the inclusion of theoretical systems and through personalized versions of self-realization, is easily reducible to a materialistic worldview. Moreover, some values such as compassion mesh with the Christian background, through new appealing, ready-made syncretism (Flanagan, 2011; Goodman, 2014; Jinpa, 2015). How does partial inclusion of Buddhist metaphysical beliefs potentially help Western patients, mainly with Christian religion backgrounds, is still an open question.

Some sustain that defining core beliefs and practices, corroborated by evidence-based beneficial effects, should bring a mindfulness universalization, inclusive of each religious affiliation or with atheism (Batchelor, 1993). Buddhist soteriology implies one's insight into the nature of mind: that experience dissolves existential suffering and involves compassion for all other sentient beings, changing radically the way "one relates to oneself and others" (Davis & Thomson, 2015).

But is that interior discovery self-sufficient, or does it require a wider cultural background in order to be fully accomplished? Does our society have the "right" knowledge to interpret contemplative experiences and draw them to the "right" exit?

Meditation and mindfulness are not the more represented instructions within the Buddhist panorama, rather, much traditional Buddhism centers on *dharma* teachings and ritual practices. Originally the devotional and ritual practices represented an initiation path to be covered in order to access precise, personalized meditative instructions, suggesting a progressive, circular interplay between mindfulness and ethical practices, in connection with a precise interpretive framework within defined cultural contexts. Conversely, contemporary Western Buddhism presents meditation as a primary, universal pivotal practice.

## 1.2 Complementary medicine state of art

"*if you don't have the motivation, because you feel depressed, because you feel sick, because you don't have the strength, you find it in the hospital, that is, even if you do not want to try, then maybe you find out an entire world*"

"*The hospital should encourages these interventions because people are struggling, especially now. In our group we were averagely young, however, people of a certain age make it much more difficult if they are not guided. There are people who would be very active, even though they are ten years older than me, they still could give so much! However, if they are not directed or helped to find alternative paths, alone is a hard work*"

Oncologic patients in Early Palliative Care, after an MBSR program

In Medicine, Complementary Approaches have origins in European healing traditions as well as in other traditional medicine systems, as traditional Chinese medicine, Ayurvedic medicine and other similar healing traditions all over the world. These systems share a common holistic approach, grounded on the definition of wellbeing as essentially linked to the balanced integration of the whole person-body, mind, and spirit, in harmony with the socio-cultural environment. There are several definitions of "integrative" health care, but all involve bringing conventional and complementary approaches together, in a coordinated way. The use of integrative approaches to health and wellness has grown within care settings. Researchers are currently exploring the potential benefits of integrative health in a variety of situations, including pain management, relief of symptoms in cancer patients and survivors, and programs to promote healthy preventive behaviors.

As shown by Breivik et al. (2013) chronic pain is a major health problem with significant impairment of emotional, physical and social functioning. In the meantime, the most common pharmacological, medical or surgical interventions are effective in the treatment of chronic pain. Turk, Wilson, & Cahana (2011) report on how these interventions are not effective in enhancing physical and emotional functioning.

Therefore, an inclusion of psychosocial contributions in addressing chronic pain and pain-related disabilities is needed. Even if psychological interventions, as the cognitive behavioral treatments (CBTs, Freeman-Fairburn), have been largely included with these patients, on average their effect sizes are weak (Koenig et al. 2015; Williams, Eccleston, & Morley, 2012). Considering the manifold characters of chronic pain, both biomedical and cognitive-behavioral interventions are ineffective in producing pain relief and more global healing. Therefore, it is progressively clear the need for an in-depth consideration of patients' expectations. As Turk et al. put it (2011) pain relief represents, per se, an impractical goal, and should be reoriented towards functions improvements.

The Acceptance and Commitment Therapy approach (ACT, Hayes et al. 2006), to improve functions, supports patients to embrace and accept pain through a relational-frame approach centered upon psychological flexibility. The possibility to change an attitude or a behavior maintaining contact with dysfunctional thought and feelings can open new opportunities oriented towards valued-life goals.

Dealing with chronic pain, to accept painful sensations, feelings, and thoughts involve a focused attention on new openings (in terms of cognitive, affective or behavioral styles), getting rid of anxious worry and catastrophic rumination (i.e. being absorbed by the problem). Through a goal-oriented approach, patients can realize new valued goals instead of engaging in pain control (McCracken & Vowles, 2014). The ACT approach is thus oriented to build psychological flexibility through the development of acceptance, cognitive defusion, present moment awareness, contact with self-as context, values formulation and committed actions (Hayes, Strosahl, & Wilson, 2012). These qualities pertain to both mindfulness and acceptance on the one hand, and commitment and behavior change on the other (Hayes et al. 2006).

As previously discussed, mindfulness has been defined as intentional and non-judgmental awareness (Kabat-Zinn, 1990): both MBSR and MBCT are based on the principles of observation, description, action, and non-reaction (Whitmarch 2012). The interplay of these principles share an underlying focus on mindful, open acceptance (Baer et al. 2006).

As inferable through the meta-analysis lead by Veehof et al. (2016), ACT and mindfulness-based interventions (both MBSR and MBCT) in chronic pain showed similar effects to CBT (Veehof et al. 2011), showing more recently their efficacy (see the systematic review of Lakhan et al. 2014). In general, Veenhof et al. (2016) conclude that both acceptance-based and mindfulness-based approaches show long-term effects with patients affected by chronic pain. The ACT is particularly fruitful with depressed and anxious people. Finally, the increased attention to these approaches with patients affected by chronic pain allows a more refined assessment of their moderate effectiveness, especially in the long term.

In Complementary Medicine, these and others outcomes call for a deeper analysis of the role of underlying theoretical basis (Burke et al. 2017). As summarized by Veenhof et al. (2016) these three interventions are characterized by the following working mechanisms, hypothesized to be the main processes of change:

1. In CBT: the shift in content of thoughts such as catastrophizing cognitions-emotions (Crombez et al. 2012).
2. In both acceptance-based and mindfulness-based treatments: mindfulness principles and psychological flexibility (McCracken & Morley, 2014).

The outcomes of these systematic reviews and meta-analysis encourage future CAM approaches to include variables from the psychological flexibility model, the CBT, as well as mindfulness. The theoretical models framing chronic pain could be enhanced by these mechanisms of change, improving its treatment efficacy. To catch unfolding processes over time individual clinicians and researchers should invest in treatment integrity.

The US Consortium of Academic Health Centers for Integrative Medicine (CAHCIM) includes 57 eminent academic medical centers. According to CAHCIM, Integrative Medicine help transform medicine and healthcare through rigorous scientific studies, new models of clinical care, and innovative educational programs. This happens integrating biomedicine, the complexity of human beings, the intrinsic nature of healing and the rich diversity of therapeutic systems. The first institute to

deal with non-conventional or complementary therapies in the Western world was the Office of Alternative Medicine, established in 1992 at the US National Institutes of Health (NIH). A few years later, the Office became the National Center for Complementary and Alternative Medicine (NCCAM), which was then changed in 2014 to the National Center for Complementary and Integrative Health (NCCIH).

The acronym CAM (Complementary and Alternative Medicine) became synonymous with what in Europe were called unconventional integrative medicines, thus including interventions, practices, and disciplines that are based in physical procedures administered to others by a trained practitioner or teacher. These techniques are taught in order to improve health and well-being and in the treatment of specific illnesses or symptoms such as chronic pain or stress. From the early 21st century, the relevance of these practices is marked by their increasing spread, which brought to the definition of Integrative Medicine. During the last decades, in the main industrialized Western countries, CAM practices are significantly spreading, suggesting a wide search for more natural and gentle methods of healing. In the United States, between 1990 and 1997, the use of such therapies ranged from 33.8% to 42.1% of the population. The statistics show how, in the country, CAMs include the use of prayer for themselves and for others; without it, the rate of US utilization drops only from 42 to 36% (Institute of Medicine of the National Academies 2005). At the beginning of the 21st century 62 out of 100 Americans resorted to complementary medicines (Barnes et al. 2004). Very high levels of use (30-40% of the population) are also recorded in Australia, France, Germany and Great Britain. The WHO World Health Assembly, by its resolutions WHA62.13 and WHA67.1812, urged Member States:

- to integrate traditional medicine (TM) and CAM within national healthcare systems by developing and implementing national TM policies and programmes;
- to promote the safety, efficacy and quality of TM/CAM by expanding the knowledge base, and providing guidance on regulatory and quality assurance standards;

- to establish systems for the qualification, accreditation or licensing of TM/CAM practitioners;
- to increase the availability and affordability of TM/CAM.

The level of public investment in CAM research in Europe stands in stark contrast to relatively large investments in Asia, Australia, and North America. In recent years, the European Commission registered a growing number of people turning to CAM for disorders they feel cannot be treated with conventional therapy. This number tops the 100 million mark in the EU alone. The ISTAT survey at the end of the 20th century registered a value of 15.5%, which, at a subsequent 2005 monitoring by the same institute, fell to 13.6% (2007). With respect to the use of complementary medicines, Italy is among the last rankings among the wealthy Western nations, with a surprising gap between neighboring countries. In Emilia-Romagna, along with Trentino-Alto Adige, Valle d'Aosta, Veneto, Friuli, Piemonte, Lombardia, 20% of the population uses CAM with a high degree of satisfaction (75-90%). Between 2005 and 2007 in Italy, there were about 200 public centers offering complementary medical services, of which, sixty in Tuscany which, among the regions, is the city that has moved further in the integration of CAM within regional health services.

| | (POSSIBLE) POSITIVE EFFECT | LIKELY TO HAVE NO EFFECT | LIKELY TO BE HARMFUL | INSUFFICIENT EVIDENCE |
|---|---|---|---|---|
| CAM | 37.2% | 4.8% | 0.69% | 56.6% |
| MEDICINE IN GENERAL | 44.4% | 0.98% | 7% | 47.8% |

**Figure 1:** The contribution of CAM to sustainable healthcare in Europe[2]

There is a lively debate on the role of complementary medicines throughout Western countries; in Italy, since 2002, it has become a frontal conflict. Before that year, all that was non-conventional was by definition " alternative", as it was often

[2] In Horizon 2020

confused with ecological and, roughly, New Age movements. Some members of the Bioethics Committee argued that unconventional medicine practices have an ideological approach based on arbitrary assumptions, without a serious account of biological mechanisms and of modern scientific knowledge, without providing a rational explanation for their alleged efficacy and referring to completely indemonstrable mechanisms. Nevertheless, many citizens find subjective benefits in these therapies.

Throughout the past legislatures, the national context has been characterized by a substantial regulatory vacuum and the failure of numerous attempts to define an overarching law. Non-conventional approaches are practically not included in the National Health Service and do not appear in the list of supplementary activities that can be paid by healthcare providers for outpatient services. The "Defining Essential Levels of Care" administrative order (2001) includes only anesthesiological acupuncture, excluding it for other purposes (as phytotherapy, anthroposophic medicine, ayurvedic medicine, Homeopathy, chiropractic, osteopathy as well as all other disciplines not explicitly quoted). The exercise of the abovementioned medicines and unconventional practices is considered a medical practice in all respects. Regional Law no. 9 of 19 February 2007 - "Procedures for the operation of complementary medicines " - subsequently amended by Regional Law no. 31 of May 25, 2007, aims to ensure the principle of patient's freedom of choice and physician's freedom of care.

The European Charter of Patients' Rights includes "the right to access health services that meet the patient's health needs, the right to information, to personalized treatment and to choose freely from among different treatment procedures and providers". Indeed, the right of citizens to use CAM is recognized, and at the same time, the principle of informed consent between a physician and a patient is ensured in accordance with the Code of Medical Ethics. In Italy and also in the context of the Emilia-Romagna Regional Program, the debate on unconventional medicines has passed the biomedical field, involving the fields of law, ethics, philosophy, sociology, economy. An overall inability to handle non-conventional and traditional medicine is present within the same biomedical community.

The spread of medical and therapeutic practices emerging outside of the biomedicine paradigm seems destined to find its place in health services in most of the industrially advanced countries. The push for integrated medicine appears to be strong, involving relevant sectors of citizens and healthcare workers. The scientific community and political institutions in the coming decades will be called upon to govern a change in health management that involves medical models, practices, and the organization of services (Integrative Medicine, 2007). This challenge to the current biomedicine framework could give rise to a general advance in understanding the functioning of the human body in health and illness, with positive consequences for human health and longevity. In the United States, an increasing number of hospitals offer complementary therapies, while there is an increasing number of doctors who use CAMs in their practice. The most important universities in the country joined the Consortium of Academic Health Centers for Integrative Medicine. Prestigious care centers, in particular for cancer therapy, have built up integrated medical services, which are often in direct contact with medical faculties, in order to ensure a qualified teaching. In 1998 the National Center for Complementary and Integrative Health has been active at NIH with an initial annual budget of $ 2 million, reaching over $ 120 million in 2009; but calculating the total NIH investment in the field of CAMs, more than $ 300 million have been invested. Of this amount, more than one third is dedicated to the oncology sector (Integrative oncology, 2008). Finally, in demonstrating the success of CAMs in the United States, there is a growing insurance coverage for incurred complementary and integrated therapies. In oncology, the treatment of chemotherapy collateral effects boosted complementary treatments which enabled the humanization of the care process (Cassileth, In Integrative oncology, 2008).

There are several cancer therapeutic approaches in healthcare practices, which, depending on the therapeutic efficacy, the cultural meaning of quality of life, and the social construction of patient and doctor, involve many complementary practices.

In 2004, the Society for Integrative Oncology (SIO) was established, which in 2007 drafted guidelines for the proper use of CAM in Oncology (Deng, Cassileth,

Cohen et al., Integrative Oncology Practice Guidelines, Journal of the Society for Integrative Oncology, 2007).

As discussed in “The contribution of CAM to sustainable healthcare in Europe - Horizon 2020”, CAM encompasses therapies with a cultural or historical basis including herbalism, meditation, yoga, hypnosis, biofeedback, acupuncture and traditional Chinese medicine. These approaches require a certain cultural adaptation, aimed at the integration of different cultural specificities: a particular therapeutic remedy that can be considered "alternative" in Italy can be often considered “complementary” in northern Europe and "official medical practice" in the Far East. By virtue of this, complementary and alternative medicine is now fully renamed "integrated medicine".

The use of unconventional treatments by patients and their practice by therapists are constantly increasing both in the US and Europe. Italy is one of the countries where cancer patients more often redirect themselves independently to unconventional care. However, despite that strong demand, information, funding for research and experimentation of non-conventional treatments are still limited (while in other countries they absorb a large share of investment). Both in diseases treatment and prevention, citizens increasingly elect the therapeutic approach they consider most suited, irrespectively of conventional biomedicine or CAM. Despite the high satisfaction rate of complementary medicine in the US (50-80%), physicians reluctance paves the way to unsafe, inaccurate individual styles of search (NCCAM Survey 2007).

Personalized medicine should involve the inclusion of treatments based on the understanding of each patient preference, allowing clinical researchers to find specific and effective strategies to manage symptoms of chronic diseases. Moreover, the incorporation of patients’ inclinations, needs a deeper understanding of the physician-patient interaction, making the patient decision about the use of CAM a guiding principle for public investments (Edwards 2011). In a country where the healthcare system is pluralistic like the United States, many patients explore health practices that are not part of mainstream medicine. The NCCAM surveys show that 40% of US adults and 12% of children use complementary or alternative approaches as a complement or

adjunct to conventional care (Barnes et al, 2008). Among them, emerged some mind-body practices such yoga and meditation. In parallel, growing evidence on the biological benefits of these practices makes them increasingly attractive. Evidence-based medicine is pushing to incorporate mind-body practices in the integrative approaches, and the need to improve their evidence in treating health problems is emphasized (NCCAM third strategic plan, Exploring the Science of Complementary and Alternative Medicine).

Additionally, many scientifically interesting and important challenges limit the study of mind-body interventions. In order to address the more appropriate research questions, investigators need to rely on experimental controls and study designs, which clarify key features such as the optimal duration and frequency of the intervention, its effects and outcome. The US National Center for Complementary and Integrative Health (NCCIH), recommend to incorporate sham/placebo interventions in order to establish if the research questions in a clinical trial are effectively targeted by a refined technique, determining a mechanism of action. The alternative most appropriate and effective design should compare different treatments in order to enhance already existing approaches. In order to establish the amenability and develop methods able to support the scientific investigation of some mind-body approaches, the most relevant research questions may require translational research. The term translational refers to the "translation" of basic scientific findings in a laboratory setting into potential treatments for the disease. These approaches combine disciplines, resources, expertise, and techniques to promote enhancements in prevention, diagnosis, and therapies, in order to significantly improve the global healthcare system. The European Society for Translational Medicine (EUSTM), a global non-profit, neutral healthcare organization, enhances world-wide healthcare by using translational medicine approaches, resources and expertise. Logically, the first target is to enhance research and develop renewed and affordable diagnostic assessments and treatments for a wide spectrum of clinical disorders affecting the global population.

Considering the difficulty to measure the physiological correlates during an intervention, any design of rigorous and reproducible clinical studies on mind-body complementary approaches is limited. Furthermore, the explanations for their mechanisms of action involve processes that are not well defined. Therefore, developing such outcomes seems a more immediate research priority than efficacy studies. Most mind-body practices involve a variable application of physical procedures, conducted over extended periods, challenging the design and rigor of research clinical studies. Moreover, true masking of study participants involved in a program (particularly in a mindfulness intervention) is impossible. These and other problems urge the need of guideposts oriented towards creative clinical research methodologies.

For example, recent research has widely documented the relevance of common, contextual, nonspecific factors in the encounter between psychotherapists and patients (Imel, Wampold 2008). In particular, empathic communication, the discussion of a possible positive outcome or the duration of interaction itself, influence the clinical outcome, independently from the specific effects of the employed intervention. In fact, along with the importance of clinical and psychosocial information (Falvo And Tippy, 1988; Waitzkin, 1985), a growing evidence on reflective-communicative qualities show the benefit of improving the understanding that patients have of the disease, its risks, and the benefits of treatments (Osterberg & Blaschke, 2005). A clear discussion of benefits, risks and obstacles has strong effects on adherence (Chewning & Sleath, 1996; O'Connor, Legare & Stacey, 2003; Stewart et al., 1999), helping to build a trust relationship and making the patient feel supported and encouraged, both through verbal and nonverbal language (Beck, Daughtridge, & Sloane, 2002). The need to assume a proactive function in the therapeutic process motivates CAM approaches.

Acknowledging wellbeing and healthcare needs of each individual patient builds a good partnership, re-centers the clinical consultation as a central act of medicine (Pendleton 1984) and extends beyond mere symptomatological management. The patient involvement in the decision-making process (Charles, Gafni, & Whelan, 1997; Greenfield, Kaplan, & Ware, 1985; Guadagnoli & Ward, 1998) engages the health

system with personal identities, cultures, and values, spiritual or religious systems, avoiding the reduction of the human complexity of an "ill" patient, to *a* nosographic "disease" (Kleinman 1980, 1988; McWhinney, 1993; Scand 1993).

An interactive "boundary" between health professionals (or practitioners) and patients enacts the therapeutic process (Nissen 2012)[3]. A growing number of evidences show how, through complementary approaches, patients can experience a direct contact not only with their own needs, but with the health institution and with health care professionals (Borkan, Reis, & Medalie, 2001; Brody, 1994; Launer, 2002; Shapiro, 1993). A good CAM practice should rely on a good communicative environment between patients and physicians (Gabriel, 2004)[4]. The diagnostic process, involving the translation of the patient's narrative into the correct differential category, relies on the personal perceptions and judgments of the physician; therefore, medical assessment follows an important interpretative process (Brody, 2003). Suarez-Almazor (2004) highlighted how verbal and non-verbal communicative attunement of the physician is associated with patient satisfaction in the outcomes of treatment. More information and explanations provided by the physician, would be able to bring the patient's needs and concerns closer to him by offering him reassurance and moral support. The more the clinician understands, the more precise is the proposed therapy, and higher is the patient's personal gratification in implementing it (Charon 1993, 1995, 2001, 2006).

Eventually, the narrative and mindfulness approaches may merge together, as suggested by Dobkin in her recent book "Mindful medical practice. Clinical narratives and therapeutic insights" (2015). In other words, mindfulness integration in multiple therapeutic contexts can lead to a more inclusive space for dialogue between health care professionals, patients and the disease (Dobkin 2015). Meshing the medical and narrative competences, the clinical evaluation itself could become more efficient and better targeted. The increased chance of a "mindful practice" in treating complex symptoms is thus supposed to foster satisfaction both in clinicians and patients,

[3] Recently the Slow Medicine movement started the Choosing Wisely program (American Board of Internal Medicine Foundation 2012) aimed at reducing wasteful or unnecessary medical tests, treatments and procedures, promoting conversations between clinicians and patients and helping patients in choosing care Supported by evidence, not duplicative of other received tests or procedures, harm-free, and truly necessary (www.choosingwisely.org). The same program have been started in Italy (www.choosingwiselyitaly.org).

[4] Other relevant work has been done in that direction, as the Narrative-medicine approach (Charon)

providing greater adhesion to the therapy, i.e. compliance. Giardini (2016) stated the importance of accepting the disease limitations, evaluating the cognitive constructs related to adherence to treatment in Coronary Heart Disease outpatients. Many chronic diseases present a relevant inaccuracy of the medical advice and a lack of adherence to treatment (Kripalani et al. 2007). Adherence has been defined by the WHO as the extent to which a person's behavior corresponds with the agreed recommendations from a provider (Sabate 2003). In order to build that mutual correspondence, the contractual relationship between the clinician and the patient has to rely on a supportive, not judgmental attitude (Haynes et al 2002).

The medical encounters are characterized by fast interactions, constrained by the pressure of time and by the severity of patients' medical conditions first, but also by discursive, professional, and institutional delimitations-borders (Sarangi & Roberts, 1999; Waitzkin, 1991). Technology is also determinant in building these constraints (Bjørn & Balka 2007) since it limits both the quantity and the quality of the human interactions. Attentional attunement is certainly one of the core factors in shaping the quality of interaction, as it can ameliorate the empathic resonance. The interdependence between dialogical, conversational factors on the one hand and the co-constructed nature of meaning between the parties on the other (Linell, 2009) goes with the conscious effort to simply be there, listening pro-actively others' narratives.

Charon (2006) states that in order to open and accept others' narratives it is necessary to downplay our own "ego", allowing *others'* voices to emerge. Charon defines this "emptying of self" as the indispensable instrument to embrace the meaning of another. There is a clear, strong resonance between Charon's narrative approach and mindfulness practice. The concept of *emptying oneself* comes from the interactive framework, i.e. from the way the clinician leaves the scene and puts herself in the background, in order to allow the other's voice to come to the forefront. To listen deeply produces a transitory suspension of her interpretive activity (Kramer 2007). As mentioned, to "empty" is far from being a passive role, because it conversely puts the listener in her full attentive, active, communicative intention. Nevertheless, to allow the process to be natural requires disciplined awareness and low emotional reactivity.

To convey emphatic affordances means to be able to signal a kind of engagement with the patient, both verbally and non-verbally. By this way, the patient can feel the often surprising experience of being deeply understood in a healthcare environment.

Some evidence shows how a good adherence can be more beneficial respect to a good specific treatment: for example, the benefits of a medication cannot be accomplished due to weak adherence (Haynes et al. 2002). In chronic disease, the ways to improve adherence are hardly effective, while simple interventions are quite successful in producing short-term adherence. These and other data encourages the analysis of adherence-supportive and non-adherence predisposing factors (Kripalani et al. 2007). Nevertheless, there is still a lack of clarity, and mindfulness is giving a substantial contribution to the topic (Dobkin 2015): spirituality is gaining interest in literature and in clinical practice, and mindfulness-based approaches, even if proposed as laic practices, are underscoring patients' heterogenic, spiritual needs. There is a promising possible match between Charon's approach, based on the patient's narration, and Dobkin's approach, i.e. taking the clinicians' perspective. What Büssing and Koenig observe (2010) is that the most desirable person to meet patient's spiritual or religious needs, are physicians themselves. But what normally happens is that health care professionals recommend other professionals in order to answer to these `secondary needs´ (Büssing, Koenig 2010). Medical `primary needs´ are often accompanied by a reductionist, biomedical approach (Koslander et al. 2009) inclined to repair the physical defect or dysfunction, with the only target as health restoration.

At the same time, international health policy plays more and more attention to the admittance of spiritual values and beliefs to healthcare systems. On a different note, health professionals could not be aware of addressing spiritual needs, and they may easily feel overwhelmed and "out of position". Extending the care process beyond the patients' physical needs, and even contacting some moral, spiritual and existential concerns, could easily make clinicians feel bewildered. A recent study shows that among patients living with chronic pain diseases, 20% did not have a partner to talk about these needs, 23% desire to talk with a chaplain about their spiritual needs, while 37% want to talk with their medical doctor about these needs (Büssing et al. 2009).

However, medical professionals and practitioners could hardly find the time to build the requested, minimal skills, and therefore to follow a necessary training. Others could even be disinterested in uncovering these personal, intimate dimensions. Finally, others could not find the time needed. But still Büssing and Koenig (2010), relying on wide, reliable data, recommend to reconsider health care professionals pivotal role and functions. Many patients have turned away from institutional religions and would like to talk with their nurses or medical doctor about their spiritual needs.

They would like to talk about these issues more with them than with trained, certified pastoral counselors or chaplains. This would mean that clinicians should attend educational training in order to address these needs, which often are not exclusively ascribable to the religious domain. The authors claim that interacting with their patients, healthcare professionals should act independently from their own belief systems, i.e. without allowing their own personal interpretations and bias to neglect the relevant presence of the spiritual/religious dimension[5]. For example, clinicians' beliefs should not alter medical treatments and type of care, including the treatment of chronic conditions (Curlin et al. 2006). However, patients are still not involved in the discussion about these themes, e.g. how the physician deals with such matters and how she is influenced in the decision-making process.

Strong evidence shows how spiritual and religious beliefs positively correlate with mental and physical health and therefore are reasonably prone to influence medical outcomes. Facilitating the encounter with these needs, a clinical assessment could account for their effects, in the same way as all other information is assessed, as the use of alcohol, drugs, cigarettes, etc… (Koenig 2012). Cultivating a multifactorial awareness in the process of care, can seemingly enhance the process itself. Religious and spiritual beliefs assessed in personal spiritual history should be addressed and influence this process. Koenig (2012) insists in centering the whole process in physicians' therapeutic neutrality, i.e. in their responsibility of not challenging these beliefs, even if they conflict with the treatment plan or even if they seem illogical.

[5] This crucial point is connected with the deontological principle of therapeutic neutrality and will be deepened in the PART A, Chapter II.2.

Taking a position against the patient's worldview often produces her active resistance to the medical treatment, fostering noncompliance. The Joint Commission for the Accreditation of Hospital Organizations and the US Medicare state that health care providers have to respect patient's "cultural and personal values, beliefs, and preferences", as religious or spiritual ones (Centers for Medicare and Medicaid Services, *State Operations Manual, Appendix M-Guidance to Surveyors: Hospice*).

The first step in order to build up respect and adjust care accordingly is the acknowledgement of those beliefs. Therefore, Koenig explicitly underscores the need of a neutral posture based on simply asking the patient some questions in order to clarify understanding these beliefs. Also, a consultation with a chaplain is recommended in order to either follow professional advice or refer the patient directly to the pastoral service. Since most clinicians do not have a clinical pastoral background, they are not supposed to skillfully respond to patients' spiritual needs or give recommendations regarding the spiritual argument. Therefore, as spirituality emerges as relevant topics throughout the assessment or the treatment, chaplains should be involved, since they normally receive broad training on the topic, undergoing a full-dedicated educative process on spirituality and religiosity. Then, independently from the healthiness of patients' beliefs and the effectiveness of the eventual pastoral service, these beliefs should be actively supported by the health care service throughout all the medical treatment, pushing its effects even after recovery.

The whole healthcare process should adapt to patients' worldviews. Koenig and Büssing (2010) therefore depict a desirable future where health professionals and practitioners work harmoniously together with the pastoral service, i.e. the chaplain[6]. As shown by Lin and Bauer-Wu (2003) clinicians can fulfill a relevant function in addressing advanced cancer patients psycho-spiritual well-being. That dimension is intertwined with a number of nuclear factors as self-awareness, coping strategies and faculty of effective adjustment to the stress, relationships, sense of faith, sense of

[6] It is relevant to evidence that nowadays, chaplains are more and more inclusive not only in the beliefs they can work with, but in their personal history as well. For example, a chaplain (i.e. someone strongly connected with the Christian religion) can have passed through Buddhist trainings, even resulting Buddhist monks (e.g. Rev. Seigan Ed Glassing, Staff Chaplain and Palliative Care Team Chaplain, Department of Pastoral Care & Education, NYP-Columbia University Medical Center, NYP-Children's Hospital of New York).

empowerment and confidence, and living with meaning and hope. But the ongoing barriers in health care systems limit the desirable consideration of the aforementioned needs. For example, Molzahn and Sheilds (2008) show how nurses can be reluctant in discovering spirituality, since they may not have the right words, they may have a lack of education, or they may believe that spiritual healing is someone else's duty. We can add the complex current secularism and the increasing social diversity within the health-care context. However, Koslander et al. (2009) expressed the desirability of a holistic care approach, restarting from the patient´s existential and spiritual needs. In order to develop it, the authors claim that, if these needs were considered like physical needs, i.e. as primary resources that have to be considered in health care, then a holistic, inclusive approach can be conceived.

As an example of a holistic practice, Puchalski (2009) pointed out the fact that by encompassing caring compassion and willingness with an openness to whatever concerns the patient, the interaction becomes automatically focused on a patient-centered model of care. Patricia Dobkin suggests that integrating mindfulness in multiple therapeutic contexts produces a more inclusive space for dialogue between health care professionals, patients and the disease (Fig 2). The medical system has to be considered as part of a social system, to which it belongs. Then, following the model resumed in the figure: in the left circle, the doctor with her professional know-how and personal history meets the patient (A), matching both the patient and the concerned disease together (B). The disease is acknowledged within its theoretical and empirical knowledge in C. Dobkin states that in A the healing process can be enhanced, while B represents the overall intersection of clinician, patient, and disease: here the entire cure process takes place. In C the physician could better (i.e. with a reflective and critical attitude) deal with her professional knowledge (i.e. all the procedures, the diagnostic tests the surgery techniques, the medication treatments which characterize the medical knowledge). The person (either “patient” or “client”) appears in the circle on the right (with her genetic heritage, psychosocial characteristics, personal history, medical anamnesis, and health-related behaviors). All these personal factors meet the

disease in D, together with the specific beliefs, expectations and hopes associated with that precise patient.

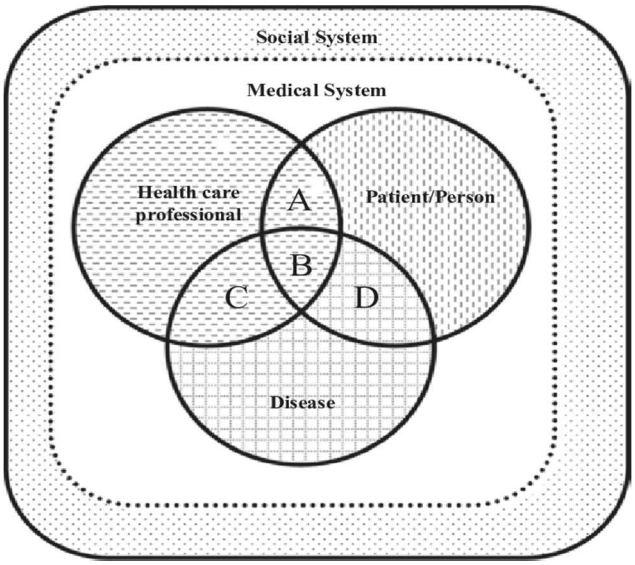


**Figure 2:** Factors involved in a clinical encounter[7]

Dobkin's model fits with Charon's point of view within the medical intersubjective environment (Charon 2001). The medical encounter is a long-standing, intersubjective sphere where the human intersubjective domain is challenged, since here more than anywhere else, one human being assists another human being. For that delicate, ethical vocation, the medical practice requires an authentic, symmetric engagement. In this entanglement, the two social actors are supposed to adapt and find some transformation (Martin, 1986). The patient-physician interaction rapidly becomes a relationship where empathic resonance and reflection build (Bruner 1986). Thus, participants expressed a high agreement rate on narrative medicine as helpful in enhancing the patient-doctors relationship (Charon 2001).

Therefore, there is a close tie between the clinician's awareness of the communicative process during the assessment and the efficacy of the treatments provided. Its quality could enhance the clinical practice itself, making clinicians noble figures aimed at the aid in its fullest, deepest meaning, free from easy dualisms between body and mind.

[7] in Dobkin (2015)

Most mind-body complementary interventions involve encounters where the aforementioned nonspecific, contextual factors, as well as expectancy, or placebo responses, often largely contribute to clinical outcomes (particularly when the subjective, patient-oriented benefits are involved). Indeed, complementary interventions are intentionally implemented in order to activate these processes and to boost their outcomes. But the understanding of the interplay between specific and nonspecific factors in enhancing a specific symptomatology, general health and well-being, is still lacking (US Center for CAM Third Strategic Plan, 2011–2015).

The mind and body approaches look promising in the scientific advance for promoting health and boosting the management of many symptomatologies. That evidence is strengthened by the increasing body of basic studies, particularly in the fields of physical and behavioral medicine, biomechanics, psychoneuroimmunology, neuroscience, and psychology (ibidem).

Mind-body interventions are challenging the scientific and clinical scenario, requiring multidisciplinary efforts to foster collaborations intended to employ CAM practitioners' expertise and experience, together with the variety of scientific disciplines. In Europe, CAM practitioners are approximately 145,000 doctors trained both in conventional medicine and in a specific CAM, while around 160,000 trained CAM practitioners (with or without conventional medicine statutory regulation) practice various CAM (von Ammon et al. 2012)[8].

However, there is a huge lack of clarity about who can practice CAM, the required qualifications, and the way services should be offered and financed. To redress the heterogeneity between EU countries, a regulation of providers of CAM throughout the EU should be implemented, a requirement also presented by the World Health Organization (WHO 2013). The lack of clarity relates to a lack of funding and scientific cooperation, which together challenge CAM practitioners and slow progress in this area. The EU-funded CAMbrella project (a pan-European research network for complementary and alternative medicine) addresses this problem with

[8] This means that there are about 65 CAM providers (30 dual-trained doctors and 35 CAM practitioners) per 100,000 inhabitants compared to the some 475,000 general practitioners working in the EU which equates to about 95 GPs per 100,000 EU citizens. These figures demonstrate that there is a vast, largely untapped, reserve of CAM healthcare provision available across the EU.

EUR 1.5 million allocated in support under the 'Health' theme of the Seventh Framework Programme (FP7). CAMbrella started with the aim of enhancing EU citizens' well-being by creating a wide map that promotes future research in the field.

The project partners collaborate in order to build a global network of research institutes. The main addressed areas are patients' needs, research methodologies, CAM legal regulations, terminology and function in healthcare systems. The lack of a comprehensive description needs a creation of shared knowledge in order to build an accepted consensus-based terminology. There exists several definitions, the European Project states: "CAM, as utilized by European citizens, represents a variety of different medical systems and therapies based on the knowledge, skills and practices derived from theories, philosophies and experiences used to maintain and improve health, as well as to prevent, diagnose, relieve or treat physical and mental illnesses.

CAM therapies are mainly used outside conventional health care, but in many countries, some therapies are being adopted or adapted by conventional healthcare" (von Ammon 2012). Another relevant point is then the understanding of patients' demand for CAM, i.e. the prevalence, the needs, beliefs and attitudes of EU citizens with respect to CAM. The CAMbrella consortium comprehends 16 scientific partner organizations from 12 European countries including France and Italy. The advisory board includes stakeholder groups (providers, practitioners, patients and consumers) in order to support the project.

### 1.3 Cancer and Epilepsy: two chronic conditions, one existential need

According to a recent report from The World Health Organization (WHO), cancer is rapidly expanding (Stewart, Kleihues, 2003). Because of the advances in the early detection, medical and technological research, new treatments and medications, an increasing number of patients will become chronically ill with cancer. Albeit cancer can be considered a catastrophic disease (Broadwell, 1987: 563), it is no longer synonymous of death. Therefore, the need for rehabilitation will increase throughout the Western world (Holm et al, 2013). National cancer plans in many Western countries are consolidating this need (ibidem).

In Italy, cancer incidence, prevalence and complexity challenges the National Health System, fostering the need for systemic processes and organized-planned health assistance services (Cheli 2016). More and more cancer patients experience chronic pain, often caused by the tumor pressing on bones, nerves or other organs in the body. Otherwise, pain is due to the treatments: chemotherapy drugs usually cause numbness and tingling in art extremities, and/or a burning sensation at the spot where the injection is applied, while radiotherapy causes skin redness and irritation. Cancer pain can be acute or chronic: the first, is connected with an injury damage and lasts a short time. Surgery often causes acute pain, which diminishes as the wound heals. Chronic, or persistent pain is connected with changes to the nerves: these can be caused by cancer pressing on nerves or chemicals produced by the tumor, or its treatment. Chronic pain continues after the injury or treatment and can be mild or severe, present the entire time. Chronic pain is a relevant public-health problem affecting 25% of adults. Individuals affected by chronic pain often seek relief from a variety of approaches such as invasive interventions (e.g. nerve blockade and surgery) and opioids. The need for research on non-pharmacological approaches is becoming increasingly evident, as CAM therapies (i.e. yoga, mindfulness-based stress reduction, spinal manipulation, exercise therapy, acupuncture, massage, cognitive behavioral therapy) and physical therapy. Within the wide spectrum of chronic pain diseases, CAM approaches seems promising in changing the processing and perception of pain, enhancing cognitive control, fostering coping skills, reducing pain intensity, improving relaxation and wellbeing. A big part of research in CAM-outcomes is working mainly on the following areas: emotional and cognitive reciprocal influence, central nervous system responses, behavior and genetics in pain management, and musculoskeletal biomechanics.

NCCAM is addressing 'Advancing the Science and Practice of Symptom Management', developing strategies (as diagnostic criteria and tools, controlled randomized trials and outcomes research) for the management of chronic pain through the deepening of the natural history (i.e. which is the outcome from the time of diagnosis to death without therapeutic intervention) and prognostic factors (i.e. the

estimation of the chance of recovery from a disease or the chance of the disease recurring). Several clinical studies analyze biomarkers for pain treatment response and prognosis. In different healthcare settings non-pharmacological and bio-psychosocial management of chronic pain have shown effectiveness (Smeeding et al, 2010; Bercovitz et al, 2011;). Wager et al. (2011) show how, in the treatment of pain conditions, promising research is addressing the use of placebo and the characterization of neurobiological (reward responses, opioid system activation, and gray matter density) as well as psychological (expectation, suggestibility, optimism) as correlates of the individual placebo response. As previously discussed, self-confidence, resilience and coping are crucial in determining both short and long term outcomes: these factors question our identity, revealing its vulnerabilities and strengths within specific socio-cultural stereotypes, heuristics and worldviews (Gash 2017). In order to combine these aspects, first, our deepest needs have to be met. Spirituality and religiosity are often regarded as relevant coping factors, in particular for cancer chronic condition (Büssing et al. 2008; 2009; Hebert et al. 2009; Nairn, Merluzzi 2003; Phelps et al. 2009; Ross et al. 2009; Thune-Boyle et al. 2006) and, less, as epilepsy (Giovagnoli 2006).

With Sgalla et al. (2015) we developed a first pilot, observational study where MBSR has shown its feasibility, security and adaptability to patients affected by Interstitial Lung Diseases. These pathologies involve many patterns of pulmonary diseases, accounting for one-third of overall respiratory morbidity, and resulting in death from respiratory failure. The most common idiopathic pulmonary fibrosis corresponds to a chronic, progressive, idiopathic disease, which goes with a duration from diagnosis to time of death of two to three years. These patients suffer from chronic, progressive shortness of breath, fatigue and cough, downgrading the quality of life in its behavioral, cognitive and affective features, which commonly happens in chronic diseases (Ryerson et al. 2011). Clinical conditions involved in this work, share many hardships with idiopathic pulmonary fibrosis, as the anticipatory anxiety connected to fear of these scaring symptoms. A vicious circle then weakens self-confidence generating further disability and compromising quality of life. The interplay of anxious worry and anguishing feelings significantly affects clinical prognosis

predictability. Lacking an appropriate explanatory model and, therefore, a good strategy of management, disease-centered pharmacological therapies have shown poor benefits. Thus, complementary interventions are needed, but the choice to do is unclear since there aren't shared parameters related to complementary interventions outcomes. In these diseases, the impairment of quality of life goes with the progressive symptoms and worsening emotional status. As in cancer, mindfulness is supposed to develop a reduction of fear and avoidance drives, as well as acceptance of diseases (Chambers et al. 2012). With cancer patients, some reviews show encouraging alleviation of psycho-physical suffering after mindfulness interventions (Shennan et al. 2011; Ott et al. 2006). In a similar way, MBSR program enhanced mood, stress and quality of life in asthmatic patients (Pbert 2012), while there has not yet been evidence related to fibrotic lung diseases until this study. The authors show positive effects on overall participants' mood and quality of life, lending support for MBSR feasibility, safety and efficacy.

Epilepsy affects about 1% of the global population. Its complex neurological condition implies a relevant personal, social and economic burden (Ngugi et al., 2010; Olesen et al., 2012) characterized by the permanent threat of an epileptic seizure. Each seizure entails physical, cognitive, psychological and social comorbidities (Fisher et al., 2014; Gaitatzis et al., 2012; Hesdorffer et al., 2012). Up until now, apart from some minor cases where a surgical treatment is possible, there is no cure for this disease (Jobst and Cascino, 2015). Seizures can be suppressed with anti-epileptic drugs, yet one in three patients continue to have seizures despite this treatment (Brodie et al., 2012). People with epilepsy report poor quality of life, depression and anxiety (Baker et al., 1997; Elger et al., 2016; Jacoby et al., 2015; Taylor et al., 2011). Almost half people with epilepsy report that their seizures are triggered by stress or strong emotions (Wassenaar et al., 2014), which can partly be explained by a recently uncovered link between epileptic activity and cortisol levels (van Campen et al., 2015, 2016). Anti-depressant drugs and education programs are the current treatment of epilepsy-related depression and low quality of life, with moderate efficacy (Gandy et al., 2016; May and Pfäfflin, 2002). One-third of incurable epilepsy goes with significant anxiety and

depression, hence with cognitive problems and low quality of life, respect to the two-thirds who can reach seizure control. These comorbidities often constitute a stressful, vicious loop, increasing seizure frequency and anticipatory anxiety. The 54% of inpatients with intractable epilepsy had depression and 19% had suicidal thoughts (Boylan et al. 2004). Boylan et al. found depression to be an influential predictor of quality of life, with respect to other variables as number of antiseizure medications, duration of epilepsy and seizure frequency. In intractable epilepsy, the management of comorbidities is therefore supposed to be as relevant as seizures treatment (Koubeissi 2016). The practice of non-judgmental present-centered awareness, focused on breath and other body sensations and feelings, is supposed to allow a progressive emancipation from past shocking memories (i.e. depressive ruminations) or future anticipations (i.e. anxious worry).

Disentangling affective-emotional retentions and predictions the attachment to beliefs and emotions loses its apparent, actually dysfunctional, control (Koubeissi 2016). Mindfulness is seemingly associated with affect regulation (Ludwig, Kabat-Zinn 2008), showing interesting, yet unclear, neurophysiologic and immune effects (Schutte, Malouff 2014). These and other research outcomes depict mindfulness as a potentially suitable tool in addressing epileptic patients' overall needs. Epileptic patients' lifestyle is a determining factor in influencing the quality of life, as in most chronic illnesses, and mindfulness is supposed to intersect with it too. Fostering patients' present-centeredness and emotional awareness, based on open recognition and non-judgmental acceptation, can be a key factor in determining patient-centered awareness of what in their lifestyle actually optimize their health. This change in attitude can improve overall awareness, often neglected, of the impact and influence that epilepsy has in patient's life. Building up new coping strategies can enhance seizures proper management, based on the recognition and avoidance of seizure triggers, adherence to medication regimens, and acceptance of its side effects (thus strengthening compliance).

Furthermore, three clinical trials (Wood et al., 2017) showed a positive effect of MBIs on epilepsy. A MBI of eight weeks, delivered over the phone or the internet,

reduced depressive symptoms compared to the usual treatment in 53 people with epilepsy and mild depressive symptoms (Thompson et al., 2010). These findings were reproduced with the same program in a second cohort of 118 people (Thompson et al., 2015). Addressing quality of life in epilepsy, the few aforementioned considered trials underscore some potentialities in complementary Mindfulness-based Interventions, but yet the underpinning mechanisms of action are currently unknown. MBIs potentially help reduce the load of mental co-morbidities such as depression and anxiety, improving effective coping strategies with stressors in stress-sensitive epilepsy, allowing the acceptance of the chronic condition per se. A better understanding of the mechanisms of action of MBIs in the context of epilepsy is needed to better increase the efficacy of such interventions.

Chronic diseases can foster the emergence of relevant resources of personal coping strategies and resilience often connected with the spiritual or religious belief system (Abu-Raiya et al. 2015). In fact, advanced cancer patients are inclined to have unmet spiritual needs. U.S. Cancer patients need help in order to better deal with overcoming fears (51%), finding hope (42%), finding meaning in life (40%), finding spiritual resources (39%), or identifying someone to talk to about finding peace of mind (43%), meaning of life (28%), and dying and death (25%) (Moadel et al. 1999). A qualitative research among advanced French patients determined the relevance of needs as reinterpreting life, search for meaning, connect to the world (to loved ones and to oneself), control, vital energy, ambivalence to the future, confrontation with death, relationship to transcendence (Raoul, Rougeron 2007). In hospice cancer patients, family support was the most frequent need (80%), while participating in religious services was the most unmet need (Hampton et al. 2007). Recently Balboni et al (2007) observed that 72% of a sample of advanced cancer patients reported a minimal or absent spiritual support by the medical system, while 47% felt supported minimally or not at all by a religious community. At the same time spiritual support is associated with better quality of life. Other relevant constructs have been observed love and belonging, meaning and purpose, hope and peace, the sacred, appreciation of beauty, morality and ethics, resolution and death (Galek et al. 2005).

At the end of someone's life, the more frequent thematic patterns of spirituality, were spiritual despair (i.e. alienation, loss of self, dissonance), spiritual work (i.e. forgiveness, self-exploration, search for balance), and spiritual well-being (i.e. connection, self-actualization, consonance) (Williams 2006). Attempting to reach an inclusive framework, Büssing and Koenig (2010) changed all previous studies themes, reaching four principal interdependent categories, across patients' spiritual needs: Connection, Peace, Meaning/Purpose, and Transcendence. Each can be respectively attributed to four underlying dimensions: social, emotional, existential, and religious (Figure 3).

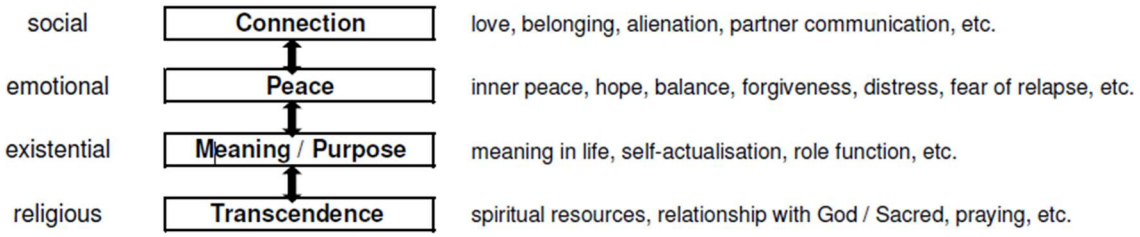


**Figure 3:** Model of spiritual need[9]

Even after these studies, the concerned needs are still problematic and unclear: Schmid-Buchi et al. (2008) reviewed the psychosocial needs of cancer patients and identified physical and treatment-related needs (physical impairment, fatigue, sleep disturbance, side-effects of treatment), psychological and social needs (emotional distress, depression, loss of sense of control, affected body image, impaired social function and relationship), and informational-support needs (management of illness, prognosis, treatment options and side-effects, support groups, complementary therapies). In general, cancer patients could benefit from a spiritual-religious integration, since these dimensions seem somehow able to foster self-esteem, provide a sense of meaning and purpose, give emotional comfort and provide a sense of hope (Büssing et al. 2008; Büssing et al. 2009; Hebert et al. 2009; Nairn, Merluzzi 2003; Phelps et al. 2009; Ross et al. 2009; Thune-Boyle et al. 2006).

Cancer is a disrupting event that destabilizes the personal structure (e.g., Sulik, 2010; Knox 2015a; Knox, 2015b). The diagnosis provokes a person to feel overwhelmed

[9] in Büssing and Koenig (2010)

of existential questions which activate a storm of recurrent thoughts and anxiety (Knox 2015b). The often experienced turmoil can entrap the person in a tortuous existential condition, expressed through radical questions about life's sense, grounding values, reason and interpretation, emotional certainty and uncertainty, the sources of self, understanding, death (Knox 2015a). These dilemmas can become intimidating challenges able to erode and disorient the understanding of reality, personal worldview, and the purpose of life itself. The disorientating experience of "not being at home" (Heidegger, 1962) combined with the experience of a lesion in the self (Sacks, 1984) dissolve the sense of identity coherence and life purpose. Cancer patients question their belief and value systems, exploring profound existential issues often regarding spirituality and religion. Question as "Where is the self that I used to be? How do I get rooted in life again? How can I make sense of all of this?" are recurrent (Knox 2015b). Living the threatening condition of cancer challenges the very socio-cultural, philosophical, spiritual and religious basis. For this same reason, cancer can be considered a moral occasion, rather than a transitory interruption to be overcome (Knox 2015a). Within the tragedy of the illness resides a calling: a quest relative to the mystery of life, the sacred, and therefore, what is principally called the spiritual, or the religious. The shape of that quest is defined by the specific personal psychology, beliefs, sociocultural background and personal history. Grounding on that shape, the disease often becomes an occasion to mobilize his/her moral resources to an exceptional degree (Knox 2015a).

Knox (2015a) describes how in long-term chronic patients, moral and existential support are relevant, particularly when the chronic illness constantly threatens their life. Knox reports that moral support is positively associated with quality of life, while unmet spiritual and existential needs are still usual. As shown by Büssing and Koenig (2010) existential needs can be associated with life dissatisfaction and with anxiety, accordingly with patients' longing for spiritual satisfaction (spiritual struggle Pargament). On the other hand, Büssing et al. (2006; 2011) show that religious needs are positively associated with spiritual well-being and life satisfaction in chronic patients, while existential needs are correlated with a lack of spiritual well-being and

life satisfaction. Adler & Page (2008) observed how generally deficient emotional support can create new, or at least exacerbate preexisting, psychological distress resulting in increased depression and anxiety. Patients' struggle with chronic symptoms can bring about feelings of guilt, loss, sadness, anxiety, diminished self-esteem, loss of role-function, communication problems with family and friends, questions about meaning in life, and religious struggles (Pargament, Raiya 2007). The needs for peace, health and social support are universal human needs and are of special importance to patients with long lasting courses of disease. Mindfulness-based interventions can be of particular importance because they can give the right occasion to patients' to leave the `passive sufferer´ role, becoming actively reconnected with inner meanings and purposes, often reopening an inner dialogue with the Transcendence, consistently with the underlying psychosocial, emotional, cultural and religious backgrounds. As stated by Büssing (2010), who refers to a bio-psychosocial-spiritual model of health care, addressing patients' emotional, social, existential and spiritual needs could promote recovery and quality of life. There is increasing evidence that distinct spiritual/religious practices and convictions/attitudes may have a beneficial effect on health outcomes (Puchalski et al. 2009). Nevertheless, there are several barriers in the health care system that limit an adequate integration of these needs. Addressing them is still not considered a duty of conventional health care, even if there is consensus that holistic care should address the whole patient's existence — physical, psychological, social, and spiritual" (Sulmasy 2002). On the evidence of unmet spiritual-religious needs among chronic patients experiencing life-threatening diseases, Büssing and Koenig (2010) showed how a significant number of patients reported a lack of their recognition by health care professionals. To this aim, Büssing and Koenig provide a bio-psychosocial-spiritual model of care intended to frame a structured support to patients' overall health. In a recent study with US advanced cancer patients, a majority (72 %) reported that their spiritual needs were supported minimally or not at all by the medical system, and 47 % felt supported minimally or not at all by a religious community (Balboni et al. 2007). On the other hand, a medical team and pastoral support was significantly associated with patients' quality of life

(Balboni et al. 2011). At the same time, advanced cancer patients receiving less spiritual care than desired positively correlates with depressive symptoms and negatively correlates with meaning and peace (Pearce et al. 2012).

Even if taking care for patients' spiritual needs seems a decisive factor for an exhaustive care humanization, it is unclear who might be in charge of this noble, as well as thorny, function. Yet, even if spiritual concerns are of relevance for many patients, it may be difficult too for them to express their spiritual needs (even with family) and more so for health care professionals to address them (Murray et a. 2004). Moreover, the current disconnection between individual's beliefs and institutional religiosity across Western secular societies (Fenn, Heriveux-Leger 2007), makes it difficult to explore, assess and recognize patients' religious backgrounds and beliefs, in order to construct new, more inclusive, spiritual care approaches (Büssing et al. 2015). For example, Frick et al. (2006) show how a majority of cancer patients wish for their medical doctor's interest in their spiritual orientation. At the same time Büssing et al. (2009) survey of chronic pain patients revealed that 23% shared their spiritual-religious need with a chaplain/priest, 20% had no partner to talk with, while 37 %, would preferred to talk to their medical doctor about these needs. In addition, health care professionals are not supposed to practice psychological or spiritual support, and might easily face difficult situations for which they are not trained.

Trying to fill this gap, and along with the current lack of a clear definition on the spiritual need itself, Büssing and Koenig (2010) suggested a research and clinical conceptual framework based on four core dimensions of psychosocial and spiritual needs: connection, peace, meaning/purpose, and transcendence. The authors link each category to a respective underlying framework: social, emotional, existential, and religious. According to Field, Cassel (1997), the spiritual need corresponds to the expectation we have to find value, purpose, and meaning, in our life. More specifically, this need can conform to a religious system, but belief systems aimed at giving meaning and purpose to life are present also in people who do not have a precise religious faith and who are not affiliated to a religious organization.

In a nutshell, Büssing and Koenig (2010) define spirituality as a multidimensional construct which is connected to religion, existentialism, and humanism, while Koslander et al. (2009) define it as the need for peace of mind, associated with the wish to overcome despair and guilt, as well as to find existential meaning and purpose in life. Underwood and Teresi (2002) consider it as a personal approach in the search for meaning and in the purpose in life, as a search for a transcendental truth which may include a sense of connectedness with others, nature, and/or the divine. The same core motifs of search and connection have been found by Büssing (2006) and Büssing et al. (2010) including both formal religiosity and personal spiritual views (which go beyond institutional religiosity). This calls into question if these same existential and spiritual needs are interpreted by religious patients in a religious way, while non-religious individuals may interpret the same needs as existential and humanistic. Albeit a theoretical distinction of psychosocial, existential and spiritual needs is possible, yet their interconnection seems unavoidable. In particular, the need for peace, health and social support are universal needs of outstanding importance in people dealing with chronic and even fatal diseases. At the end of one's life, this wish to go back to a peaceful state of completeness can also be viewed as juxtaposed to a condition of suffering pain, distress, uncertainty, daily struggle, and, a looming, threatening death.

Büssing and Koenig (2010) underscored the importance of the "spiritual peace" category for the emotional well-being of patients. In fact, through the Functional Assessment of Chronic Illness Therapy Spiritual Well-Being (the 12-item Spiritual Well-Being Scale, FACIT-Sp-12) this component strongly related to cancer patients' mental health-related quality of life, while the `Meaning′ component was just marginally related to physical and mental health; in contrast, `Faith′ was just marginally (negatively) correlated with mental health (Canada et al. 2008). At the same time, the most inclusive category is "connection" (love, belonging) involving family, friends and social interactions, while the transcendent connection as a religious need was less present. Similarly, praying for one's own concerns was more relevant than praying with someone, someone praying for the patient, and having someone from the community who is engaged in religious services. In general, connecting with others

from the religious community seems less important than the self-realizing aspects and patients' turning to a Divine source for help (Büssing and Koenig 2010).

In order to clarify these outcomes, Büssing et al. validated the Spiritual Needs Questionnaire both in secular and religious contexts, avoiding exclusive religious terminology. The four main subscales are Religious, Inner peace, Existential, Actively giving. After assessing the Spiritual Needs Scale with Korean cancer patients, there emerged five constructs involved in building spiritual need: love and connection, hope and peace, meaning and purpose, acceptance of dying and relationship with God (Yong et al. 2008). Religion was a determinant differentiating factor in this sample, since those without a religious denomination had the lowest sum scores. Assessing the scale in 210 cancer patients (75% women, 25% men; mean age 53.7 ± 12.2 years; 67% chronic pain conditions, 28% cancer, 5% other chronic diseases), Büssing and Koenig (2010) observed strong spiritual needs as Giving Attention and Inner Peace and Connection (Figure 4).

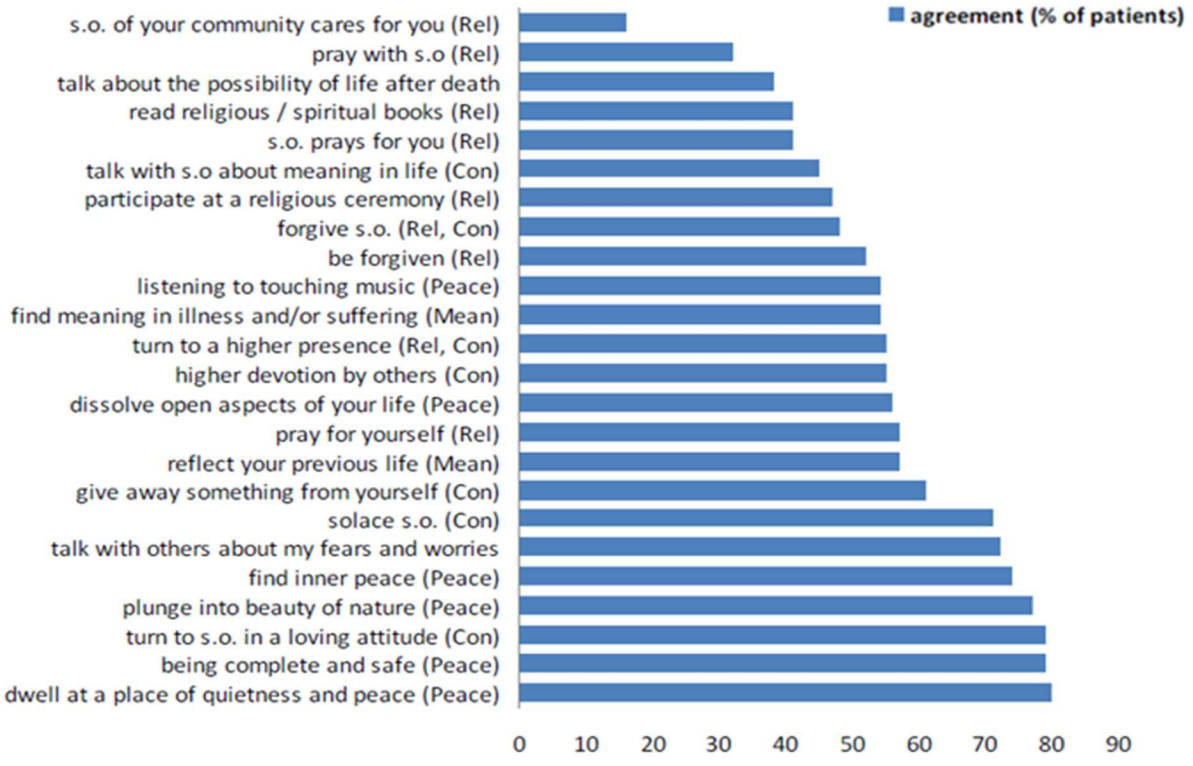


**Figure 4**: Spiritual needs of patients with chronic diseases as measured with the Spiritual Needs Questionnaire[10]. Abbreviations.: Rel(igious), Mean(ing), Peace, Con(nection).

[10] In Büssing, Koenig (2010)

Assessing the same scale with cancer patients, Höker reached a similar outcome, showing a meaningful effect of anxiety on needs for Inner Peace, Existential Needs, and Actively Giving (Höcker 2011). Anxiety seems to be a motivating factor in the quest for spiritual meaning. The impact of patients' view of their disease has an impact on the expressed needs, since both positive and negative interpretations of illness are moderately associated with spiritual needs (Büssing et al. 2011). An intermediate relevance emerged from the Meaning/Purpose category, while needs for Inner Peace had the highest scores, followed by Actively Giving and Existential Needs. Religious Needs had the lowest relevance. Therefore, spiritual need represents a larger category with respect to the formal religious need, and can have a relevant influence on conventional health. A free, spiritual attitude may match the patients' need to overcome the "passive sufferer" role becoming active, self-actualizing, and giving individual. Murray et al. (2004) qualitative results show how the spiritual need was also associated with the need to have a sense of self-esteem, and an active, useful role in life, with family and friends. Overall, Büssing and Koenig (2010) "spiritual need" minimal definition, is the patient's longing for spiritual well-being, yet, its correlation with life satisfaction was weak, indicating a difference between the two needs.

In cancer patients, the needs assessment matches past experiences with their expectancies (Bonevski 2000), often showing the latter to be higher than practicable by medical professionals. In particular, cancer patients show high levels of unmet needs, also in relation to conventional psychosocial and medical communication/information (Girgis et al. 2000; Rainbird et al. 2009). Supportive care with cancer mainly assesses psychological, physical, daily living, and sexuality areas, but the dimension of spiritual and existential needs remains in most cases ignored (Sanson-Fisher et al. 2000).

The clinical implications of the studies presented above should influence the way health professionals treat patients. The evidence of the need of a patient-centered integration in the spiritual domain and in the clinical practice is progressively outstanding (Koenig 2012). Many Religious/Spiritual needs are related to medical illness, in particular of those in terminal patients (Balboni et al. 2007). Unmet spiritual needs can involve both religious and spiritual struggles, and negatively affect health.

Pargament et al. (2001) observed an increased correlation with mortality independent of mental, physical, or social health. Indubitably, both religious and spiritual attitudes influence coping and resilience: Koenig (1998) observed that 90% of patients used religion as coping strategy, and 40% indicated it as a primary coping behavior. Previously, Koenig et al. (1989) observed how poor coping strategies adversely affect medical outcomes, lengthening hospitalization and increasing mortality.

Likewise, religious and spiritual beliefs influence patient's medical decisions, medical treatment and compliance (McCord et al 2004) especially in advanced cancer (Silvestri et al. 2003). Moreover, the lack of a spiritual need integration, increases health care costs which results in consuming huge amounts of medical resources, especially towards the end of a person's life (Balboni et al. 2011). When medical treatment is vain, patient and families may continue asking for medical care, which often can be extremely expensive (Koenig 2012). Begging for a miracle, to agree to hospice palliative cares or to stop life support, can be experienced as a lack of faith or of belief in a divine healing power. Considering openly spirituality could help patients and families in talking about these issues, avoiding high-cost, indefinite, useless treatments.

In order to address spiritual issues in medical care, Koenig (2012) suggests to record a brief spiritual history, especially if patients have serious or chronic illnesses. Koenig argues that it should be the health professional, not the chaplain, in charge for that fast spiritual evaluation ("screening"), in order to activate spiritual or religious care services consistent with the patient's needs. In particular, spiritual and religious beliefs and practices should be explored in connection with illness-coping, taking into account their influence and possible conflict with medical care, and the patient's compliance. In addition, active participation in spiritual communities, its eventual supportiveness, and any other spiritual need, should be recorded (Koenig 2002). That knowledge should be documented and shared with other health professionals and other hospital staff. Currently in the US, only 10% of physicians "often or always" take notes and record these issues (Curlin et al. 2006), therefore the task often is accomplished by nurses or social workers, who normally merely record the formal

religious denomination, whether a chaplain is needed, without talking about personal spiritual history.

The health professional should support the spiritual-religious issue in a non-coercive way, leaving the patient to eventually ask for prayer or meditation in a private setting. Patients should feel free to express their need to do it alone, with a spiritual guide, a chaplain or with a health professional. For example, quietly confirming a prayer with an "amen" at the end, may represent a minimal participation. Any health professionals' lack of belief should not condition the whole process. The possible discomfort discussing these issues can mainly occur if the lack of personal involvement communicates a lack of appreciation for the importance and value of sharing the topic.

Koenig states that the problem could be overcome by training and practice, since nearly 90% of US medical and nursing schools include religious-spiritual curricula (Koenig et al. 2010). Thus, spirituality and health is increasingly addressed in medical and nursing training programs. Teaching health professionals different religious traditions and practice could enhance healthcare quality, taking into account each specific socio-cultural milieu. This knowledge also improves the impact that each religious or spiritual belief and practice can have on the type of care provided, particularly when patients are seriously ill or near death (Koenig 2007).

Finally, identifying spiritual needs should ostensibly enhance both medical outcomes and healthcare costs, since spiritual and religious beliefs and practices are at stake in coping with illness and challenging life disruptions. Chronic illness affects someone's entire life in its physical, functional, emotional, social and spiritual dimensions. Engaging psychosocial and spiritual needs should improve recovery, but it is unclear how to ameliorate the inclusion of these needs. When identified, a new way to support patients' struggle with chronic or fatal illness is given to health care professionals and patients' relatives (Koenig et al. 2012). To ignore the spiritual dimension often represents a failure in addressing the patients' dignity and fundamental rights which are core factors in health care ethics (Koslander et al. 2009). The research is developed in many well-designed clinical and non-clinical studies. The illness condition is usually combined with a certain degree of dissociation from life

(Zaner, 1988; Kleinman, 1988, 2013; Mattingly, 2010, 2012, 2014). But with moral and existential support during medical treatments and in recovery, this condition can unveil vital meanings and enhance and valorize valuable principles. Then, as illness finishes, it also offers the possibility for a radical, authentic quest of life meaning, purpose, values and virtues (Charon, 2006). The illness as a moral, existential, spiritual challenge, encompasses a wider vision where individual resources are mobilized (Zaner, 1993), and resilience is supported. Moving beyond the physical-mental-social-sexual framework, specific moral factors could be activated both in the treatment and in the rehabilitating process. As stated by Charon (2006) this moral component should involve a philosophical approach which shifts the question "*from patient to person, from disease to existence, from functionality to the art of living, from medical care to philosophical care*" (Knox 2015b). Accompanying the intervention with a philosophical, and precisely ethical practice, an innovative approach to cancer could be started. The reconnection of the existential and ethical questions would mirror Heidegger's attitude of being intrinsically the pathway of life itself (1956), instead of looking for its origin, direction or goal: a journey without an end or a destination which is shaped by the way it is covered.

To face a cancer and chemotherapy brings a radical feeling of existential solitude. This can easily turn into a state of social isolation, if not addressed: "*Cancer accentuates the human condition*" (Knox 2015b) not only of the single, but of her whole totality of interconnections. Since sharing the experience of it can interconnect and enrich who is in touch with the patient, its spiritual integration could involve, prior consent, a connection with patients' family or faith community in order to ensure that spiritual needs will be addressed once home. Rehabilitation is defined by the WHO (2001) as "*the use of all means aimed at reducing the impact of disabling and handicapping conditions and at enabling people with disabilities to achieve optimal social integration*". Enabling the achievement and maintenance of the optimal physical, psychological and social functions, rehabilitation aims at realizing independence and self-determination after the release and into long-term cancer survivorship. The spiritual support may help in reconnecting patients with their social and familiar

milieu, since a substantial portion of cancer survivors report a lack of supportive care (Harrison et al., 2009; Merckaert et al., 2010; Thorsen et al., 2011; Holm et al., 2013). Conversely, to regain a social dimension often represents a source of resilience. Thus, the continuity of the spiritual care from the hospital to the community, could reconnect the patient with her spirituality (Koenig 2002). In order to accomplish the whole process, health care professionals and practitioners should be familiar with all the above discussed spiritual dimensions.

In conclusion, the integration of religion, spirituality, and health is rapidly becoming a mainstream theme in healthcare practice and research. Mindfulness-based approaches, are in the eye of that storm. At stake is the health and wellbeing of our society and overall wellbeing. Relying on the reported literature, it is arguable that crossing the ideological (both institutional and individual) barrier, based on implicit, undisputed cultural gospel, can foster health providers' satisfaction in delivering a care which encompasses the whole person which includes her embodied, cognitive, and spiritual dimensions. According to Koenig et al. (2012) and Koenig (2013) a high-quality, inclusive care is needed, highlighting the possibility to integrate spirituality into health care. As will be shown in the discussion, the present work partially corroborate the points addressed by Koenig and Büssing teams. The observed mindfulness programs with cancer and epileptic patients, witnessed a strong individual reconnection with the spiritual background, suggesting a high suitability of minduflness as an inclusive, secular practice. More precisely, in the observed sample, mindfulness seemingly encompasses the observed religious (mostly Christian) and spiritual beliefs.

In the health setting, Buddhism can provide a relevant contribution as well as other religious traditions, cultural practices, and identities (Whitley, 2012). As in many religions, there are various Buddhist sects, and core teachings underlie this diversity (Dalai Lama, Chodron, 2014). Nevertheless, it is worthy to notice that for many Eastern native Buddhist, both meditation and mindfulness are not pivotal in their religious practice. Many Buddhist functions are rather primary, involving ethical systems, collectivity, prayer, rituals, and shared practices. The vast written philosophical

monastic tradition that we summarize in the word "Buddhism" (Kalupahana, 1976), have been built through a long history of syncretic adaptations throughout Asia, interacting with previous religions and animistic or shamanistic traditions (Gellner, 1997; Samuel, 1993; Spiro, 1982).

The contemporary hype of mindfulness meditation and other Buddhist practices and principles in clinical settings, shows a mesh with Western cognitive conception of suffering and healing as flexible aspects of globalized cultures (Kirmayer 2015). The importation of these practices in clinical settings, demonstrates an active effort aimed at the modernization of Buddhist doctrines. Kirmayer claims that mindfulness-based accessible techniques imply the adjustment of meditative practices to clinical needs, and not the contrary. In the meanwhile, we are expecting effective explanations from the contemplative neuroscience field, as a "magic ingredient" independent from the socio-cultural constraints. The question of how its scientific translation could retain its original meaning should involve a refined analysis of sociocultural origins of Buddhism.

Meditation can either be viewed as a decontextualized, aseptic analysis of the mental processes or as a sociocultural construction aimed at disrupting the existential structure of daily life, based on a renewed form of subjectivity (consistently with radical constructivism, von Glaserfeld 1987). The first perspective focuses on the way the mind unveils its nature, while the second concentrates on the way sociocultural frameworks and structures define the self-inquiry through precise practices and ethics.

Regardless, the integration of both perspectives would be preferable, since both meditation practice *per se* and socio-cultural, historical environments, are fundamental in constraining that specific form of life (Kirmayer 2015). This is particularly relevant in the definition of mindfulness-related ethical constraints. Mindfulness can be ethical in variable ways from one form of life to another, since it is interdependent with relative interpretive frameworks, sustained by whole cultural complexities. These backgrounds include a plethora of knowledge and symbols, which in Western society are characterized by individualism, technological progresses, economic global networks, mass migration, consumerism and a sort of capitalistic system which reinforces

individualistic inequalities, often challenging any ethical conception of life (Purser et al. 2016; Kirmayer 2015). The threat of an excessive reduction of meditation to a tool based on individual self-realization and performance is increasingly discussed.

Cognitive sciences and Buddhist studies are then encouraged to seriously estimate the impact of contemplative background knowledge, intentions, and aspirations, since the contemplative challenge, even in its non-ascetic, soft-version may not be realizable in Western culture (Kirmayer 2015). What is suspected to be harmful is a complete misunderstanding of a Buddhist, dis-embedded, practice. Moreover neurophysiological meditation correlates are embedded in their wider relational function, connected with specific cultural histories and embodied enactment (Davis & Vago, 2013). Developing a sensitivity to context-dependent factors could enhance mindfulness meaning involving in not only the Western health paradigm, but its whole metaphysical and theoretical worldview. This means to create a dialogue with Buddhism as a tradition of wisdom.

Hard clinical conditions can allow new insights on the nature of universal suffering, across its different cultural manifestations. Understanding suffering in connection with specific mental habits may permit the emergence of relevant structural invariants, beyond a reductive neurobiological model. Buddhism's start-point is the analysis of human suffering and of its origins, leading to the acknowledgment of mental and affective distortions and reifications based on the conditioning force of existential ignorance. This narration has shown strong and refined philosophical consistency, and could be helpful in our over-medicalization of existential, social and moral suffering (Kirmayer 2004). A well-rooted, engaged and ethical practice could address medical-related suffering, framing the bodily as well the moral, spiritual and religious breakdowns. Moreover, considering self-attachment as a pivotal illusion, many socio-political-economic forces could be reconsidered as secondary sources of useless suffering, based on the violent abuse of needy human beings. Similarly with the Christian tradition, Buddhism is a socially-engaged soteriology which, starting from self-revolution, aspires to ethical social changes (Ambedkar, 2014; Queen, 2013; Senauke, 2013). Engaging these active, spiritual and

religious forces through common practices is expected to both heal individuals' suffering and support compassionate, wise-based actions (Kirmayer 2004).

Sustaining the reconstruction of broken identities within the health-sanitary interactions, the complementary medical treatment gives a chance to foster a radical, human and existential reconnection, based on the shared acceptance of hardships. Filling the gap between specialized medical practices and embracing spiritual individuality through a patient-centered practice, may renew both the subjective experience of chronic illnesses and the social environment (Colombo, Rebughini 2003).

# II

## AN ALTERNATIVE PARADIGM:

## MINDFULNESS BY VARELA'S VIEWPOINT

In the following part the autopoiesis theory will be examined in-depth (Maturana, Varela 1987), since this epistemological model can be very useful in describing and understanding key features of "a process that elevates a system from its limits" (ibidem), together with the praiseworthy integration of first and third person approaches. Varela himself was engaged in the meditative practice of pure presence, based on the experience of minimal mind activity, with the pursuit of a state of pure awareness (Varela, Thompson, Rosch 1991). Instead of paying attention to a specific object, this meditation is supposed to access a profound absorption, needing the wise guide of a master (Trungpa 1984). This kind of absorption is not addressed in mindfulness awareness, which conversely can be seen as its very basis. Almendro, Lopez (2016) define mindfulness broadly as a "non-judgmental complete self-perception which provides being aware, moment by moment, without identifications", but the non-duality of a deeper absorption is hardly definable.

Varela was fully committed to the integration of this practice among scientists, in order to rediscover their own interiority (Varela, Thompson, Rosch 1991). Here, "qualitative" and "quantitative" approaches are not mutually exclusive concepts. Qualitative knowledge develops human potential relying on first person transformational experience of meditation; this knowledge can be mutually enriched with scientific/intellectual conceptual knowledge. But activating the process of inner inquiry can reflect huge differences between the Western scientific paradigm and original texts, both related to Buddhist practices (Grossman, Van Dam 2011) or to yoga ones (Telles et al. 2015). In both approaches we can have subjective misunderstandings. Undoubtedly, far from the Buddhist philosophical background, scientific paradigms can easily suffer from a mystification of objectivity (Almendro, Lopez 2016).

The neurophenomenology program (Varela 1996; Thompson 2004; Lutz, Thompson 2003) addresses mindfulness combining "first person" data (what the subject says of his experience while meditating) with "third person" data obtained from an external measurement. The combination of meditation practices and scientific research can help test theoretical hypotheses (Desbordes, Negi 2013) as subject's occurring qualitative data are combined with third person synchronic records.

**Mindfulness from Varela's viewpoint**

This paragraph provides insight into how the scientific and the meditative commitments are intertwined throughout Varela's work and life. His work was mainly based on self-referential cycles which systematically include the observer in each observation. The inescapable situatedness of observation, description and explanation processes, embodies the researcher, limiting the traditionally praised abstraction in Western scientific and philosophical communities. Varela's work aimed at the dissolution of the juxtaposition of body and mind, spirit and matter. Far from committing to the widespread materialistic framework of mindfulness, Varela's approach is based on the meditative dissolution of dualism (Poletti et al. 2017, in prep).

His spiritual worldview developed as a situated, contextualized construction based on meditative self-referentiality. Varela's work was nestled in the encounter with contemplatives and in the cultivation of an insightful inner vision; with this, he developed a coherent research program. Neurophenomenology situates any description and explanation in the observer and in its process of interpretation. Far from being another scientific or philosophical conceptual abstraction, it embodies the researcher in the meditation practice. The *brute fact* of consciousness dissolves theoretical speculation in its first person exploration, challenging our own identity and implementing first-person approaches in the scientific-academic setting (Varela 1996).

Even if a large amount of theory treats pre-reflective consciousness, enaction, and embodied cognition, abstract knowledge is still the distinctive speculative style in the academic environment (Vörös 2017). But what does mindfulness means to *us*? How far are we willing to renounce our research paradigms? Evaluating associated benefits and

risks, are willing to undergo the existential transformation implied in contemplative practice (Bitbol and Antonova 2016)? These questions address our worldview as Westerns, and are necessary in order to put into a constructive dialogue science, philosophy and Buddhist contemplative tradition, as Varela did. The question of how mindfulness meditation, within a neurophenomenology-inspired approach, could help in difficult life circumstances and in our wider social paradigm, is an open question. Its discussion should produce the introduction of practices within both clinical and scientific communities, since verifying the phenomenology of mindfulness in first person, i.e. in the way it concerns us, can highlight right, grounded research questions.

The increasing Western Buddhist community's concern of Buddhism's secularization based on mindfulness-based approaches (Purser et al., 2016) should be more embedded on meditative, empirical examination of phenomenological self-facticity. More practice and theoretical considerations should address insights of one's self impermanence and inconsistency. Varela's life and work presents an outstanding example of a deep, synergic encounter between theoretical and the meditative practices, enriching dialogues between both Western and Eastern cultures and philosophies. Buddhist adaptation to the Western historical context is not problematic *per se*, i.e. for its uncritical use of Buddhist concepts (Wallace, 2012), but in the constraints the practitioner faces when addressing fundamental, existential questions (Vörös 2017). Hence, Neurophenomenology-inspired approaches can frame new paradigms able to embrace the "perturbation" of Buddhism within Western culture, without losing contact with the original authenticity of Buddhist teachings.

In the following part, Francisco Varela's work will be summarized in order to:

- criticize naïve positivist and materialistic approaches to mindfulness practices, which can suit individualistic purpose as self-improvement (Bitbol 2012);
- show how Varela's analysis of the immune system and of epilepsy could be useful in clinical approaches

Varela can be regarded as a person radically engaged in bridging Western science and epistemology with Buddhism. Even though Varela's work is "*avant-garde*" in the

field of living-systems phenomenology and of the biological roots of knowledge, it still deserves further attention in order to open new epistemic possibilities in approaching Buddhist practices and values. Varela's existential questions and scientific work can be thought of a symmetric.

In the following part I examine his initial studies about self-reference in constitutive nervous and immune cellular networks cycles, in the enaction of sensory-motor experiences, up to Neurophenomenology and its non-regulatory ethical implications. The concepts of autonomy, operational closure, structural coupling, self-organization, and autopoiesis are then compared through graphs in order to clarify their common origin and their differences. Through Varela's development of the research it is possible to identify a constructivist self-reference. This circularity includes two different features: the first limits the possibility of representationalism, the second generates self-organized coherence of the living systems. A constructivist thread runs throughout Varela's theoretical and empirical studies, gathering his scientific knowledge and philosophical and Buddhist meditation practice. His entire work was intertwined with these aspects and in relation to human fragility in wider terms. Varela's work represents an outstanding contribution of the problem of mindfulness integration in Western culture. His epistemological and scientific insights were rooted in his meditative practice and existential commitment, blended with natural deterministic approach, i.e. the necessary identification of conditions able to give refined descriptions of defined phenomena. The principal phenomena explored throughout his life has been consciousness both as a process and as a factual experience. The roots of Varela's work can be found in both self-reference and Buddhist practices. "Self-reference" is the conceptual keystone of autopoietic theory, and after the 1973 Chilean coup d'état and Varela's subsequent interest in Buddhism, self-reference was strengthened and deepened by his meditative practice. The existential commitment was shaped by meditative practice and scientific work, as will be discussed across the following themes:

- the development of autopoiesis as a mechanistic-deterministic self-referential cycle, working with Humberto Maturana;

- the work with cells networks and the development of a post-determinist approach - enaction - related to Buddhist philosophy and based on generative self-reference principle and conditioned co-production;
- the Buddhist inspiration of Varela's phenomenological praxis as self-referential re-direction, throughout both empirical and theoretical works in neurophenomenology (NP);
- Finally, in the last part of his life, the existential engagement with illness, fragility, ethical issues subsequently, opened up questions about death, based on his meditative lived experience.

When Varela joined Humberto Maturana's laboratory as a student, he told him that his research interest was "to understand the status of consciousness in the universe" (personal communication with Michel Bitbol). Maturana introduced him to the research on the frog's visual system, addressing his interest in the biology of perception and cognition. Years later, Varela declared: "I'm a biologist who has been interested in the biological roots of cognitive phenomena" (Varela 1990).

At the beginning of the 70s, the development of autopoiesis theory made Maturana and Varela's work well-known. They started with a question such as "What accounts for the nature of each living system, in its simplest and most general terms?". Maturana and Varela proposed that the answer is to be found in the dynamic and internal organization of living systems, rather than in external stimuli. A living system is characterized by its organizational and operative closure, defined through a circular principle: the reciprocal determination between metabolic processes and biological structures (Figure 5).

This reciprocity shows how top-down causality (from the cellular structures to the local metabolic processes) co-occurs together with a bottom-up causality (from the metabolic processes network to the construction of the physical structures).

In that original framework, cognition mainly occurs by incorporating bottom-up perturbations that trigger internal state transformations (determined by the system's own structure) in an implicit way, finding a top-down match with perceptions,

concepts, categories (as shown by the mismatch brain response in event-related potentials, within predictive coding approaches, Garrido et al. 2009).


**Figure 5:** Reciprocal determination between metabolic processes and biological structures[11]

For the environment to become meaningful for an organism, the organism must be endowed with a hierarchical set of a priori (even though adaptable) structures that can mirror selected aspects of it (Khachouf, Poletti, Pagnoni 2013). The entanglement between the environment and the autopoietic a priori character of the organism is exactly what Varela and Maturana defined as minimal-cognition, as stated in Varela's precept "living is sense-making" (Varela et al. 1991).

As presented in Fig. 6, autopoietic circle implies a codetermination between the structure and the self-organized cell metabolic processes, in an operational closure open to environmental energy perturbations.

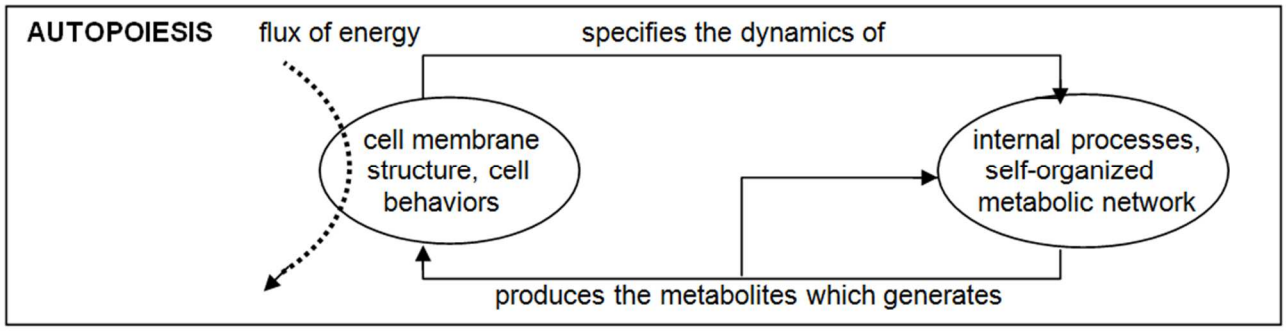


**Figure 6:** Autopoietic circle simplified model

In this closed circle, the living organism stays open to the environmental flux but the logic of its processing is determined by its internal self-organized constraints, rather than by external ones. Hence, autopoiesis defines the living organism as a system able to self-produce and self-stabilize constantly through self-referencing.

[11] redrawn from Maturana & Varela (1987).

The internal recursive reproduction of the physical structures (cellular membranes, DNA molecules, proteins, enzymes), in connection with the metabolic processes regulated by these structures, led Maturana and Varela to perceive biology as an autonomous, iterative, dynamic cycle. That cycle frames the living as a unified system, including cognitive activity. This is then defined as an overlapping self-referential process interdependent on the whole system (Maturana & Varela 1985). In Varela's words, cognition is not scattered in cycles and processes, but exists as a circular unity: "The domain of deformation that the system can be submitted to without losing its identity-organization is the domain of transformation where it exists as a unity" (Varela 1979).

In the 50s-60s, cybernetics defined self-reference as a core, self-stabilizing, circular feedback central to the identity-construction process from bacterial cells up to animals, including their cognitive dimension. Living beings "transform matter in themselves, in such a way that their organization is the product of their operation" (Varela 1979). In accordance with Varela's metaphysical commitment to a non-reductive monism, or "non-reductive non-dualism" (Vörös 2017), self-reference depicts cognitive activity as the intertwined process of interactions with the components that it circularly shapes. Therefore, neither structures nor processes, not even their interaction exist *per se,* but only within their systemic interdependence. In any deterministic causative description, self-reference circularity shapes the emergent living world not "as it is", but as a recursive, unstable, autoreferential construction. The Chilean *coup d'état* in 1973 strongly influenced Varela's life; thus, raising radical questions in his mind, and consequently paving the way to his entry in Buddhist practice. At that time, themes of unstable-worlds and identity-breakdowns appeared in his description of awareness as a basic construction of lived-worlds:

"The coup d'état was very important and had the effect of shaking me out of the idea of a stable, very well constructed and rational world. Just a blast of a little bubble. Just taught me that I really was so ignorant. Until then, I was following a well-directed plan: I was going to do science in Chile and to build the socialist world in my country, and then suddenly BANG, I was left without direction, with just a question: What is

the sense of my life?" (quotation in Reichle, 2005). From that point on, Varela started to focus on two research themes:

- Tibetan Buddhist meditation practice (Reichle, 2011), enriching his knowledge of notions and intuitions derived from Buddhist Philosophy such as the co-dependent origination, Sanskrit *pratytia samutpada*);
- Applying the self-reference-model to cellular-networks and to human cognition.

From the mid-1980s, Varela intertwined meditation practice with science and Buddhism. He and Adam Engle promoted seminars where cognitive scientists and the Dalai Lama met for the first time, giving rise in 1987 to the Mind & Life Institute. Searching for an opportunity to deepen the phenomenology of biological systems, he moved to Paris, where he first focused on cellular networks. Again, self-reference modelled his approach to the nervous system along with his own meditative practice.

Bitbol follows the same engagement, writing one year after Varela's death: "we should go back to the experiential realm from which the very dichotomy between subjectivity and objectivity arises, and then establish within it a system of mutual constraints" (Bitbol 2002; 2012). Varela created a model of a cellular networks linked by electric signals that tuned into concordant frequencies, discovering the temporary synchronization of distant cell assemblies. These unstable assemblies, circularly adjust in line with experiential informational feedback (Varela 1995). Each state of the system influences and relies on its auto-regulative quality, which is embedded in consciousness. That emergent "unity" gathers the different perceptions allowing the overall assimilation of internal and external perturbations.

Absorbing each perturbation, the cloud of rhythms and oscillations never completely loses its coherence, preserving the organization that belongs to each specific cellular network. The same is observed in the collective behaviour of a social insect colony, where a complex network made of rapid signal-interactions constitutes a sophisticated organization with its own unitary identity. That "collective mind" is able to distinguish and preserve Self-identity (Ferrari et al., 2006). The same function

applies to the immune system, as a cognitive factor able to determine and keep the molecular identity of an organism.

Varela and his colleagues hypothesized that the immune network (cellular and humoral functions, antibodies, hormonal signals in connection with the nervous system activity) is not involved in the identification and destruction of the non-Self molecules: "Fundamentally the immunity system does not distinguish, and cannot distinguish the Self from the non-Self" (Varela 1989). As a matter of fact, many antibodies work against Self-molecules, in minuscule concentrations. The immune system constantly samples the whole pool of body-molecules. This process is not a reaction against antigens, but rather constitutes a positive task, defining the molecular identity of the body in which all is Self. Of course, when too many antigens arrive too quickly, the immune system occasionally organizes a defence, e.g. activating inflammatory responses produced by quasi-automatic processes, until the system is rebalanced. But these processes are peripheral to the whole network. The main task of the network is to re-establish the flexible molecular systemic identity through the constant detection and destruction of tumour cells, viruses, and antigens. That process does not defend the borders of the Self, but safeguards its inherent malleability, in order to adjust to contingent environmental conditions (Varela & Coutinho 1991).

Starting from the single cells, through cell systems, up to organs like the brain, Varela's work combined biology with cognition as an embodied process. Without considering the brain from a functional localization perspective (allocating processes to specific anatomical areas) he embedded the mental within its embodied, environmental entanglements. In Varela's words: "The mind is not in the head" (Varela, 1999b). In the early 1990s this led to the enactive view of cognition (Varela, Thompson & Rosch 1991), which construes the latter as a process arising from a threefold interdependence:

a. the co-determination between nervous cells structures and their self-referential organization;

b. the coupled co-determination between the sensory-perceptive cycle and the motor-movement cycle, involving the specific phenomenology of all perception-movement possibilities and its constraints;
c. the informational co-determination between organism and environment, based on the energetic, interactive exchange which shapes the experience of the surroundings experienced by each living organism-identity (the ecological niche, or Ger. *Umwelt*).

The enactive cycle co-determines distributed and assembled realities such as the body, the identity and the world (see Fig. 7).

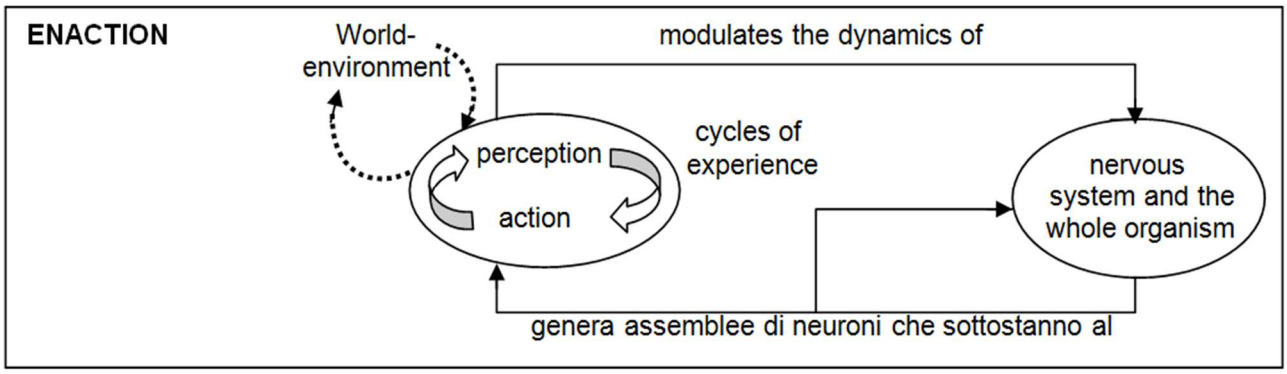


**Figure 7:** Enactive co-determinative cycle

The unstable coherence of identity emerges from sensory-motor cycles which are circularly regulated by feedback signals. In one of Francisco's well-known examples, France emerges from the structural and sensory-motor couplings, as well as linguistic habits of the French; at the same time "France" is modulating the French with boundaries, laws and a national spirit, a personal disposition and a culture-specific inclination. Metaphors aside, both the collective and the individual mind "neither exists nor does not exist" (Varela 1999), since pre-reflective self-consciousness relies on self-*relative* information rather than on self-*specific* information (Ruby & Legrand 2007). Self-relative information is not relative to the self, but about the world relative to the self/body (Legrand 2007). The three co-determinations are represented in Fig. 8.

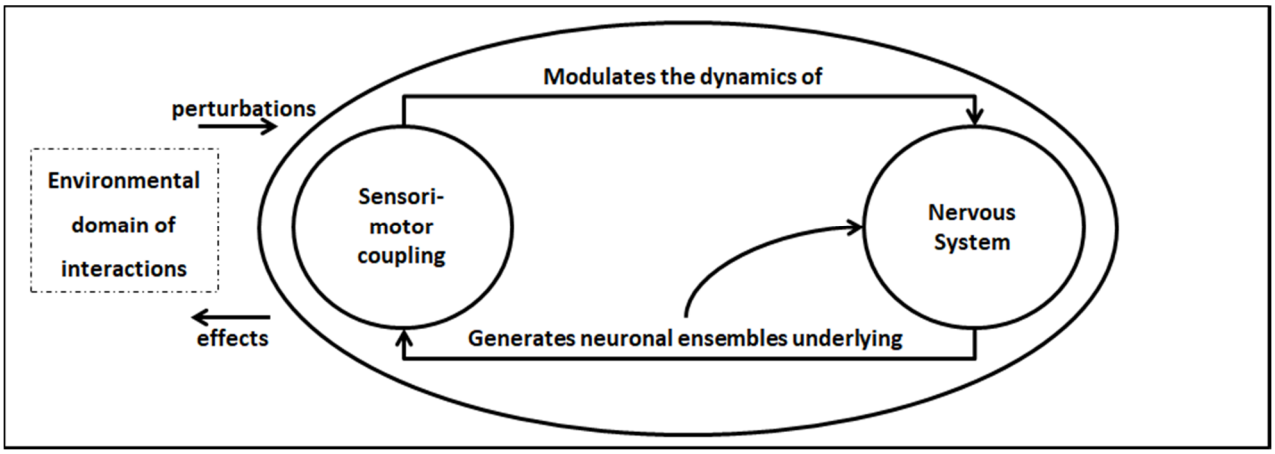


**Figure 8:** Co-determination of body-self and environment[12]

None of these self-referential loops (between elements like structure and organization, cell and cells' networks, feeling and acting, organism identity and environment) cannot be fixed because it exists only in relation with the overall interdependence of the system. In each loop, elements are distinguishable only with approximation from the whole and are inseparable from each other. Varela's empirical and theoretical studies were influenced by Buddhist philosophy and meditative practice. Associating immunology and neuroscience research to unstable associations between distant cell assemblies, he was driven not by the model of mechanistic feedbacks and loops, but by his first-person, meditative and phenomenological investigations. In fact, Buddhism allowed him to experience mental states as transient phenomena, devoid of stable nature, integrated into a unity of experience, highly entangled with the environmental constraints and this led looking for a similar dynamic in cell networks (see figure 9).

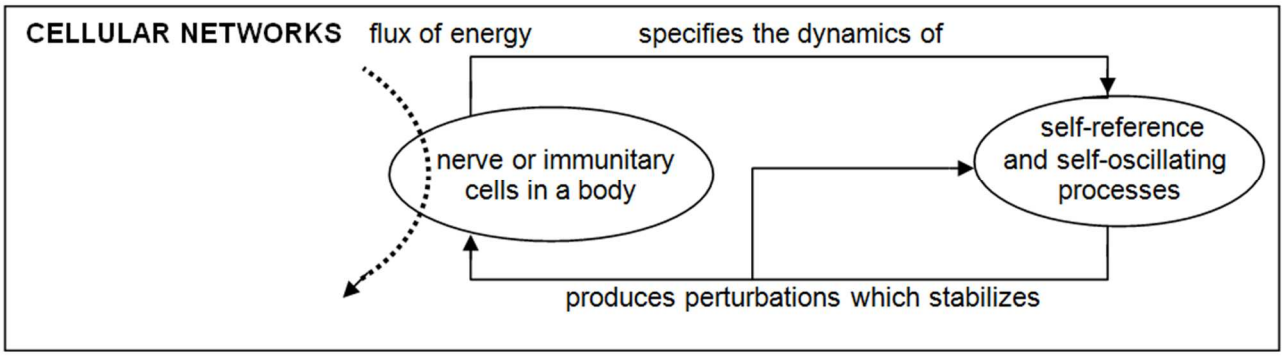


**Figure 9:** Self-referential cellular networks

[12] in Rudrauf et al. (2003)

Likewise, enaction theory is far from being an extension of cybernetics ideas but is rooted in Varela's meditation and philosophical background. Buddhist philosopher Nagarjuna (Garfield 1995) rejects the idea that entities have their own "intrinsic nature", their "own-being"(Sanskrit *svabhava*). In this way, he denies that phenomena have either substantial existence or absolute non-existence, placing them in the mid-way between eternal existence and annihilation. However, if phenomena lack "intrinsic nature", then how do they constitute themselves? Nagarjuna calls this process "dependent origination" (San. *pratitya samutpada*): its main implication is that all phenomena are in reciprocal dependence and it is not possible to refer to them as independent entities interacting with each other because they do not exist *per se* (Harvey 2012). In this sense, "subject" and "object" have significance only when they are in relation to each other (Garfield 1995). For example, just as "short" derives its meaning from its relation with "long". Varela showed the illusory distinction between a real world and a real subject and between realism (i.e. the ontological primacy of a real world) and idealism (i.e. the ontological primacy of a subjective self which transcends the phenomenal world). At any time, they exist only as enacted emergence from recurrent, body-situated cycles (Bitbol 2012).

Nevertheless, Varela does not deny the experience of being an "I", a subject. The ongoing activity of embodied self-referential cycles, just produces a "functional identity", in whose phenomenological character it persists: "This global level of me as an individual appearing in our mind-related interactions is a mode of existence about which you cannot say it doesn't exist ('Francisco doesn't exist')" (Rudrauf et al., 2003). The experienced sense of "me" is not opposed in the Buddhist doctrine of no-self (San. *anatman*) just as Nagarjuna does not deny the simple existence of the phenomenon of "I" (Harvey 2012). Our experience is "participated" with a sense "of something being at stake" for someone. Plausibly Varela experienced that undoubted presence during his meditative practice: our functional virtual identity is a phenomenological evidence, if not, who realizes or doubts that there is no self-identity? (Bertossa et al., 2004).

The importance of this enacted and embodied experience of "me" seems to provide a continuation to Heidegger's *Dasein*: being-*there*, at the exact point where the

ongoing experience is happening (Varela, 1991), and being *thrown* in a specific condition: "We are taken in a cognitive system, from which we can neither escape, nor choose where it begins or how it works" (Varela 1988). Even if blending the enacted constructive-generative aspect, his undeniable immediacy and in its ontological constraints, no stable "transcendental ego" arises in Varela's work. Indeed, thanks to the lack of own-subsistence, living organisms can transform and efficiently adjust to new challenges: the evolution process belongs to the ongoing transformation of the enacted-organism, i.e. the assembly of its living, roughly functional world, far from any objective-reality principle (Varela, Thompson, Rosch, 1991).

The irrefutable "I-experience" is thrown into a specific and meaningless condition, continuously moving forward: "Organisms, those fascinating networks of selfless selves, no more, nor less than open-ended, multi-level circular existences, always driven by the lack of significance they engender by asserting their presence" (ibidem). The arising of the enacted constructive nature of the sense of "me", and its peculiar and undeniable immediacy, are driven by, and mixed with, its *thrown* character, giving an irreducible push to live, to act, to feel and to understand.

How can the mind be scientifically inspected without losing its subjective character? In the last part of his life (1995-2001), Varela focused on developing a new scientific practice of reintroducing qualitative experiences to laboratory methods. This effort inspired students and researchers who were interested in embedding qualitative experiences in a coherent neuroscientific approach, thus intertwining phenomenology with cognitive sciences. The NP project matches descriptive third-person data with detailed, reliable data obtained by the analysis of first-person experience (Petitmengin et al. 2017) through generative knowledge production grounded on functional integration of both mental level and the functional-physiological level (Varela 1996) as in Fig. 10. NP addresses the "hard problem" by putting aside the habit of "essentialism", i.e. the attempt to define what consciousness *really* is (emergence from the matter, information, spirit, etc...). Any description of it as something particular (e.g. matter, energy, information, spiritual substance, etc...), should imply a "magic ingredient" able to produce not only its *qualia* but its very existence.

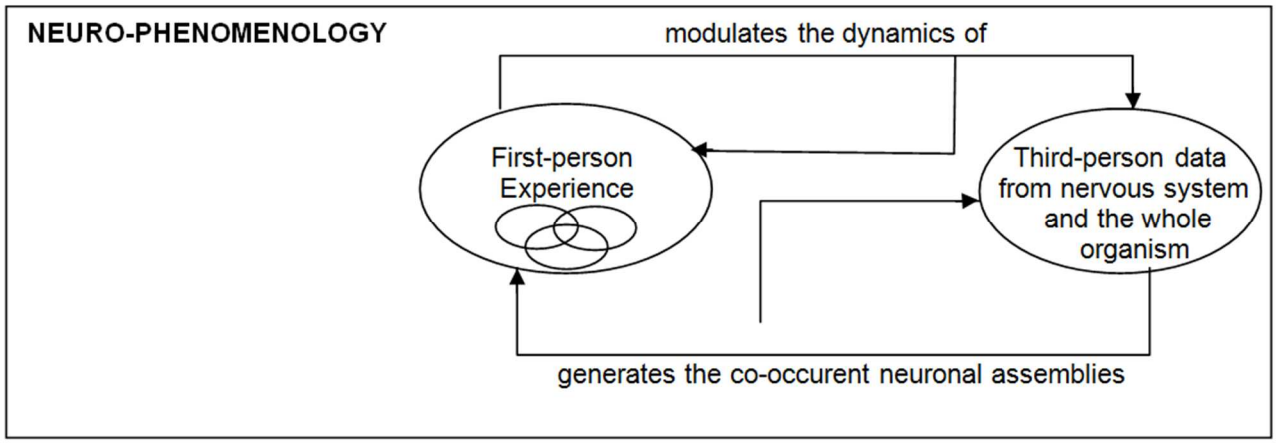


**Figure 10:** Neurophenomenology first and third person interplay

Varela unhinged this paradigm suggesting the suspension of any definition and the activation of a methodology coherent with both the qualitative phenomena and the hard sciences. Varela was looking for evidence of a single act of perception, based on the first-person phenomenological account. As previously stated, Buddhist meditation inspired him to look for transient, unstable, distributed and integrated neurodynamics in the very instant of a recognition of present time (Varela 1995). Conversely, Varela believed that these synchronizations are driven by these qualitative integrations. These third-person time-space unities (in the order of milliseconds) were assumed to go with first-person recognition-moments in subjective time (in the order of seconds) for the production of the ongoing, lived "cognitive present" (see Fig. 11). Then, the awareness of this succession of unified cognitive moments has been fostered by internal-awareness training, i.e. meditation.

In empirical works, Varela and collaborators investigated the emergence of moments of recognition. They observed that the moment of recognition of a presented shape (e.g. the Mooney faces turned upside down) is preceded by around 250 milliseconds of suspension, with no synchronization of neurons firing. In the instant of recognition, EEG measures revealed long-range phase locking, occurring especially in the gamma band (30-80 Hertz). This transient phase-locking is distributed in distant areas and is scattered at 400ms after the presentation, "allowing" the shift to a new cognitive moment.

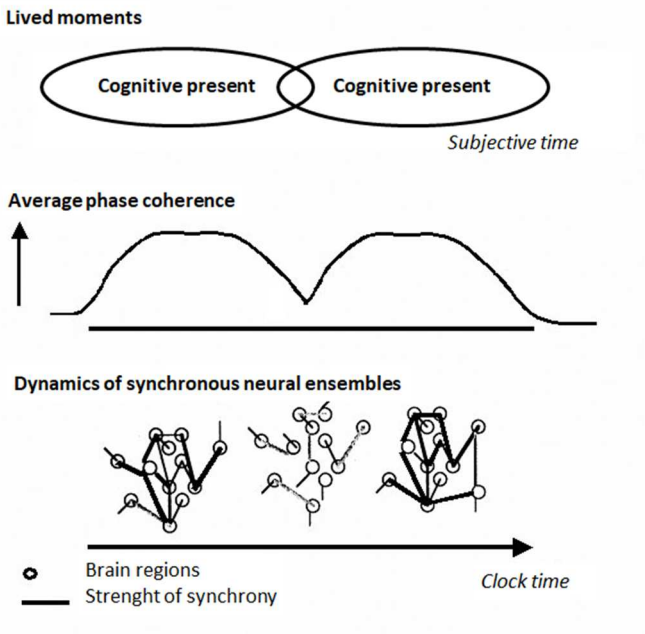


**Figure 11:** Cognitive present[13]

Finally, at 600-700 milliseconds, a synchronization re-occurred between distant cell assemblies, during the motor response – i.e. button pressing by the experimental subject to signal image identification (Rodriguez et al. 1999). Among subjects unable to recognize the shape, no synchronizations or de-synchronizations were detected. Again, these transitory "shadows of perception", as they were called by Varela, were investigated under the inspiration of Buddhist classification of subtle moments of mental activity enumerated in the Buddhist psychology texts, as the *Abhidharma* (Guenther and Kawamura, 1975).

The following work can be considered as another study centred on the importance of the Buddhist mental factors (San. *cetanā*). Two groups of subjects preceding a stereogram identification task were split based on the description of their mental disposition towards the incoming task: one group of subjects declared they felt sufficiently attentive and ready, a second group felt "unprepared and distracted". In the first group, some phase-synchronizations appeared even before the stimulus presentation, showing quick transitory neuronal assemblies that, at the moment of stimulus recognition, became more durable and stable. The subjects reported an associated sensation of stability and continuity with respect to the previous instants.

[13] in Rudrauf et al. (2003)

The second group did not show unified cognitive moments before the stimulus presentation, and only weak transitory synchronization configurations were detected after the presentation – as unsuccessful attempts of recognition; this process is linked to a feeling of surprise reported by the "distracted" subjects, a clear discontinuity with the previous moments (Lutz et al., 2002).

After Varela's death, a study on epilepsy detected some neuronal activations which predicted the impending seizures many hours before. Subjects were trained to recognize the peculiar phenomenology of these early, subtle signs. Thanks to the early recognition of the incoming seizure, many of them could control the intensity of the seizure, learning to stabilize specific mental states and to inhibit or control the impending epileptic seizures (Le Van Quyen, Petitmengin, 2002). This study showed how epilepsy can be approached matching the knowledge of its physiological substrate with its peculiar, lived phenomenology. Self-referring attention on the instability, variability, and transience of the associated neuro-phenomenological states, circularly enabled their transformation. It is arguable that a reflective particular strategy relied on a pre-reflective consciousness is the very basic possibility to refer attention to itself (Legrand 2007) in order to recognize cognitive and physiological, subtle qualities within their intentional character (Lutz and Thompson, 2003). "How are we to understand the very moment of being-there when something concrete and specific shows up?" (Varela 1995). Francisco Varela dealt with this question throughout the last part of his life. The following conditions were required to explore the experience with a phenomenological, analytic attitude:

a. to overcome the naïve introspectionism, i.e. the unreliable character of experiences as private facts;

b. to improve training methods to access the experience through the development of specific descriptive competencies, thus enabling work within a self-referential, co-emergentist framework;

c. to attain reliable phenomenological data, in order to catch the "private experience" as an intersubjectively shareable knowledge.

The second point implies a particular practice, partially overlapping with the Occidental Phenomenology studied by Varela himself; from when he was young reading mainly Husserl and Merleau-Ponty. However, these highly talented philosophers of subjective experiential invariants delivered accurate descriptions, but provided little practical indications on *how* to attain them. Varela realized that Buddhist contemplative practices provided these instructions, and moreover they share with Phenomenology a specific, disciplined attention to first person examination. As a matter of fact, both require a profound transformation of the researcher's self, involving self-referentiality in order to develop self-awareness, and entail ethical and existential implications.

To bridge the first and third person, Varela matched contemplative Buddhist practices and introduced the relevance of a highly trained expert guide (the "second person"), derived from the meditation teacher, who has a dialogue with the practitioner encouraging and sustaining a reliable descriptive process. The mastery attained through a long-term personal practice helps the neophyte decompose the experience and explain its contents and structural characteristics, bringing back attention to the very moment of experience (Petitmengin et al. 2017). The guide relates with the apprentice in an empathic way, like a music teacher, athletic or artistic master. Supporting the apprentice's feelings "from the within" the master insightfully uses her own past challenges, infusing her know-how and gaining trustworthiness. The relevance given to the second-person guide enhances the training concreteness as primary to any pursued philosophical or theoretical perspective. Varela distinguishes three gestures or moments necessary to become aware (Depraz et al. 2000; Depraz et al., 2003), as presented in Fig. 12 below.

The first gesture is suspension, present in both Phenomenology and the Buddhist tradition: an essential step enabling the subject to "put in brackets" judgments, habits, schemes, frameworks, in order to slow down the succession of mnemonic association, to expand attention and interact with phenomena "for the first time" (as in the Husserlian *epoché*).

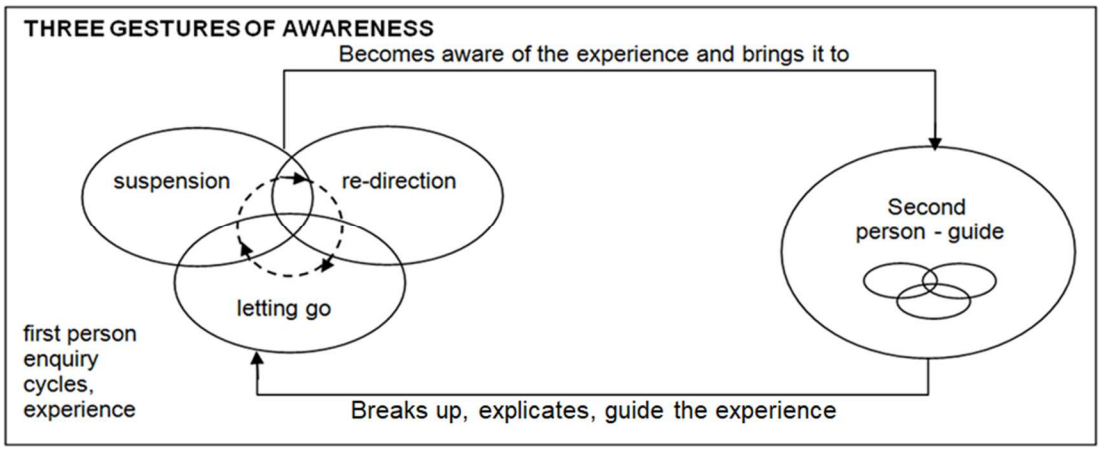


**Figure 12:** Three gestures of awareness

As Varela learned during his Buddhist practice, the apprentice learns to observe thoughts and listen deeply to feelings, cultivating mental presence with a calm attitude (San. *Samatha*). In these phases, the body plays a central role: the mind becomes "influenced" by the immobility of the body and by the postural balance, transforming its state and allowing the experience to stand out (Bertossa and Ferrari, 2006). This suspension at times happens spontaneously, e.g. after shocking experiences that suddenly interrupt the normal mind flow.

The second gesture is re-direction, that is, lived self-reference. Again, Varela was trained in this gesture following the Dzogchen Buddhist tradition, but this gesture is also present in Phenomenology (transcendental reduction) and in the Hindu tradition. He describes it as the self-referential shift from the contents of consciousness to consciousness itself; it's the lived act of becoming aware of the intentionality of consciousness, more than a theoretical inclination (Varela 1996). This shift is necessary in order to avoid an attachment to the first gesture and also to stabilize a suspended attention (Scharmer, 2000).

With this self-referential attitude, the apprentice clears up the intentional bond within which each "mind content" is enacted. In this way, the experience becomes brightly aware of the contents that nourish our narratives and drive our actions and perceptions. This apparently simple exercise which started in the United States in the late 70s guided the whole meditative practice of Francisco Varela. He initially studied along with Keun-Tshen Goba, with the meditation master Chögyam Trungpa

Rinpoche, founder of Vajradhatu and Shambhala Training, and later with Tulku Urgyen Rinpoche, a Nepalese meditation master of higher tantras who offered him "pointing out instructions" (Reichle, 2005) in order to realize the "naturalness of mind".

The third gesture is letting go. It is about the cultivation of an open attitude free from the inclination of "conceptual grasping", that pushes us to dive into our thoughts. It consists in recognizing the attitude itself and letting go of the attachment to it. Varela was aware that if this gesture is not achieved, the apprentice tends to give substance ("own-nature") to the intentional act, transforming it in an idealistic subject (Scharmer, 2000). In this sense, the let-go gesture is a trademark of Buddhist meditation practice. It is often associated with the liberation from fixed models and from belief-grasping. Recognizing each cognitive act, the "let go" practice is the negative, gentle strength to accept events and collateral automatic reactions as they come to us, allowing them to fall down in a moment of abandonment (Bertossa and Ferrari, 2005). These three gestures take place within the dialogue between first and second person: the latter encourages the deepening of bare suspension and of impressive re-direction, pointing out the neglected sides of the whole process, and opening new opportunities for the exercise of being present.

In all his work, Varela consistently highlighted that the living organism is able to assimilate and process environmental perturbations, due to the "un-fixedness" of his structure and organization. It can rebalance the transitory disruption of his internal organization, often with creative and unpredictable outcomes. Each adjustment tracks a path that, only through a diachronic description and on a larger scale, can be seen as "historical evolution" between an organism (subject) and a world (object). This ongoing synchronic process "co-evolves" with the circular experiences of actions and perception.

In humans and animals, an arduous challenging event (breakdown) is associated with increased vigilance-alertness (arousal) and uncertain suspension (anxiety). After a variable amount of time, a newly viable narration of world-identity arises and occupies the scene. Otherwise, the attempt to counterbalance the perturbation can be

dysfunctional such as self-immune diseases, neoplasia, and psychopathology. For example, we believe that neurophenomenology could renew neuroscientific research in schizophrenia, readapting its framing as a "radical alteration of reality" (Buckner et al., 2008). These theoretical findings have been permeated by a strong existential commitment, during Varela's last years and during his long-lasting illness. The "virtual dimension" of the living system, of his self-produced and self-referential world-identity, was a matter of fact for Francisco Varela: speaking about himself he called it "fragile" (Scharmer, 2000), not only through time but also within the present moment. Self-fragility involves two relevant implications: on the one hand, it guarantees the possibility to transform; by losing the solid structures and keeping its functional, autopoietic organization, any organism can adapt to any perturbation and consequently learn, grow and renew. On the other hand, the lack of self-stability offers the experience its peculiar character of fluctuation. The constant, co-emergent process of living is self-referentially pushed by the vital effort of keeping identity coherence, i.e., keeping the self as similar as possible to itself (see Fig. 7).

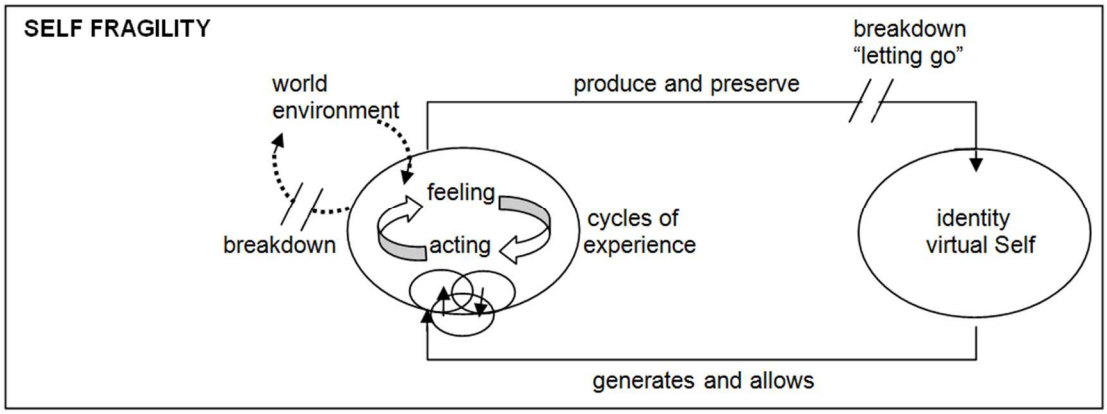


**Figure 13:** Self-fragility

Following the Buddhist approach, Francisco Varela grappled with the relevant question of how would it be possible to realize our own fragility if we are always "immersed" in it. In all his work, including with respect to fragility, Varela avoided any idealistic position, i.e. the idea that we realize it by means of comparison with an eternal, stable substance or consciousness (as, for example, the spirit). He based all his reflections on the immanent experience, as given within its phenomenological process.

He argued that as soon as this process loses its coherence, a sudden realization of our own fragility can arise, accompanied by the stunning surprise of being-there. At the same time, the unavailability of the usual meanings we use to decode the world may pervade us with a sense of 'thrownness', leaving the constructive process of our own identity unknown and mysterious. These astonishing "breakdowns" (Rudrauf et al., 2003) can reveal the function of our meaning-systems which constitute the habitual "obviousness" of the world and of ourselves (Armezzani 2009).

The breakdown and the consequent reorganization of this process can be scientifically examined in terms of de-synchronization and new cell assembly phase-locking. But, when directly involved, Varela suggests to approach those threats by cultivating awareness through the meditative practice. In particular, the letting-go gesture is a capacity that human beings have all the time, and is indicated as crucial in emancipating from the identity-centred narrative, since the perceived virtual character of the self makes our attachment to it senseless. This gesture "invokes the virtuality of the self, just putting it spontaneously on the table" (in Scharmer, 2000). At the same time, Varela states that conditions as sickness, danger, or deep disappointment, can force that gesture of "letting it be" (in Scharmer, 2000). Our fragility comes to light thanks to the constant breakdowns that disrupt our interpretation of the world and the sense of our presence "in it". As we are going through moments of bewilderment, our interpreting dynamic declares an essential arbitrariness. However, where someone can assume a nihilistic perspective ("all is fragility, loss, arbitrariness, and breakdown of narratives and meanings"), Varela based ethics on fragility (in Scharmer, 2000):

> *"What is it to have a good life? A life of wisdom is to be constantly engaged in that letting go and letting the virtuality or the fragility of the self-manifest itself".*

Fragility, when consciously self-referenced, gives rise to an ethical "know-how," which enables us to act spontaneously, recognizing the good as a situated opportunity which does not need a predetermined representation, an a priori "know-what" structured in moral laws or theories (Varela 1999).

This know-how emerges from the clear perception of the Self as something not isolated from the world and from others, i.e. as an existential bond that renders useless any self-defence or reaction to aggression from other selves. Francisco Varela's illness offered him a radical experience of his fragility and of the arbitrariness of any Self-affirmation (Varela 2001). For him, any theoretical foundation, that is the attempt to fix laws through descriptive representations that ignore the ongoing self-referent process of life, was no longer possible: in Biology, in Cognitive Sciences, in Philosophy of Mind, or in Ethics. Consistent with his lifestyle, Varela embodied knowledge with ethics: every day's life and its constant exploration through a disciplined, acquainted self-reference and self-transformation, does not grant us permission to be isolated in our "selves." In fact, it shows us that there is no intrinsic Self to defend and that a constant opportunity to act spontaneously is offered, at each moment. Ethics become the disenchanted, legitimate connection with this fragility. The co-emergent identities constantly rise and dissolve.

# III

## THE EXPLORED THEMES,

## THROUGH A PHENOMENOLOGICAL APPROACH

The following areas describe the principal themes proposed during the semi-structured interviews. Participants were invited to answer the following topics through precise questions, even if their order occasionally changed in function of the connections made by the interviewees.

### 1. Worldviews and spiritual hypotheses

During the interview, each participant was invited to express, thinking loudly, his/her perspectives on specific philosophical topics. In particular, the interviewee was invited to explore the six philosophical domains which define a philosophical discipline. In order to answer to each question, the participant had to take into consideration his or her worldview.

Since the topic is clearly quite challenging, the interviewee was often initially impressed by its complexity. But, interestingly, they often admitted to being surprised by their own answers, since they never posed the question to themselves, explicitly. However, a plethora of information was stated by each participant on each topic.

The term worldview (or *Weltanschauung* in German) has been used in philosophy, theology, anthropology, or in education, without a precise definition: Kant, Hegel, Kierkegaard, Dilthey, Husserl, Jaspers, Heidegger gave different definitions. As stated by Vidàl (2008), contemporary, scientific paradigm suffers from a lack of an integrative, comprehensive worldview; thereby, being split in different domains with different epistemologies and languages. That distance is particularly meaningful if we consider the difference between human sciences and exact sciences. The term "worldview" somehow emphasizes a personal and historical standpoint, involving the constraints of a *Zeitgeist*, i.e. the way to construct worldviews in a certain *époque*, and the structural relativism of the thinker, that contrasts with its universal

validity. But the worldview is *per se* rooted in rationality and thus aims at the highest universal validity: as a matter of fact, philosophy *is* the construction of a licit worldview. According to Vidàl (2008) the appropriate construction of a worldview is the highest manifestation of philosophy, but somehow everybody builds an implicit, often explanatory, theory of the world, grounding on their beliefs system.

Stephen Pepper (1942) epistemological model has been discussed in some psychological theoretical frameworks, as cross-cultural psychology, behavioral psychology and developmental psychology. Pepper discussed the error of mysticism, animism and logical positivism, highlighting the indetermination of the real philosophical object, i.e. the pervasive character of interpretative process which shapes epistemology. Lacking the possibility of any pure, objective fact, Pepper depicts objectivity itself as a myth. In order to build minimal adequate conceptual systems or world hypotheses, a "metaphor method" has to be developed to reach a "good" interpretive understanding. The nature of this understanding can oscillate between skepticism and dogmatism as two problematic, complementary, weak positions. While relative skepticism beliefs are suspended until an explanation is provided, naïve skepticism put individuals in a dogmatist attitude where everything is always doubtable. The dogmatist beliefs system "exceeds his cognitive grounds for belief" (ibidem). In Pepper's view, the weakness of both naïve dogmatism and skepticism relies on their extremism (Fig. 14), while knowledge about the world should reside between "common sense" and "refined knowledge".


**Figure 14:** Example of two polarities of meta-belief

These two worldviews examples of Dogmatism and Skepticism are characterized by a meta-belief system: the former by beliefs assumed for granted, i.e. relying on their

internal coherence, the latter by beliefs which are not considered as intrinsically valid, in comparison to other beliefs which can invalidate them (external coherence). There is a complementary balance between common sense and refined knowledge: being the former omnipresent and pervasive, it gives a tenacious sense of certainty. But once discussed and scrutinized it automatically moves into a form of refined knowledge. Both philosophy of science and science itself are at stake in this movement, building criteria which constitutes 'evidence' shaped by the rules which regulate how what is known has to be known. In order to support reliable evidence, in his book *World Hypotheses* (1942), Pepper described four criteria able to define root metaphors, namely relatively adequate worldviews which can offer consistent philosophical accounts. These principal world explanatory hypotheses are:

1. Mechanist Metaphor: cause-effect determinism connects each parts with the whole;
2. Formist Metaphor: labels create systems of labels which explain the world through acceptable, taxonomic descriptions and classifications;
3. Organicist Metaphor: organic systems emerge as more than the sum of their interconnected parts.
4. Contextualist Metaphor: historical, contextualized relativism define, through their development, specific occurrences and circumstances.

This scheme echoes Miller's one, in the respective order: Reductionism, Schematism, Gnosticism and Romanticism. But both these models are too strict to catch the peculiarity of the invariant character of subjective sense-making, which, in order to construct subjective reality, *has to be* hidden or implicit.

Following the Buddhist construction of suffering, deep-rooted beliefs are persistently at work in building our inherently self. Eminently, self-related core beliefs or nuclear constructs are prone to go unrecognized, still influencing the construction of reality (Wells 2007). According to Buddhist theory, Shonin et al. (2016) define "ontological addiction" as a connection with that form of core beliefs which shape predominant cognitive and behavioral response patterns, thus determining karmic

sediments. In Buddhist and others traditions, such as stoicism, some courage is needed to acknowledge existential meaninglessness unto itself (Norton, Weiss 2009). To recognize the illusory character of reality construction, and hence the illusoriness of self-attachment, needs a sort of "absolute faith" (Tillich 1952): even if without a predetermined content, yet it keeps the question of spirituality and religion open.

In order to escape from false belief-based karmic productions, Madhyamika Buddhism deconstructs each conceivable narrative articulation, showing its unconceivable character of its definition and determination. This negative deconstruction pushes so far that Nagarjuna, the first Madhyamika patriarch, in his *Madhyamaka Karika* denies Buddhist concepts and thus, logically demonstrating the lack of inherent character of moral virtues, salvation, damnation, etc... (Garfield 1995).

In a similar way, worldviews can be approached as the minimal statement we can give of each philosophical branch. For example, Vidàl connects each core philosophical question with the corresponding traditional discipline, and to each philosophical discipline a certain number of world hypothesis (see Table 1 below, in Vidàl 2008).

| Question | Philosophical Discipline |
|---|---|
| 1. What is? | *Ontology* (model of reality as a whole) |
| 2. Where does it all come from? | *Explanation* (model of the past) |
| 3. Where are we going? | *Prediction* (model of the future) |
| 4. What is good and what is evil? | *Axiology* (theory of values) |
| 5. How should we act? | *Praxeology* (theory of actions) |
| 6. What is true and what is false? | *Epistemology* (theory of knowledge) |

**Table 1**: Worldview questions and the corresponding philosophical area[14]

[14] in C. Vidàl (2008)

The interplay of the world hypotheses form a general world-view, namely a coherent collection of concepts that enable the construction of a global image of the world, allowing a comprehension of as many elements of our experience as possible (ibid). In this research, participants were invited to consider the following six traditional philosophical questions.

All six questions are interdependent: even if well-defined and distinguished, they are complementary, easily co-involving aspects relative to the others.

1) The first is the ontological question, namely a model of the existent as a whole. Ontology encompasses questions regarding the nature of a real world, of its structure and function. More precisely, it corresponds to the radical question of "Why is there something rather than nothing?".
2) The second question addresses the very principle or origin of being, somehow addressing its determined specificity and shape. The antecedent of the being defines its nature.
3) The third question is symmetric to the second, and therefore it focuses on the future, life's purpose, destiny or fate. Any possible "futurization" in its conception and development implies the domain of teleology and/or teleonomy. The intrinsic indetermination and incertitude of future possibilities already put at stake ethics, as the alternative we should promote or avoid often determines the value of our actions (conforming or not to the fulfillment or objective of life). It is arguable that the deterministic, scientific paradigm excludes intrinsic life's purpose from the very beginning, accounting for survival's strain only in term of evolution or extinction.
4) The fourth question addresses the evaluation of our actions, the meaning of human behavior, and therefore of life. This principle can be seen as very manicheistic, as any intrinsic "good" or "bad" has often to abide to religious systems of value (and therefore with axiological prescriptions and proscriptions). This is often considered a quite tricky philosophical question (Confucius gave many apparently contradictory examples, in order to show how "good" and "evil" are relative, contextualized categories. But still, some radical values are incontrovertible (as, for example, provoking suffering in others sentient beings, is commonly considered

bad, or "evil"). This domain concerns morality, ethics and even aesthetics. Together with the predictive model of reality (question three), ethics defines a direction, a purpose, a set of goals to guide our actions. In order to conform to any ethical or moral principle, we should be able to implement it in "good" or "bad" actions.

5) The fifth question concerns ethics, i.e. theory of action, or praxeology. This pragmatic translation of theoretical principles, implies the identification of few general principles according to which we should organize our actions. Each religion, for example, has a particular "plan of action" based on compassion, empathy, generosity, and so on. Again, the most shared principle is not damaging other sentient beings. From of religion, philosophy is supposed to build up a praxeological framework in order to give precise ethical directions, filling the gap of abstraction with action.
6) The sixth question corresponds to question 1, 2, 3 and is about the theory of knowledge (epistemology), namely how knowledge can be constructed and validated. According to principles of valid demonstrations and inferences can be logically defined valid induction, deduction, abduction, existence or non-existence, necessity or non-necessity, until truth or non-truth. Language is often at stake in epistemology in its limitations and constructions.

Vidàl (2008) considers four examples of worldviews (see table 2 below):

(a) Science,
(b) Religion,
(c) the worldview of a bacterium and
(d) the worldview of a society.

These themes, which represent four approximate world hypothesis, were not directly explored during the interview, but can depict some illustrative possibilities. For instance, hypothesis (b) was more directly explored with meditation experts, and hypothesis (d) was discussed with all interviewees.

| | (a) scientific | (b) religious | (c) bacterium | (d) society |
|---|---|---|---|---|
| **1. Ontology** | Materialism, no God. | Two aspects: matter/mind. | What it senses at present. | Shared cultural ontology. |
| **2. Explanation** | Scientific models of the Universe, its evolution. | God. Answers in sacred writings. | A kind of memory. (Which can be the biochemical state of the bacterium.) | Explanation for the present society. |
| **3. Prediction** | Predictive models of our world. | A form of life after death. | Genetically-based feedback system. | Political plans, forecasting. |
| **4. Axiology** | Very vague. Only values for scientific inquiry. | Concrete and fixed values from the "sacred writings". (e.g. Ten Commandments) | Mainly genetically determined: find food; reproduce. | Utopia, political and economical values. |
| **5. Praxeology** | No guide for action. | Some precise and concrete actions proposed. | Move; eat and digest. | Political actions, normal people actions. |
| **6. Epistemology** | Interaction between theory and observation to build components 1, 2, 3. | Knowledge comes primarily from the "sacred writings" and from the religious experience. | Some basic perceptions. | Information comes from sociological transmission of culture (e.g. Schools, media, etc.) |

**Table 2:** Examples of four different worldviews with their corresponding components[15]

**(a)** Even though Western culture secularization is spreading thanks to scientific progresses, an all-inclusive scientific worldview is far from being accomplished, and is still limited by various constraints. Science traditionally models the world, answering worldview questions 1, 2 and 3. At the same time, it increasingly recognizes the need to integrate philosophical problems involving the nature and meaning of values, actions and knowledge (questions 4, 5 and 6). Throughout the last decades, scientific activities have strongly increased, multiplying papers in scientific journals and disseminating last-minute knowledge, hence producing a type of information overload. At the same time scientific knowledge is always more rich, refined and specialized, fragmenting its various domains and fields of application. The question of a global scientific or

[15] In Vidàl C. (2008). To make a comparison with Vidàl proposal, Pepper (1942) distinguished seven world hypotheses: (1) the generating-substance hypothesis, (2) animism, (3) mysticism, (4) formism, (5) mechanism, (6) contextualism, (7) organicism. Pepper rejected the first three as inadequate and retained the latter four as relatively adequate hypotheses.

philosophical worldview could embrace all contemporary different sciences with an inclusive epistemology, is particularly at stake these days. In contemporary Western culture, the dominant worldview aimed at modeling the world is the scientific one. Its mandate is to provide explanatory power based on and verified by observational and experimental support. The first explanatory requirement includes predictive modeling and consistent connections between various scientific theories. The empirical dimension tests predictions through the falsification principle (Popper 2002). This implies a critical realist worldview where experimental and empirical activity together should lead to truths about nature. The scientific paradigm, together with its materialistic tendency and descriptive, mandate, can always change, and, therefore, progress following the falsification method (Popper 2002). For the same reason, scientific paradigms should not pretend to *explain* reality, but rather to *describe* it accurately. But this approach involves some pivotal assumptions, as, for example, realism, objectivism and materialism, thus falling into some explanatory metaphysics.

**(b)** Contrarily to the scientific one, a religious worldview does not attempt to answer worldview questions 1, 2, 3, because it generally emphasizes the three others questions (4, 5, 6). The spiritual or religious worldview emerged spontaneously during the interview. Only expert meditators, minduflness trainers and Buddhist teachers were invited to consider their perspectives on Buddhism referring to its integration in everyday life. In particular, interviewees were invited to depict how Buddhist principles were assimilated in their lives, through which practices, and what precisely occurs before, during and after these practices. In order to deepen the minimal spiritual or religious feature, participants were asked about the nature of their bodily feelings during these practices. Below some considerations on contemporary Western spirituality and secularization. In his analysis of the Western religious landscape the sociologist Hervieu-Léger (1999) highlights the global tendency to disconnect religious affiliation (as a denominational membership and participation in the community of believers) from the set of "beliefs" to which they adhere (see Fig. 15). No longer tied to orthodox institutions, Western religious narratives linked to the Christian eschatological system are now often conciliated with soteriologies unrelated to the

monotheistic Abrahamic religions (Gauchet & Burge, 1999; Luc & Gauchet, 2005). The vocation to transcendence is itself transformed through these syncretism, stripping spirituality from religion, soteriology from eschatology, generating a transcending process deprived of a transcendent referent (Berger, 1967, 1971, 1999; Giordan, 2004, 2007). Such transformation is testified by a growing number of Christian health-associations and organizations spreading the application of practices and concepts derived from Eastern Traditions (Hervieu-Léger, 1999). These organizations are progressively developing institutional syncretism (Luther 2000) and innovative worldviews (Pepper, 1942). The contemporary "pilgrim" (Hervieu-Léger, 1999) thus tends to define her religious identity using narrative constructions through multiple interdependent factors (see Fig. 15, Heelas & Woodhead, 2004), aiming at integrating the ongoing experiences in a consistent identity (McAdams, 1996). Such adherence to experience itself involves the individuals' interests, expectations, desires and worldly relations, making the modern search for spiritual meaning strongly psychological (Zinnbauer & Pargament, 2005).

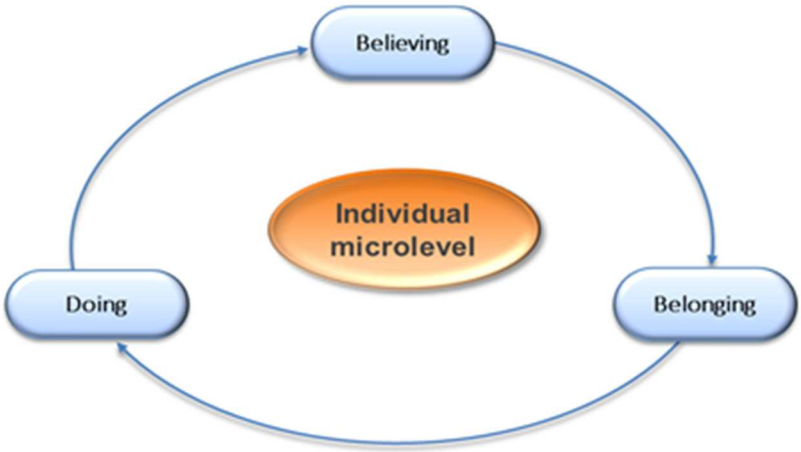


**Figure 15:** Individual microlevel interdependency[16]

The involvement of the subjective psychological and existential dimensions in the search for meaning echoes the definition of faith proposed by Tillich (1957), as a state of *ultimate concern* towards what is considered ultimate reality, which overshadows all other interests of the individual. Even though Tillich defines faith as an act involving

[16] Redrawn from Heelas & Woodhead (2004)

emotional, cognitive and volitional components, these are not enough to define the act of faith itself, which transcends, ecstatically and noetically, the totality of the individual. According to the author, such transcendence is reflected in the symbolic nature of the referent of the true act of faith as opposed to the act of idolatry. In this light, belief is not an ontological statement on the object of faith, but rather the active participation of faith itself without a real, transcendent object (Wulff, 1999). The search for such appreciation of the religious object, frequently takes the form of a pilgrimage towards a direct experience of the Absolute. The main instruments adopted to this purpose are what Hadot (1995) called "spiritual exercises", which, through an intensive cultivation of the "inner sense" (Luhrmann & Morgain, 2012), aims at engendering specific "consciousness' activities" hardly definable through discursive-conceptual language. The prolonged adoption of such exercises causes deep personality changes in the practitioner, involving the totality of her existence (Hadot, 1995).

Although in the West such exercises are traditionally bound to the theistic perspective, with the exception of the Greek schools of philosophy (Hadot, 1995), in the last century a new, secular approach to mindfulness-based practices has been developing both in North America and Europe (Drougge, 2016; Kristeller & Jordan 2017). Such stance has also been fostered by an increasing confrontation between Western philosophies and scientific communities on one hand and various Eastern wisdom traditions on the other. Among these, Buddhism results one of the most interesting, due to its numerous consonances with the Western cultural *milieu*, such as:

1. the methodological pragmatism which characterizes Buddhist epistemology;
2. the concepts of impermanence (*anicca*) and no-self (*anatta*), compatible with contemporary scientific epistemology and the cognitive theories of the emerging mind (Varela 1999);
3. the paramount position that tolerance and sensibility to suffering and injustice has in Buddhist ethics, which resonates with Western humanism.

Even if many Buddhist doctrines, such as *karma*, rebirth and detachment from life, have been prone to some misinterpretations or negligence by the Western Buddhist meditation practitioners (Sharf, 2015), the emphasis on contemplative practices typical of this tradition has favored a more embodied and "pragmatic" approach to the spiritual life, centering it on a living, embodied, seat of consciousness of the practitioner. It is with such practices that the "spiritual life" of the individual, normally latent, emerges to consciousness in ways that separates the spiritual act from others intentional acts:

1) Initially, the spiritual act cannot be viewed as a constitutive act, since it does not establish any object. From such perspective, any image or concept adopted in spiritual exercises is recovered from the objective world as a reference point to allow the "actualization" of the spiritual act without encompassing it completely. Such recovering, through a radical renewal of individuals' identity, engenders specific tonalities of the spiritual act as the overcoming of any "objectivity" (Bitbol 2014). The spiritual exercise unfolds according to Martin Heidegger's *Stimmung*: the mood out of *Being-in-the-world* arises as distinguished from a state that originates depending on situations and contexts. Rather, it is an existential mode which unveil the way we find ourselves (*sich befinden*) in the world (Freeman 2014). Through mood the world is made present *to us* experiencing it as a matter relevant for us, "before" any mental state, emotion, feeling, disposition, or belief;
2) Subsequently, the spiritual act is intrinsically "incomplete", presenting itself as a "silent call" that must be answered frequently by the practitioner through the repetition of the spiritual act itself. In this way, the spiritual exercise is integrated in the individual's life, constantly embodying the prefiguration of its "aim." At the same time, the meaning of this aim is dependent on the unfolding development of the practitioner;
3) Lastly, the spiritual act leads to a transformation of the individual, extending the contemplative practice's effects, turning them from an episodic occurrence to a new way of being.

This transformation is at first manifested in the individual's life as "radical suspension", that is, as a query which puts into question every certainty, every system of values and intelligence of the person, calling his foundations into question. The result of such a suspension is a progressive rupture of the automatic processing of meaning-systems that produce the usual conceptual-discursive thought, producing heightened pre-reflective awareness (Gallagher & Zahavi, 2013). The removal of the cognitive layer of information processing is typically reported in awakening experiences' narration (de Castro, 2017) and echoes the "non-judgmental" stance (Shapiro et al. 2006) characterizing the mindful attitude. Fostering such posture, Contemplative Practices (CPs) seem to promote a transition from a narrative self, by which the practitioner's identity is constructed as "this or that" (Ricoeur, 1990), to a "minimal self", or "no-self" (Berkovich-Ohana & Glicksohn, 2017). By virtue of this transition, the dynamics of identification are not oriented towards a static self, but to the phenomenon of experiencing itself (Dor-Ziderman, Berkovich-Ohana, Glicksohn & Goldstein, 2013).

How that dynamic transition is influenced by socio-cultural constraints, and specifically by the interpersonal milieu where the contemplative training takes place, is an open question. Consciousness is not a mental state, but the condition for the possibility of emotions, feelings, beliefs and mental states. At the same time, consciousness influences beliefs, desires, affecting *how* the world appear to us, in a determined context in which things are manifested. A contemplative collectivity develops a common attunement through narrations within shared spiritual beliefs (Matarazzo & Frank, 1962; Imel, Wampold 2008; Berger 1967). Such social arrangement permits a certain spiritual or religious view shaped by a specific set of common beliefs.

The postmodern scenario has been described by Berger as secularized, and thus somehow distant from previous religious plausibility structures (Berger 1971). Since history constructs and deconstructs plausibility structures, the plurality of modern worldviews can determine the diminishing plausibility of traditional religious narrations (Berger et al. 1974).

Thus, along with the practitioners' psychological and socio-cultural milieu, theoretical-reflexive dimensions of meaning are grounded on the common experience of the traditional teachings and are constantly renegotiated developing new hermeneutics (see Fig. 16). Such renegotiation unfolds giving sense to emotions, cognitions and actions as interdependent factors within a larger socio-cultural meaning, as shown in Fig. 16 (according with the Transactional Self, Bruner 1986).

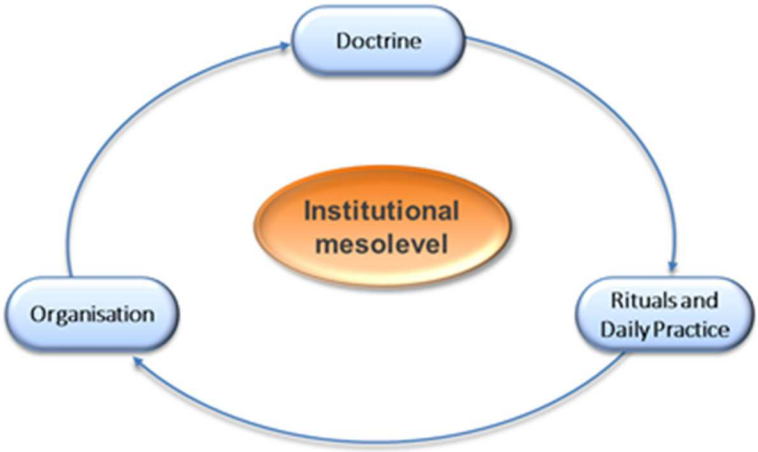


**Figure 16:** Institutional mesolevel interdependency[17]

The spiritual organization represented by any group of practice fits with the classic church-sect model, where the exchange of personal experiences among their members is fundamental (Heelas & Woodhead 2004). Inside these groups, any emotional resonance between the members is crucial, especially in light of the guide-student relationship. Consistently with Heelas & Woodhead work, this bond is also critical for the transmission of Buddhist teachings and urges the guide to develop an adequate emotional repertoire to meet the students' questions and implicit needs. To deal with salient emotional experiences and clarify their meanings, implies walking a tightrope of the empathic resonance without confusing each other's feelings and projections, rendering the relationship ambiguous (Berzin, 2000; Golasmici, 2011). The development of these psycho-social empathic skills, together with the guides' expertise in meditation, makes the Buddhist teacher a privileged speaker. The personal dimensions connected with CPs are essential to understand experts' personal maturation, as will be discussed in the preliminary inquiry with Buddhist masters.

[17] in Heelas & Woodhead (2004)

Beliefs and meanings are held by groups and individuals; they are embedded in sociocultural and institutional processes (Berger 1967). Berger describes how the social "world" and plausibility structures reciprocally influences each other, therefore highlighting the connection between religiosity and life events. Underscoring the relevance of plausibility structures, organizations like church, preach communities or family, can easily be viewed as systems embedded in specific sociological frameworks. In a similar way, religion relies on the plausibility structure shaped by the interpersonal, cultural milieu, i.e. by the system of meaning within which a spiritual/religious narration makes sense, or is made plausible by social actors.

In this framework, the religious worldview is centered on the conversation with a "significant other." Roof (1978), Hougland and Wood (1980) and Cornwall (1985, 1987), discuss the relevance of personal communities in keeping religious beliefs and spiritual commitment, suggesting a model of religious change based on life events. These result are relevant in connecting personal belief and commitment with others of similar faith and worldview. In fact, life events directly influence religious beliefs and commitment with a constant re-evaluation of prior "explanations of reality", i.e. worldviews. By this functional standpoint on religion, it can be regarded as a way to explain the unexplainable: the salience of the latter is often triggered by difficult life events such as loss, bereavement, and so on. These events encompass our limited interpretation of life, disrupting its narrative sense and presenting our worldview as no longer able to provide adequate explanations. Religious commitment is thus called into question as the individual must search for reliable, alternative explanations, able to frame the existential turmoil associated with these disrupting events (Kushner 1981). As will be discussed in the autobiographical theme, the pervasiveness of religious change is thus related to the experience of specific life events, providing a worldview able to supply a "more adequate" narration. The key point therefore is how "old" narratives and worldviews are challenged by the experience of negative life events (Kushner 1981).

**(c)** This represents a theoretical example useful to clarify how far the inquiry on minimal worldviews can expand. Bacterium is considered the minimal conceivable agent "having" a worldview. In line with Kantian transcendentalism, Khatchouf, Poletti

and Pagnoni (2013) depicted it as a minimal unity with an associated transcendental and an aprioristic set of knowledge. Referring to enactivism, Khatchouf et al. (2013) examined environmental intentional bonds as a proof of the "about something" of experience (Thompson, 2017). On that basis, they argued that for the environment to become meaningful for an organism, a hierarchical set of malleable a priori structures have to be at play, reflecting selected aspects of a specific ecological niche (see Image 17 below).

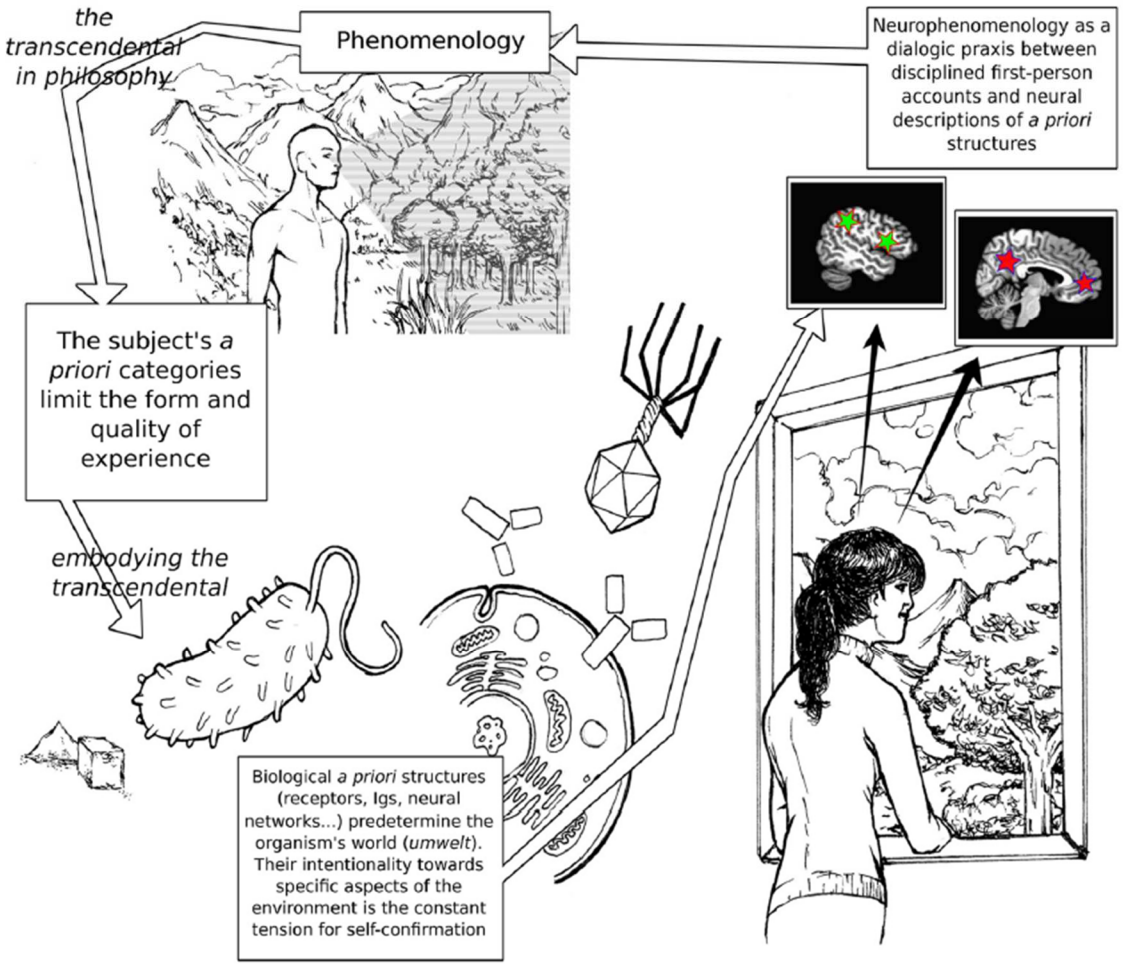


**Figure 17:** A priori structures at play in different environments[18]

The brain pictures are toy-representations of the default mode network (red stars) and the putative human analog of the mirror-neuron circuit (green stars). On the lower left hand of the figure, a flagellated bacterium is moving toward an area of

[18] in Khatchouf, Poletti and Pagnoni (2013)

high sucrose concentration. In the middle, Y-shaped immunoglobulines are poised to recognize a viral epitope.

Kauffman too proposed bacterium-system as a minimal molecular agent able to reproduce and carry out one work cycle in the thermodynamic sense (Kauffman 2000). A bacterium swimming up a glucose gradient is an agent, and glucose has a pre-determined value and meaning for it. Bacterium are sensible to chemicals and live in a world whose cardinal features consist only of three chemical objects which fit its predetermined metabolic networks and receptors. For a bacterium, all the remaining physicochemical world is the "the object per se", namely the utterly invisible Kantian *noumenon*. This theoretical example of a transcendental worldview allows the integration of processes which build up subjectivity with processes and build up life.

**(d)** During the interview each participant was invited to consider his/her perspectives on social identity referring to his or her social community, collective identity. In order to encourage a minimal description of this very complex and rich theme, the participant were invited to describe which sense and meaning has to live in a community, respect to a condition of complete loneliness. In particular, the interviewee was invited to explore the role played by social interactions and membership in the meaning of their life and identity.

Society as a whole worldview counterpoises the abstraction of the bacterium worldview, defining cultural milieus which are difficult to gather in a univocal framework. Human groups and individuals shape forms of learning that are cumulative, establishing defined bases of knowledge. Both science and religion support collective learning processes that are in part cumulative (Oman, Singh 2016).

Mindfulness practices are situated within broader, systemic philosophical, historical, and cultural constraints, representing a defined socio-cultural subsystem. That autopoietic subsystem emerges by the interaction of social actors' beliefs, which give consistency to some paradigmatic worldviews, that once enacted are persistent and self-preserving (Di Santo 2016). If we consider the interaction as the keystone of any multicultural integration, then spirituality should correspond to a domain where a

*shared* worldview plays a pivotal role. It can be seen as that subsystem where the personal reflexivity is aimed at investigating the personal use and attachment to the spiritual-religious symbol, and the collectivity-unity as a protective, cellular membrane. Meanings and truths are neither constituted by mirroring the objective world nor by their pragmatic usefulness: they simply reflect the use of them as such (Gergen 2000, 2001, 2006, 2009). At the same time, individuals' beliefs do not exist as systems independent from cultural beliefs and they have to find some complementary coherence with them, even marginal respect to widespread shared views, through specific ecological niches. Social interactions are not consistent processes between two intrinsic entities independent from their interaction. On the contrary, shared meanings give sense to identity and Alterity, shaping individuals as at the same time interdependent actors and authentic subjectivities. Throughout the identity-Alterity construction process, it is possible to define the continuum between individual suffering, related personal representations and spiritual dimension as an inclusive refined framework of each shared belief.

By this standpoint each medical and psychological disease does not exist *per se*, but within the complexity of the subjective systemic positioning. Therefore, even in referring to the medical taxonomic model, each pathology-disease cultural-construction corresponds to an illness, which correspond to a sickness, the very key player is transversal and pertains to the physiologic, psychological and moral suffering of a living being.

Teleological structural coupling starts with the criterion of autopoietic organization. The example of society-worldview too can be seen as the metaphor of a systemic, complex organism. Those simplifying examples serve as extreme-cases of worldview domain: in one case a very primitive worldview (more similar to a model) in the other, a whole complex set of individual worldviews that composes a culture and a Zeitgeist, or spirit of the time. Individuals carry personal worldviews taking part to "super-ordered" systems, organizing and, at the same time, being "organized" by them. This "back and forth" movement represents a negotiation process centered on theoretical beliefs.

The struggle for a worldview is both a psychological and sociological issue. In order to *believe* to any conception, an individual has to negotiate and share it with critical sense. Some sociological studies showed how feelings of distrust and insecurity are more present among people whose beliefs belong to a religious or philosophical worldview (Vidàl 2008). On the other hand, psychologists have found that having such beliefs increases life-satisfaction and well-being, furnishing life meaning, sense and purpose, as well as feelings of hope, trust and sense of belonging to a larger whole (Myers 1993). Where philosophical inquiry is not pursued or does not fit individual's questions, other cultural knowledge will provide answers. These are principally science and religion (or other cults, with often extremist secular ideologies or fundamentalist religious interpretations). In order to interact with the social community and with the entire world we all need to share some worldviews, even if not explicitly. This implicit pre-ontological world-hypothesis is a practical need to find a naïve answer able to give a reason.

Enquiring what makes life meaningful, this research explores interviewees' account of the aforementioned philosophical questions, in connection with their shared worldview.

## 2. Existential suffering

*"We are neither numerous and prolific (like the ant and the termite), nor tough and aggressive (like the shark). Weak and vulnerable creatures, we are constrained to make our evolutionary way in the world by the use of brainpower"*

Philosophical Reasoning: A Study in the Methodology of Philosophizing (Rescher 2001)

During the interview, each participant was invited to articulate, think loudly, his/her perspectives on human suffering. In order to scrutinize this general and somehow vague theme, the participant was invited to distinguish physical pain on the one side, and psychological, moral or existential suffering on the other. In particular, the interviewee were invited to explore the meaning that pain and suffering assumed in his or her life. Then, he or she was invited to describe his or her own conception of existential suffering, as universal, higher category. In order to answer each question, the participant had to take into consideration his or her own past history, often connecting past acute bewilderments and shocking experiences. Following the contrast between physical and psychological, material and spiritual or moral, the interviewee was supported in this exploration starting from his or her experience.

Human beings need a unitary framework or worldview in order to make sense of life (Heidegger 1956). Rescher (2001) argued that human's endeavor relies on the strength to know. This spontaneous need to acquire knowledge involves both the self as identity in the world, and the world itself. Hence, humans strive for understanding and interact with themselves and with the world. Personality can be viewed as centered in the development of personal core meanings. At the same time, cognitive systems can be seen as characterization of dynamic juxtapositions between counter-posed polarities which frame the narrative self-attribution of the experience. This dynamic counter-position can be experienced as a rigid, irreconcilable discrepancy, giving way to conflicting feelings regarding the integration of genetic, environmental, socio-relational and psychological factors (Cortina, Liotti 2014; Guidano 1991; Kelly 1995).

Improvement of self-consistency and cohesion are overriding in facing liminal experiences, like chronic pain, existential anguish and suffering, and, particularly, in

terminal illness. While contemporary cognitive sciences are introducing speculative questions about self-nature and existence, the world balance is pushed to its limits, in force of its existence and consciousness. Considering human society as a global system circularly shaped by the interaction of uncountable complex subsystems, we can describe the last century as rapidly innovating the way individuals frame their selves and their suffering. The attempt to reorganize the meaning of the inner identity through a renewed, authentic positioning keeps each individual in a certain unbalance. The cognitive effort and the auditory-visual sensory overexposure (respect to tactile-proprioceptive ones) are seemingly complicating the connection between the inner, felt-identity and the social community as a system with shared values and perspectives. The alienation of self-related feelings, compared to the overloaded perceptual thresholds, brings to the forefront external dimension, with a consistent lack of internal consistency and trust in inward world.

This work looks at two relevant clinical conditions, epilepsy and cancer, which share some critical aspects: stigma, both chronic and acute pain, pharmacological treatments with relevant side-effects, and psychological critical experiences as depression, anxiety, derealization, depersonalization, body dissociation, and many other secondary aspects, such as loss of meaning, loss of identity, groundelssness, voidness and the sense of absurd. Both conditions experience that intricacy of disrupting emotions as crucial, transitional phases of the individual life (Tanner 2006). These affective-emotive disruptions are often connected with the ambiguity of the identity-related belief systems and undermine its structural solidity. Each culture, in the previous ages has supported identity furnishing definite worldviews, meaning-systems and theories, hence framing a sense; nowadays culture does not give univocal frameworks able to make identity breakdowns more comprehensible. Moreover the lack of self-integrity is sustained by its scientific objectification through the medical and neuroscientific enquiry. To understand a breakdown means to face a challenge in our reading of reality and of ourselves. Meditation practice goes with certain exceptional states of consciousness, which apparently “stop the mind” and silence constant interpretative activity.

Finally, the participant was invited to discuss if (and how) suffering, in its manifold nature, can be avoided or limited. Often this point was directly related to ethics and praxeology.

In Buddhism, unreleased-stored reactions, often referred to as dispositions (Skt, samskaras) held in deep storehouse consciousness (Skt, alaya vijnana), are said to push forth attachments and consequent existential suffering (Skt, dukkha). In fact, the retention of these salient memories are said to show up through individual inclinations to act (Skt, vrittis and vasanas). That is why meditation is said to help clear past impressions, purifying the ongoing dependent origination of time-consciousness. Buddhist interdependent origination addresses existential suffering head-on. For example, with refined logical arguments, Nagarjuna attempted to show how existence has no self-existence, since it can never be grasped (Garfield 1995). In a less analytical way, Dogen defined being-time as a unified, co-emergent pure activity, since Being unfolds itself as beings, and time unfolds Being as beings (Kim 2000). In Dogen, Being and time are the activity of space-awareness, based on "forgetting oneself." Such interpretation takes on its full meaning only following the "letting-go" gesture, reclaimed by Varela himself. Forgetting the "specious-present," time structure can be reabsorbed into minimal activity. Letting-go existential attachment, the Buddhist soteriology aims to purge recorded retentions, which keep us in the circle of suffering, determining our personal worldview and thirst/desire (Skt, *trishna*), marked by karmic influences impressed in our beliefs and in our dualistic worldview. Dualism starts with the (pre-reflective) attitude separating ourselves from the supposed "external world"; hence, the core sense of "I" exists only insofar as its evidence is supported in its auto-confirmatory process based on salient retention-protention cycles which determine self-attachment. In both Hinduism and Buddhism, primary existential craving is said to shape this transcendental activity, constructing the condition of suffering (Skt. *dukkha*) as impermanence (Skt. *anitya*) and self-emptiness (Skt, *anatman*) go unrecognized. Contemplative practices are supposed to allow that acknowledgement through refined analysis of the ongoing experience. Clearly, existential impermanence is radically at stake, and is connected with, our ego-centered interpretative framework.

Considering the interplay of time and existence, Madhyamika philosophers proposed a refined conception of time, filling the gap between the act of knowing and perceiving (Garfield 1995). As in Husserlian epoché, the attempt of Buddhist meditation is to collapse all interpretative inclinations towards the noetic side of intentionality. Trying to overcome the subjective dimension, its endeavour is to abandon ego-centred action-perceptions, a principle that was crucial in determining Varela's own worldview.

In the enactivist approach (§17), intentionality is accompanied by pre-reflective awareness (Depraz, Varela & Vermersch 2000), which in turn is embedded in situated physiological processes (Lutz & Thompson 2003). Varela methodologically dissolved any objective, metaphysical stance on reality, showing the impossibility of being able to describe consciousness "within nature as it is supposedly described by our best scientific theories" (Bitbol 2002). Starting by "clearing out" the researchers' mind, neurophenomenology comprehensively encourages a transdisciplinary integration of extra-intentional, pre-noetic factors. In order to affect an individual's mind, these factors are supposed to be embodied in their immediate intentional bonds with society, language, and culture. Incorporating these co-produced factors, the Buddhist contemplative practice, which is grounded in body-awareness, is supposed to unveil their intentional character. Certainly, Varela accessed it personally, scrutinizing Buddhist philosophy and practicing meditation.

## 3. Autobiographic disruption and narrative-self

During the interview, each participant was invited to recall and retrace his or her past history, choosing freely the point from where to start. The question was formulated as follows: "Would you share something of you, of your past history? How you reached your actual identity, passing through which, more meaningful, turning points?"

In order to scrutinize this general and somehow vague theme, the participant was invited to follow the thread defined by physical pain on the one side, and psychological, moral or existential suffering on the other. In particular, the interviewee was invited to explore the meaning that pain and suffering assumed in his or her life. The instantiation of each transitional event has been considered in the distinction of

each phases with all its subphases, following the narrative exhitation, preparation, development and resolution. The relevance of each transition is inferred by the perceptual position of the interviewee, i.e. by the condition of association or dissociation with the synchronic definition of the self and of the actual identity.

Then, he or she was invited to describe his or her own conception of existential suffering, as universal, higher category. In order to answer to each question, the participant had to take into consideration his or her own past history, connecting past acute bewilderments, and often traumatizing or shocking experiences. Following the contrast between physical and psychological, ethical and unethical, true and false etc..., the interviewee explored these dimensions starting from her own experience. Referring to the latter, interviewees were invited to express what it meant to them to be endowed with a body and experience "through" it. This point is supposed to show to what degree someone connects his or her identity with his or her body, and how.

Considering the Self by a constructivist standpoint (Guidano 1987; 1995), the active construction and co-organization of the inner coherence in a given autopoietic system, is coupled by the emergent property of identity, specified by the patterns of interaction between the organizational closure and its structure (Maturana, Varela 1987). The self can be considered a process which constantly develops through phases of continuity and discontinuity, in a constant reorganization of its schemes and of their specific reality constitution (Mahoney 1991). Then, the organizational closure and structural coupling enable each human being to adapt within the interaction with its ecological niche (Luhman 1996; Hardesty 1972). The inner coherence studied by Greenberg (1987) in relation with the construction of an emotional repertoire can be seen, in agreement with Neimeyer e Lyddon (1993), as the integrated outcome of distinct features in a singular narrative structure. This structure is fostered by a constant process which enables the subject to "become" the main character of her history, creating a referential social and existential meaningful framework ascribed to the self-identity.

In the Abidharma tradition, the experience given with that process becomes stored in memory (Lancaster 1997a; 1997b), and, in order to reach unification of

consciousness, the soul has to give up possession of all memories. Both Eastern and Christian contemplatives invite the practitioner to face that memory-emptiness, killing all accumulated memories. In Buddhism *smrti*, even if currently translated as mindfulness, can literally mean "memory" (Lutz, Dunne, Davidson 2007). The role of memory in meditative practice has involved the Default Mode Network (DMN) as an aprioristic entangled background interpretive activity (Khatchouf, Poletti, Pagnoni 2013). Spontaneous DMN is stimulus independent and is associated with mind wandering activity. This active process predisposes to the incoming future constantly assimilating memories as a "memory of the future" (Ingvar 1985). Connecting the "before" with a "possible after" links refractory thought with anticipatory thinking.

Hence, experience is circularly enacted by implicit expectations of models based on autobiographical memories. Avoiding infinite regressions, it should be inferred a structural model of reality tied to personality traits or psychological nuclear constructs. Stimuli-independent thoughts can be seen as self-referential narrative processes that maintain the co-construction of the "narrative self" active (Gallagher 2000).

Having ruminative thoughts or being worried about the future is eminently at play in chronic diseases, and mindfulness practices are supposed to incite awareness and acceptance. Following the instruction of paying attention to the present moment, the wandering activity emerges in all its spontaneity. The bond between feelings and subjective time enhance the idea that time perception implies emotional states (Wittmann 2015). Our embodiment seems to follow our temporal perception of phenomena, giving way to the narrative, bodily self. Interoceptive stimuli anchor the experience to the body in a particular subjective time (Almenandro, Lopez 2016). This enduring narrative self is shaped by our attention as it is guided to reside in the bodily sensations and feelings. Driven by our attention feelings can spontaneously reveal meanings, thus producing semantics and allowing the integration of deep implicit meanings (Levin 1997). Hence, the narrative self is circularly determined by the recording of past experiences (within the interplay of emotional repertoire and cognitive schemes) and the shape given to the incoming experience (Wittmann 2015). Increasing the attention to that ongoing process suspends time-perception and

changes the DMN activity (Pagnoni et al. 2008; Berkovich-Ohana et al. 2014; Brewer et al. 2011), strengthening present-moment awareness and leading functional changes in DMN (Taylor et al. 2013).

Memory shadows the experience often producing suffering and anxious anticipations: mindfulness is supposed to temporarily dissolve its tireless activity. Often participants experience a peculiar, stunning innovation of experience, and progressively, a change in the whole sense of life, accompanied with a different way of perceiving and thinking (Almenandro, Lopez 2016). During the program people acknowledge specific attention "attractors" (Varela 1989) characterized by a certain power to catch their attention, producing complex units of feelings, thoughts and actions. The complexity of the DMN activity goes with the intertwining of meanings and physiological interdependent networks (Varela 1989). Varela depicts that complex patterns of activity as near to a symbolic activity, rather than to an item-per-item deterministic activity. For the same reason, a crisis in a system produces the structural instability of the whole life process. Almenandro and Lopez define it "Emergent Crisis" (2016) framing the human system as an open, complex, natural –non-linear– phenomenon. The emergent crisis is witnessed by a narrative breakdown, i.e. by the discontinuity of the linear narrative self. This discontinuity is determined by precise turning points where the usual one's life sense organization breaks down. Referring to chronic illness Bury defined the "biographical disruption" (1982). Bury's contention is that especially chronic illness disrupts everyday life structure of experience, i.e. the implicit meaning which underpin it. Chronic illness implies the stunning acknowledgment of pain, suffering and even death, which usually are perceived as distant possibilities. Moreover, individuals and their social niche suffer a perturbing disrupting of normal rules of reciprocity and the dependency on others' support. Finally, all plans and expectations in one's life have to be reconsidered, provoking deep questions about life meaning and purpose. The disrupting onset of a chronic illness strongly calls into question the individual's beliefs system: the spiritual and religious background. The connection between life hardships and religious worldviews (Berger 1967) strongly depends on spiritual communities which frame and contextualize

religious beliefs and commitment (Roof 1978; Hougland and Wood 1980; Cornwall 1985, 1987).

Life events seemingly urge spiritual or religious worldviews, connecting hardships with consistent beliefs: this requires a reconsideration of prior "explanations of reality" or "world hypothesis" (Pepper 1942) devoting the whole personality to a radical enquiry. A functional approach to religion would frame it as the attempt to explain the unexplainable (Albrecht, Cornwall 1998). When something unexplainable happens, it unveils a lack of consistent worldviews, showing an explicative gap where individuals must search for themselves other alternative explanations (Kushner 1981). The responsibility to give an answer to death and impermanence as coessential to life, risk the whole autobiography, hence the perception of one's, particular life.

The illness disconnects the ongoing process of identity-construction from the recorded memories, making the future increasingly threatening and enigmatic (Guidano 1991; Frank 1995). The narrative self can thus be fragmented into different conflict perceptions, where the narrative articulation lack an integrative perspective (Pargament, Hahn 1986). Even if mindfulness training should enhance a process of integration of that suffering, individual coping strategies are unclear, and ask for deepening on mindfulness' secular warrant.

# PART B

## THE QUALITATIVE ENQUIRY

## ON MINDFULNESS

**PART B** reports on the empirical qualitative enquiry about the involved samples:

- Chapter I presents and discusses the qualitative inquiry of Buddhist teachers, mindfulness trainers and meditation experts. These studies are relevant in order to explore the relation between experts' existential suffering and autobiographical self. Furthermore, shifts in worldviews are considered along with the autobiographical report, in connection with Buddhist soteriology and the ethical responsibility of teaching it in Western socio-cultural environments.

- Chapter II presents the qualitative research on epileptic and oncological patients who took part in a MBSR program. In the "epilepsy study", each meeting of the program is analyzed on the basis of an ethnographic diary of a physician who took part in the program. In a similar way, in the "cancer study" each meeting is analyzed on the basis of the researcher's own ethnographic diary, together with the mindfulness trainer's notes and considerations transcribed after each meeting.

Both chapters report the thematic analyses following the phenomenological methodology. Each relevant theme has been defined through a progressive construction of meaningful categories, relevant in the whole development of the argument, with respect to the balance of the complete interview.

## Methodological introduction

As the following studies will show, the methods used across the studies implied:

1. Researcher participative-ethnographic accounts of the meetings;
2. Meetings recordings and verbatim analysis;
3. Patients' homework diaries;
4. Mindfulness trainer's diary;
5. Participant's semi-structured interviews;
6. Mindfulness trainers' interviews.

This analysis is inspired by an iterative interpretive process considering:

- structural invariant emergent themes;
- structural invariant narrative enchainment;
- typology of relations across arguments' diachronic fragmentation and succession, involving causation, implication, correlation relations between themes. The instantiation of each transitional event generates the distinction of each phase with all its sub-phases, following the narrative hesitation, preparation, development and resolution. The condition of association or dissociation with the actual identity defines the transitions, or turning points, in the perceptual position of the interviewee.

Consistently with the phenomenological framework of the study (Moustakas, 1994; Flick, 2009), researchers adopted the narrative analysis approach proposed by Atkinson (2009), which defines narration as a linguistic act based on shared socio-cultural resources. The semi-structured interviews were analyzed with the Computer-Aided Qualitative Data Analysis Software Atlas.ti 7, adopting the classical Interpretative Phenomenological Analysis approach, as stressed by Pietkiewicz and Smith (2014):

1) Multiple readings, note taking and preliminary manual coding;
2) Transforming notes into Emergent Themes (Atlas.ti 7);
3) Seeking relationships and clustering themes.

The analysis systematizes the invariant structure, denoting elements of concatenation and transformation (prologue, orientation, complication, evaluation, resolution, epilogue - Mantovani & Spagnoli, 2003) while stressing the connection between narrative forms and contents (Biggerstaff, Thompson, 2008). The description of subjects' spiritual journey emerges linking different events through an uncharted plot, studded with neglected dimensions and new stories (White, 1987), allowing new interpretations based on text ambiguity and complexity (Charmaz, 2014). In particular, the hermeneutical approach can enrich the perspective on Self-construal, reality perception, and spiritual identity, connecting the ego with the social me (James 1902), the self-schemes with their narrative development (Smith et al. 2003), thus integrating the sociocultural meanings which inscribe the subject in the wider historical and spiritual-religious dimension.

Keeping in mind the phenomenological attitude, the researcher dealt with the "otherness-experience" in a non-naturalistic, hermeneutical way, embracing meanings and beliefs with respect to their implications for those who expressed them, cultivating a non-reactive attitude[19]. Operationally, he had to let-go hypotheses and systems, recognizing them, taking care of them, sometimes compromising research questions in order to sustain participants' turmoil during the interview. Being engaged in the study as a researcher does not meant to leave aside human vulnerabilities and ethical responsibilities. With respect to patients' hardships as, for example, their threatening health conditions, the researcher tried as much as possible to sustain them in sharing their suffering. We know from past studies how communicative settings are extremely unstable and permeable to non-verbal factors. It is arguable that to respect others experiences does not mean to leave it "as it is", but rather to constructively interact with it, as the interaction is already happening because we are present. Thus, assuming a phenomenological, constructivist standpoint, above all should imply awareness of self-reactivity, cultivating vulnerability to the immanent interaction in all its multi-

[19] I remember, with a nostalgic note, a seminar lead by prof. La Mendola, where he asked: which is the reason to engage in a qualitative study if we suppose to know the answer? We better write a book, then making difficult questions to our participants". That, almost trivial consideration, let me realize all my ongoing, working hypotheses about my theme of research. Reading his book (2009) I deepened my understating of being "centered and open" during the interview process.

sensorial features. Following this attitude and mindset transformed each interview into a unique experience, enhancing its uniqueness, not only deducting its content through narrative articulations, but following the *pathos* of its emotional development. As a living-organism actively engaged in interviewing, the researcher felt the deep implications of Merleau-Ponty's statement (1962):

> *"The world is inseparable from the subject, but from a subject which is nothing but a project of the world, and the subject is inseparable from the world, but from a world which the subject itself project"*

Often the overarching theme of researcher's neutrality is reduced to the limitation of over-interpretation, without considering all the a-specific factors immanent to emotionally salient interactions (Imel, Wampold 2008) and more specifically to clinical interactions**,** from the first few seconds. If we examine the commitment of the researcher, particularly in its critical, ethical dimension, it is quite intuitive that such attitude modifies the quality and the direction of that interaction. The methodological declination of these considerations should involve some reflexive considerations by the interviewer of his overall experience of the interviews "conduction". First, interviewees' narrative "red thread" remains crucial, since the exploration of the predetermined themes happened through constant reformulations which enhanced interviewee's more relevant issues. Each emergent interpretation is shared and discussed during the reformulation, repeating and secondly summarizing interviewees' explanations. Then, I occasionally connect them with previous contents and the main theme of the question. With this methodology, I sustained interviewees' reflective effort while exploring challenging philosophical themes. To this aim, I provided examples or metaphoric variation of the discussed theme in order to clarify the implications of a question. Therefore, the interviews were semi-structured, revolving around each answer through recurrent reformulations aimed at:

1. assuring communication efficacy and conveying clear contents;
2. pushing further the theme, reconstructing additional features and details.

# I

## QUALITATIVE RESEARCH ON BUDDHIST MEDITATION EXPERTS

*"You meet the master when the tradition becomes problematic, namely when each word and gesture which vehicle a traditional content on the meaning of life, are lost"*

*"to be a teacher means to be able to inspire confidence and friendliness, out of any authoritarian or hieratic attitude"*

*"usually, the master-disciple relationship is shaped by the resolute, sincere and firm demand of someone who is ready to recognize the teaching message".*

### 1. Qualitative enquiry of Italian Buddhist teachers

Through semi-structured interviews and participatory observations, this theory-driven qualitative enquiry (Macfarlane & O'Reilly-de Brún, 2011) aims to study the narrative constructions of CPs' teachers, focusing on the search for meaning construct (Steger & Shin, 2010; Frankl 1979; Wong, 2010) through the analysis of linguistic expressions, reported themes, and reflexive instances. Two temporally distinct forms of self-reference are considered, in accordance with James' synchronic 'I' and the diachronic 'me' (James, 1902): the momentary self-reference centered on the present and the extended self-reference weaving experiences across time, i.e. the process of narrative self-reference that maintains continuity of identity across time.

Also referring to some previous qualitative findings in heterogeneous milieus (Bruce & Davies 2005; Lorenzana 2001; Lindahl et al. 2017; MacKenzie et al. 2007), specific attention was paid to developmental transitions (Cohen et al. 2003), biographical disruptions (Bury, 1982) and recentering (Tanner 2006), looking to how such process is influenced by the superimposing of meaning system breakdown and meditative discipline. The subsequent self-definition framed by a transcendent meaning system was considered, inspecting every cultural and spiritual value involved, as well as the personal identity developed through such paths.

The research focused on the study of 4 CPs' Buddhist teachers: two belong to the Theravada School, one to the Rinzai Zen and one to the Soto Zen. Respondents were selected according to purposive-intensive sampling, finding groups and figures relevant for the research, i.e. considering their different accents in the interpretation of contemplative techniques as defined in the preceding paragraphs. Of six interviews, four were selected as the most significant, mainly for the interviewees' long-term experiences as spiritual guides in large groups of practice.

***Methods*:**

- Participants: 2 Theravada Masters, 2 Zen Masters (1 Soto, 1 Rinzai School);
- Participant selection happened through purposive sampling;
- Phenomenological, semi-structured interviews are assessed;
- In order to investigate how participants make sense of their experience the Interpretative Phenomenological Analysis is adopted.

Consistently with the phenomenological framework of the study (Moustakas, 1994; Flick, 2009), the researcher adopted the narrative analysis approach proposed by Atkinson (2009), which defines narration as a linguistic act based on shared socio-cultural resources. The semi-structured interviews are analyzed with the Computer-Aided Qualitative Data Analysis Software Atlas.ti, adopting the classical Interpretative Phenomenological Analysis approach, as stressed by Pietkiewicz and Smith (2014): 1) Multiple reading, note taking and preliminary manual coding; 2) Transforming notes into Emergent Themes (Atlas.ti 7); 3) Seeking relationships and clustering themes. The analysis systematizes Mantovani & Spagnoli's aforementioned invariant structure (p. 146), defining the narrative path with reference to the concatenation and transformation phases. Dorjee (2016) objects that traditional qualitative methods are inappropriate to investigate the shifts in the modes of existential awareness. This and other works suggest that hermeneutical approaches may enrich the perspectives on the modifications of awareness' states and spiritual identity construal. In particular, the connection of metaphysical worldviews, social identity and self-schemes with their narrative development (Smith et al. 2003) can enrich approaches to contemplative

states. This would integrate the sociocultural meanings which inscribe the subject in a wider historical and spiritual-religious dimension. Furthermore, Neurophenomenology could integrate the existential meaning of moods (*Stimmung*, Heidegger 1962) and mind states: to approach their ontological structure, it requires a qualitative account of "being attuned (*Befindlichkeit*) through mood" (Elpidorou, Freeman 2015, p. 471).

These interpretive findings include a criterion of uncertainty (Emden, Sandelowski 1999), i.e. the constructivist position of openly acknowledging that claims about research findings are tentative at best and might be impossible to show otherwise. This contingent view is congruent both with the emic nature of the study and its interpretive framework.

***Themes*:**

- Biographical disruptions and narrative reconfigurations;
- Beliefs and worldviews in both the theoretical and ethical framework;
- Values and beliefs transitions, in connection with the transformative practice of meditation;
- Each socio-cultural and spiritual involved factor, as well as the personal identity development throughout the Buddhist path.

References are included offering some matches with the literature. A conceptual global map with a thematic overview of the interviews coding is provided (see Tab. 3): along with the autobiographical reports, a chronological map based on the individual narration is presented in Tab. 4. The transition column corresponds to the shift of nuclear constructs through which the interviewees interpret and define themselves (e.g. "*The shock of pain let me think: 'it cannot be all here, answers cannot be all here!'*»). In general, as stated in an interview:

> "*There are several reasons why such a path begins: curiosity, spirit of truth searching, a family drama that wounds us, or the perception of being separated, divided, alone, abandoned, and in suffering".*

Common to the four interviews is the perception of meditation as something that overshadows what before was considered problematic or indispensable through an intensive mind-body training.

This leads the practitioners towards long journeys in search for practical and spiritual guidance. The spiritual practice, with principal reference to *Vipassana* and *Shikantaza* meditation, is described as a source of insightful experiences of "Truth", often marked with a noetic quality of "realness" superior to that of normal experiences (Yaden et al., 2017). Such epistemic states (d'Aquili & Newberg, 1993) are occasionally accompanied by psycho-physical intense phenomena, representing important internal cues for the definition of the experience in its consecutive appraisal (Taves & Asprem, 2016). Recurrent then is the dialogue between corporeality and transcendence (Scheler, 2008). In an interview, the experience of a radical doubt about the existence of God caused the feeling of "a fire" in the stomach which expanded in the diaphragm and the heart:

*"and when arrived at '...but God doesn't exist!' it was like a fire flared up in my heart".*

These revelations are followed by a phenomenological recentering movement of the "center of gravity" experience (Berkovich-Ohana & Glicksohn, 2017), leading to a deep transformation in the construal of the Self. The whole intuitive experience is described as "wonder-inspiring" and leading to a sensation of awe in relating to something "beyond" the individual itself, yet intimately connected with the human existential condition as a whole, making them both humbling and exalting (Preston & Shin, 2017):

> *"Then I entered, consciously, in contact with the energies of earth and sky, and 'went beyond'. [...] In that moment I became aware of my humanity and, at the same time, entered a consciousness state with no limits".*

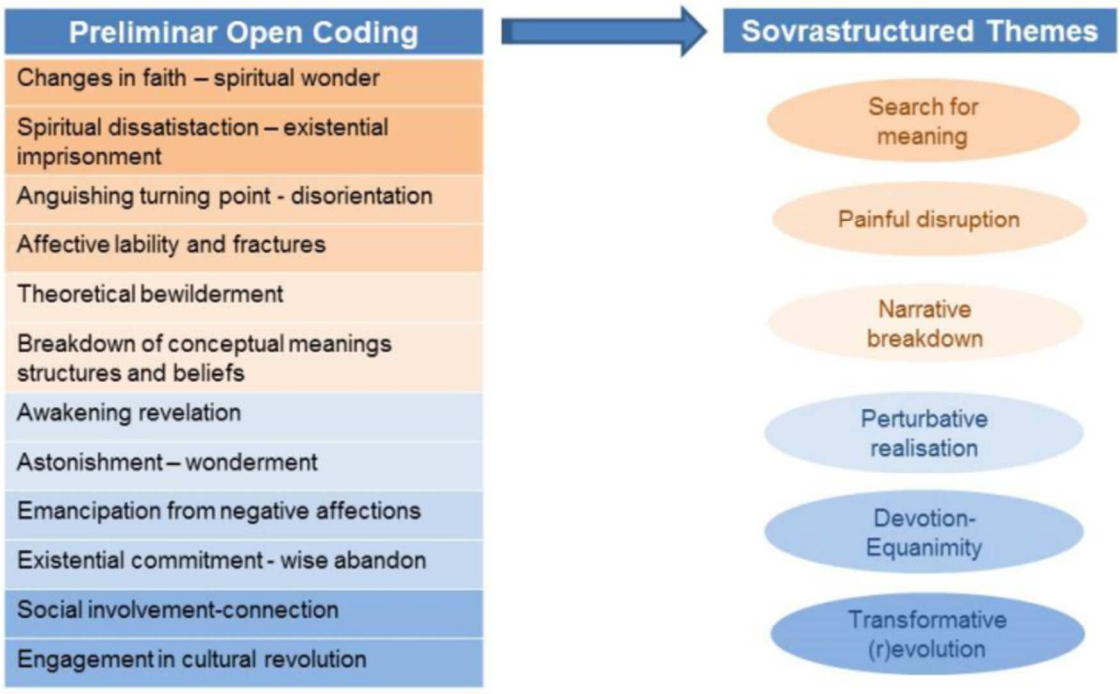


**Table 3:** Thematic analysis process with Buddhist teachers

However "definitive", these experiences don't give an exact perspective on reality to assume, but a flexible attitude open to the production and integration of new meanings, giving a sense of unity to the Self in the deepening of the Truth. Strongly marking this unification of the Self is a state of emotional equanimity (Desbordes et al., 2014) connected to a direct experience of the source of both thoughts and emotions. Such unification emerges in stark contrast to previous states of crisis reported by the participants, characterized by the absence of a center and by a chaotic search for answers. Even with a certain variability in the degree of suffering and uncertainty reported, these crises emerge as a break in the autobiographical continuity, representing a turning point in the identity narratives of the interviewees (McAdams, 1996) recalling Bury's concept of autobiographical disruption (Bury, 1982):

> "*When I was an adolescent I really looked for a way to face these moments of discomfort, an existential stage experienced as a fracture. That fracture can recompose in different ways: sometimes it lasts open, other times it closes, and it's a true pity*".

In another interview, that moment has been described as open radical questions:

> *"After this experience, things in the world lost their ordinary meaning, their sense, their familiarity and intrinsic reason, therefore their origin and end; it seemed impossible to me they could possess any intrinsic, well-founded sense. Now I have deepened this central topic throughout my life, but at that time it was only a torment, to which I could not give precise words".*

These phases are always followed by recentering through the deepening of a long-lasting spiritual practice. As a consequence of their spiritual research, the participants reported the urge to share their experiences with others, bearing witness of their significance and leading to the assumption of the role of "spiritual guide":

> *"as my master, who practiced much Zen, used to say: 'When you'll find something precious in yourself, you'll understand that you cannot do without sharing it.' [...] that's the reason why I didn't really decide to be a master, but I found myself in it."*

The meeting of spiritual guides is positively connoted by all participants and represents a cornerstone in their personal spiritual path, due to both the transmission of their teachings and to the personal relationship established between the guide and the pupils.

Concerning the teachings, the interviews highlight a strong tendency to "personalize" the way of teaching, sustaining new hermeneutics of the traditional doctrines and the associated practices. This customization is rooted in the personal biography of the master and includes parallelisms with other spiritual traditions, references to contemporary philosophy and to disciplines such as yoga and martial arts. Nevertheless, the value of the transmission keeps the continuity of a symbolic tradition, more than that of an institutional one:

> *"You don't succeed a master, but a tradition, thanks to a master!"*

The main task of the spiritual guide is described as taking care of the disciples, giving ear to their suffering, and even advising a consultation with a professional psychological therapist. As stated by a Theravada master:

> *"a rather widespread tendency among practitioners is to expect from the teacher a sort of psychological counseling. Emergencies excluded, I bring back the discourse on meditation practice".*

Furthermore, together with some relational qualities, a disciplined training and a good connection with other masters and psychotherapists seems a relevant point:

> *"a Dharma teacher shouldn't be a self-proclaimed teacher, since the attendants of the Dharma Centers are often people gifted with sensibility and therefore some life or psychological difficulties; it is certainly useful to have the opportunity to address those meditators who require it to recognized psychotherapists".*

Hence, the master is committed to supporting practitioners in the cultivation of a specific disposition through a maieutic process based on the teachings acquired through dialogue with the traditions:

> *"the master does his best to 'bring out', which means bringing to light, the wisdom in his disciple, awakening in him or her the "truth" which is already present in them".*

This "wisdom" is characterized by a pervasive sense of totality and wholeness which surpasses the cognitive capacity of the practitioner, leading to a representation of life as an entire process able to combine together its immanent unknowingness (Caputo, 1986) and unfamiliarity (Waldenfels, 2011). This may be due to the absence of a stable conclusion on reality, which keeps its openness to new interpretative trails of which the subject is not the author of the existence, but co-author to the sense (Ricoeur, 1990; Bruner, 1986):

> "*The Buddha's experience is original because we are compelled to re-narrate it from generation to generation".*

***Autobiographical accounts:***

Comprehensively, the autobiographical accounts present a shared structure, with a chronological, linear succession. In order to piece together these common features, the researcher defined the following themes: "search for meaning", "biographical disruption", "transition", "spiritual identity", and "guide identity" (see fig. 18 below).

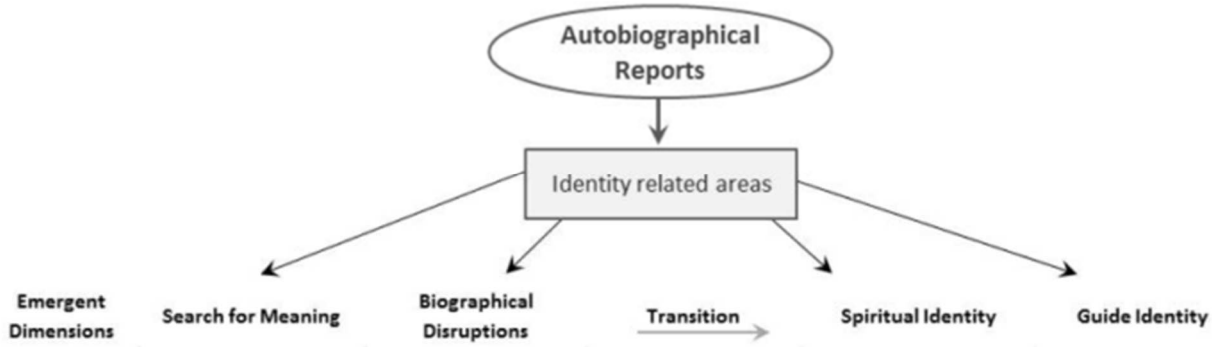


**Figure 18:** Identity related areas

Furthermore, the analysis of each area brought to additional "emergent dimensions" (table 4 below, left column: "handling criticalities", "embodiment", "practices", "affective feelings"), which drove the examination and their pattern of interaction. These "emergent dimensions" are interpolated with the previous in table 4. The lines correspond to the "emergent dimensions", the columns to the previous areas (fig. 18). Each box provides the overlap of the two categories.

| Emergent Dimensions | Search for Meaning (1-2) | Biographical Disruptions (2-3-4) | Transition (4-5-6) | Spiritual Identity (6-7-8) | Intereligious Identity (8-9-10) |
|---|---|---|---|---|---|
| **Framework** | religious identity uncertitude, spiritual dissatisfaction-synchretism-pluralism | irreversible-shocking events, life meaninglessness, interior center need | changes in narrative-self, master encounter-engagement spiritual recentering | relational involvement, worldview transformation, spiritual elevation | tradition witnessing, cultural challenges, ethical responsability |
| **Handling Criticalities** | religious education, socio-political-theoretical bewilderment | theoretical beliefs breakdown, existential imprisonment-impermanence | existential realisation, ultimate concern revelation, Life valorisation | conditioning, emancipation, complete existential commitment | leadership risks, peers interdependence, socio-cultural function |
| **Embodiment** | mysterious felt-meanings, mind-body bound exploration | need of embodied cohesion-recentering | shaping discipline, perceptual refinement | energetic changes, healing recentering, immobilty | mind-body interdependent balance |
| **Practices** | martial arts, yoga, and expressive arts | social-ethical engagement reaction | religious apprenticeship, intensive retreats,Transmission | buddhist training and rituality, beginner mind | creation of western inclusive knowledge through dialogue |
| **Affective Feelings** | doubt, tradition fracture, refusal-rebellion, turmoil, consternation | lability, disorientation, anguish, absurd non-sense | devotional abandonment-determination, revelation, wonderment | autenticity, suspension, vocational emancipation from negative affections | membership, compassion, community belonging, cultural valorisation |

**Table 4:** Thematic map of narrative chronological proceedings

Instead of using CPs as a therapeutic instrument, the interviewees turn to the practice as a way to confront more universal questions through a form of radical research, leading to a constant re-seizure and de-reification of their personal identity (Dunne, 2012). The ecstatic suspension of the identitary structure typical of the CPs bolsters a constant reorganization of the Self through a renewed identitary felt-

meaning, paving the way to a larger, more meaningful narrative, able to gather each significant biographical event with deep equanimity and acceptance. As stated by Armezzani (2009) and according to radical constructivism (von Glasersfeld, 1995), the autobiographical reflexivity redefines the link between past memories and future expectations, making difficulties more acceptable as reinserted in a story ordered by the sense of time. Moreover, the recognition of an immanent teleological intentionality, weakens the trust in an external, objective reality and the impulse to outwardly reach satisfactory goals. Such possibility seems connected with the necessity to abandon the egotistic attachment to particular worldviews, rediscovering an authentic way of being rooted in the lived experience (*abandonment*, Davis 2007; *letting go*, Varela 1999). This Self-recentering involves a critical reinterpretation and re-evaluation of the perceived reality, unveiling the partiality of cognitive habits and schemes (together with the associated personal constructs, see Guidano 1995; Kelly, 1955; Smith et al., 2003), fostering the awareness of their circular, projective reinforcement (Bertossa et al. 2004). This ongoing process is seemingly in accordance with an increased metacognitive reflexivity (Geertz, 1988; Schön 1983; Dorjee, 2016; Wells et al., 2009) as the disposition of noticing the background activity slows down the articulation of automatic concepts and actions, holding the field of awareness open to alternative cognitive, emotional and behavioral inclinations. Life is considered as an immanent metaphor of transcendent meanings where thoughts, feelings and bodily sensations are treated more as transient mental events that can be simply observed, rather than integral parts of the self (Farb et al., 2007). Far from a pure individualistic process, the development of new hermeneutics entails a reconsideration of the practitioner's socio-cultural context. This increased awareness, supported by the confrontation with other cultures, is expressed in the attempt of the interviewees to develop a bridge between Western culture and Buddhist traditions in the formulation of their teaching methods.

Attempting to reach the experience of the sacred itself, beyond its cultural interpretations, the participants shifted from the definition of knowledge as noematic

contents projection (expectations based on spiritual, religious, moral values) to an open, noetic act, whose origin appears mysterious:

> "*I think that the origin of my more intimate motions*
> *cannot be inscribed to my biographical life itself*".

Finally, echoing Heidegger's ontological difference, the co-origination between each given phenomena and its felt-existence makes the experience existentially flavored. The phenomenal fluctuation in its ontological indetermination renders the experience in its entirety groundless. Consequently, the transcendence becomes a movement between Being and nothing, emptying any substantial reification. Therefore, the search for a transcendental principle becomes an impulse towards the lived existence itself, rather than towards a pre-definite being, making the movement of meditation akin to a circular comeback from the irrepressible representative activity based on transitive Self-centered achievements, to a spontaneous horizon of undetermined awareness.

The in-depth analysis of the present study implies a limited sample, selecting intentionally the interviews through purposive sampling: this limits the results of the research and their representativeness among Westerners Buddhist teachers. At the same time, theoretical considerations and discussions on literature findings have an introductive aim, without attempting any explanation of the phenomenon concerned. Rather, we attempted a wide theoretical integration of CPs meaning to reach an overview of the implicated factors to access the overall complexity of the peculiar issue.

Summarizing the overall findings of this research and with respect to this limited sample, it is arguable that:

- Search for meaning is a pivotal impulse to renew worldviews and can reveal deeper theoretical understandings;

- The conception of the relative, mundane world as a non-intrinsic, transient phenomenon calls for the beyond, abiding contemplation as a founding self-revolution;

- Contemplative practice adjusts to this vocation through the radical suspension of each assumption, as the letting-go of any concept empties the immediate experience and makes it mysterious;
- The search for a principle defines a turning point where the lacking of sense turns into a sacred, inexhaustible dialogue between immanent identity and transcendent Alterity;
- Narrative loops of spiritual development and social-ethical engagement are in a dialectical relationship.

To clarify the dynamic interaction of these relevant themes, figure 19 below represents their succession in a recursive loop shape. As previously discussed in table 4, even if the linear path suggests a chronological succession, each theme reoccurs in autobiographical accounts involving the whole process in a non-linear way.


**Figure 19:** Interpretive concatenation of iterative phases

Figure 19 attempts to describe the bipolar interaction of the teachers' "transition in nuclear constructs" (lower side, salmon color) and the "social engagement" (upper side, blue color). Within the narrative accounts, these two aspects occur in a

dialectical, dynamic interplay, in a “back and forth” motion, like a pendulum. Each interior revolution brings to a renewed ethical engagement with the social community.

In conclusion, this research suggests that crossing first-person accounts (Bitbol, Petitmengin 2017) with qualitative-narrative approaches (Atkinson, 2009; Cardano, 2016) could enrich the study of CPs, sensitizing the cultural matrix, as well as the autobiographical story of the practitioners, helping to redefine spirituality as a psychological fact, historically and culturally situated (Gergen, 2001). Further qualitative research on CPs and their meaning in the whole autobiographical process through different lifespans (Moberg 2005) and different cultures are encouraged and useful in any implied philosophical, social and psychological feature.

## 2. A qualitative enquiry on mindfulness trainers

This work includes nine interviews to mindfulness trainers (MTs): as a first invariant aspect worth to report, MTs share a biographical turning point connected with a disruptive grief, a loss of someone meaningful. This turning point represents a moment of intense philosophical questioning about life's sense and purpose. Many MTs experienced this moment as a critical challenge regarding previous metaphysical worldviews, associated with relevant perplexity and existential bewilderment.

In particular, Christian eschatological system results not fitting that experience, and some MTs start to contemplate more seriously soteriological possibilities, as the Buddhist one (only occasionally involving the belief of reincarnation). Others, engage in personal or organized pilgrimages, often experiencing a radical reconnection with their religious background, through a renewed, personalized spirituality. While MTs mainly engaged in clinical practice find a strong reconnection with Christian tradition, those engaged in the education of other MTs are more directly tied to Buddhism. However, in both cases, MTs frame religion as a collective occasion to share something intimate through different practices. For some of them, religion represents a connection between individuals with specific beliefs which only partially overlap, thus recalling the etymology of "religo", which means "bond together". However, the nature of this "bond" is not strict, but mainly tied to the awareness of suffering and the presence of an ethical purpose in one's life.

As shown in figure 20 below, the connection between the past critical turning point and the associated existential disorientation, brings MTs to consistent shifts in identitary nuclear constructs, developing more flexible worldviews, often in connection with eastern, holistic practices such as shiatsu, yoga, acupuncture, Aikido, Thai-Chi, or Chi-Kung. Through these practices MTs developed a tight bond between professional identity, social identity and beliefs.

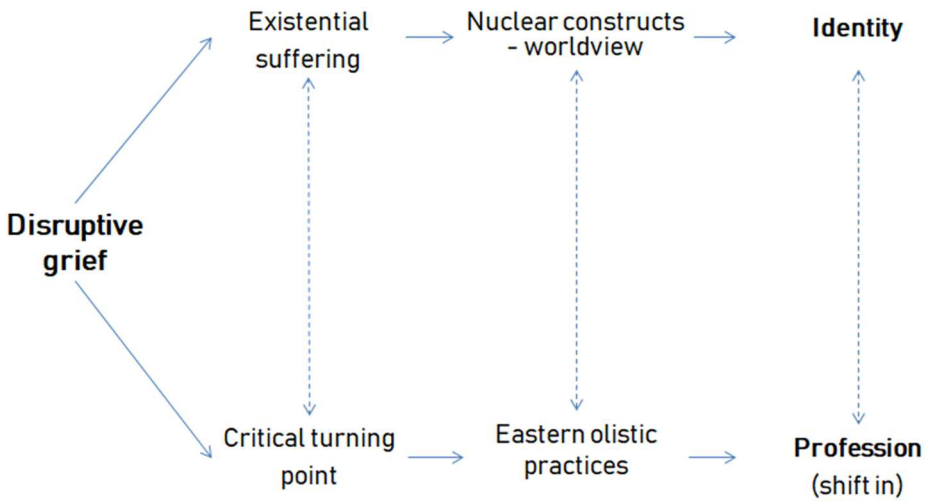


**Figure 20:** mindfulness trainers' biographical path

Unlike many hobbyists, for them, a practice often considered "alternative" or "New Age" as meditation or yoga, became extremely relevant in finding a new path towards interiority, and, often, spirituality. A key factor for them, as well as for the aforementioned Buddhist guides, is the meeting with a charismatic mentor, or therapist, personally involved in these practices. Many of them spend specific words describing the person who guided them to these practices: adjectives such as "convincing", "reliable", "deep", "right", "insightful", "experienced", "perspicacious", are recurrent. That figure guided them to discover a deep interest in meditation practice: the description of a "return", a "comeback" to something more present in the past, and missed throughout life's paths is frequent. That dimension is deemed concerned with the sacred, the religious, the numinous: mindfulness unveiled and put them again in contact with that dimension, together with particular skills and psychological knowledge. This knowledge is a key factor in framing that hardly explainable dimension: a MT says mindfulness emerged in her life as a "connected" fact, namely, as a viable, feasible alternative, accompanied by her psychological knowledge and her many experiences of loss within the oncology unit.

Another factor related with the aforementioned "return" is nature: all of the MTs give a crucial meaning to natural landscapes and awareness of natural phenomena. For example, some of them fall into a contemplative state trekking in mountains, while others experienced moments of mystical blissfulness practicing the walking meditation

in nature. Finally, few others did many pilgrimages (as the one to Santiago or Medjugorje) aiming at giving a special space to that practice of awareness in nature. As said before, those MTs engaged in the education and training of other MTs, did pilgrimages to India to find an inspiring master.

Another relevant factor is the body awareness: attuning with body feelings has become a pivotal practice for MTs in both their personal and professional lives, with an evident ethical commitment. For example, a MT describes how she is systematically driven by principles such as humility, authenticity, and kindness basing on body's sensations and proprioceptive feelings.

In particular, all of them brought that practice into their personal and professional life, frequently meeting some resistances viewed as "transgressive" with respect to the traditional approaches. Those in strict contact with hospital reality witness a lack of relational intimacy, empathy and compassion with patients' suffering and amongst health practitioners and professionals. Mindfulness allowed many of them to find a balance both in their selves development and professional growth. Most of the interviewees are psychiatrists, psychologies and/or psychotherapists. Therefore, relational features are extremely relevant for them, and mindfulness answered to both their curiosity, their inclination for Self-exploration, and a reliable methodology to ameliorate their work. To work with mindfulness-integrated approaches means, for many of them, to provide psychotherapy as a complementary-combined tool, defined by someone the "safety net" able to protect and sustain patients in their mindfulness practice.

Comprehensively, many of them think that introducing mindfulness-based programs for health professionals and practitioners, could have a cascade effect, allowing them to take part in clinical programs, thus fostering the connection between patients and health care system. The improvement of the personal expertise is supposed to enable addressing patients to appropriate complementary programs. In turn, these are supposed to enhance adherence and compliance to medical treatments. Moreover, after the training, some physicians, medical practitioners, nurses, psychiatrists and psychologists, often decide to become themselves mindfulness

trainers, or engage in either collective or personal meditation practice, thus promoting mindfulness approaches in health environments.

Finally, as shown in figure 20 (last column in the right), MTs' professional life is prone to dedication, if not even self-denial. Thus, to find an internal balance through mindfulness practice and principles, is a relevant fact, often interconnected with ethical worldviews and spirituality.

### *The cross-border case of LA: being mindfulness trainer and cancer patient*

LA is a mindfulness trainer, she works as a nurse and she is a psychologist, psychotherapist and educator in the public health service. She principally deals with addictions. She defines herself as an introverted person who did not invested a particular professional career, rather she focused on the quality of her work. Therefore, mindfulness became essential in the improvement of the quality of her working life.

Her personal contact with the mindfulness practice starts with the onset of a cancer as a complementary support in facing the hardships of the medical treatment and of the possibility of death:

> "*At that moment it was clear to me that physicians had to do their work, while I had to do mine*".

Facing despair and denial, she felt the importance to come back to herself and her feelings. Relying on her yoga practice, after a partial, arduous recovery with many complications, she contacted the Italian Mindfulness Association in order to attend the one-year professional training.

The head physician of her unity took care of the expenses, permitting her to assume the full responsibility to heal herself and, consequently, to heal the patients of her unity, promoting the mindfulness program there. As a matter of fact, she linked the influence of her personal practice to her psycho-physical health with the potential benefits that practice could have on addictions, the principal clinical spectrum with which she deals. Now, she is leading private mindfulness-based stress reduction classes and she is training other mindfulness trainers. She believes that mindfulness can be

viewed as a great support for many people, far from being an ideological solution for everybody in whatever condition.

Before the sarcoma diagnosis, she had a traumatic experience when she found her father-in-law dead. Then, at the start of the training her mother left, and she received the diagnosis of pulmonary metastasis: throughout that period, she faced life impermanence and the anguish of death centering upon her breath. After this close-range dialogue with death, she feels her way to experience daily life and to interpret it, has turned in a more peaceful, inner dimension, radically transforming her way of feeling. Nowadays, she experiences a pervasive sense of gratitude in life. While before, the onset of cancer would cause her worry, anxiety and depression, her head filled with ruminative thoughts, now she appreciates the simplest things, and life as a whole.

In her youth LA was a practicing catholic, then she left her parish because she actively sustained the legitimacy of the divorce (which later she could personally attain). Now, even if not practicing, she believes all religions deserve respect, including Catholicism, since they all share a deep, existential need:

"*this human need represents a sacredness which gives meaning to our existence*."

All religions come out of this common need, and she thinks each representation, symbol or religious ritual is meaningful, as it comes out of individual spirituality. Spirituality, she says, deserve common spaces and institutions in order to be expressed, recognized, and valued.

Mindfulness training transformed her lifestyle increasing sportive activities, the time spent in nature and, enriched her yoga practice while also enhancing the centrality of breath: reducing it to its minimal activity, she experiences a total absence of anxiety. Finally, mindfulness improved her professional skills, in particular relational attunement during the psychotherapy interaction:

"*in my working milieu mindfulness has become a great satisfaction, even if I did not expect that; I introduced it with the aim of helping few patients, and now I lead entire classes. Everything developed spontaneously, effortless*".

She describes the conduct of the mindfulness courses as a refined, rigorous setting, where the indications have to be as precise as possible, and not a product to be easily sold. Her teaching is deeply rooted in her practice, characterized by an occasional, pervasive sense of gratitude and wholeness. She describes her daily practice as a very particular, heterogeneous moment: centered on the stillness of the body, the mind is sometimes pervaded by discomfort and preoccupation, other times as a blissful peacefulness. In any case, the practice brings her back from the "doing-mode" to a sacred "being-mode":

> *"when this motionless peace is there… You lust for it. Keeping the stillness of the body and of the mind, you would never exit from that condition*!".

This mode accompanied her sporadically in her life also before the start of the mindfulness training. In particular some yoga retreats were relevant in bringing her to the breath as an anchor.

In her history, both yoga and meditation were crucial in facing difficult moments, for example after the cancer diagnosis or before surgery interventions. The diagnosis triggered her interest for the meditation practice related to yoga, determining her actual commitment:

> "*it has been a discovery, after a sincere research: I was looking for it.*
> *After some hesitancy, I really uncovered it!*"

## 3. A qualitative enquiry with Buddhist contemplatives

*"What does it mean for you to own a body?*
*The body… I would split in two for my experience:*
*before the spiritual experiences and after".*

An interviewed expert practitioner

During my internship at the French National Institute Of Health And Medical Research, I interviewed 12 expert contemplatives, all belonging to the Vajrayana tradition, in particular the Nyingmapa school. All the contemplatives were interviewed after the elicitation of physical pain, induced through a thermic device, and reaching the individual pain threshold. Hence, the interview explored the above mentioned themes, together with the theme of bodily pain and psychological suffering (a theme that spontaneously emerged from both epileptic and cancer patients).

While this paragraph offers an overall perspective on this sample characteristics, each theme will be discussed in detail later (PART C – discussion).

Some structural invariants emerged across the participants. Even if they were invited to express themselves with respect to their own experience, without explicitly referring to the Dharma teachings and philosophical system, a certain homogeneity emerged across the sample.

For example, a main theme, for all the practitioners is the shift from the "doing mode" to the "being mode". This shift unfolds in two temporal scales:

1. in the lifespan, as their life became more and more tied to the spiritual vocation;
2. in daily life, as meditation brings them "back" from the doing mode to the "being mode", a silent presence rid of active goals and worries.

The transformation involved in this shift, implies some recurrent polarities strongly connected with Buddhist philosophical system and practice, as presented in tab. 5.

1) In the first chronological scale, the shift meets the wide theme of existential bewilderment concerned with both ethical and metaphysical questioning. Each participant, when asked to give an autobiographic account, starts by describing an

early multilayered disorientation, involving some problematic ethical dimensions: interpersonal conflict, social and cultural frameworks, concerning the cultural, spiritual and religious beliefs, as well as political and ecological sustainability.

The addressed ethical issues are centered about on global suffering and the felt possibility for humanity to reduce it or even to overcome it. Then, they perceived Christianity lacking of something essential:

*"Who am I? When I went to church, and looked at Christ, I wondered: who are you? As I prayed I had some answers in the act of praying itself: God, our Father, God is love and God is light. So these three words became a key in defining my question".*

| "Doing mode" | "Being mode" |
|---|---|
| Subject-centered | Systemic adjustment |
| Target-oriented | Felt meanings oriented |
| Controlling | Open |
| Representational | Unmediated |
| Mind as body | Body as mind |
| Body as a limit | Body as a resource |
| Automatic-reactive | Naturally balanced |
| Ambitious-heroic | Simple "little thing amidst the others" |
| Desires, expectations-fears, avoidances | Acceptance |
| Fuzzy, confused | Present-centered |

**Table 5**: Emergent themes with expert practitioners

As shown in that beautiful extract, experts often experienced a strong intimacy while praying. But in order to deepen it, they felt the urge to look for something else, often traveling abroad, in particular to the Asiatic continent. Practitioners were precociously inclined to frame the mystery of life as a mutual interplay, or even a cycle of birth and death, more than a decisive moment to reach transcendent dimensions (i.e. Hell or Paradise). What is at stake is the dualistic approach, and the need to

overcome the interpretative activity of mind as it brings radical misunderstandings about one's self and one's life. As said by an interviewee:

> "*I wanted to catch immediately how the human mind works and how it interacts with the body, shaping our whole experience.*"

Consequently, the chance to find an explanatory system based on the first-person exploration matched that strong curiosity, progressively reducing the puzzling confusion. Another relevant theme in the first chronological scale is the encounter with the master. Almost each participant depicts this encounter as the very transformational turning point in his or her life.

More than a discontinuity in the biographical report, the master represents an "integrative point" where the existential bewilderment and research meets a symbolic possibility of incarnate, personified wisdom. The symbolic power of that meeting is strengthened by a whole tradition: each participant develops a strong interest for Buddhism early in his or her life, and suddenly an embodied person triggers the underpinning need to follow a guide of that tradition, an example of virtue, calmness and clarity of mind.

Many interviewees report a feeling of surrender, as the mere presence of a certain master (often a Tibetan *lama* or *rimpoche*) made them feel a peculiar sensation of joy and peacefulness. The desire, for most of them, was to spend their lives, as much as possible, with that inspiring figure. This twine, which may be considered a pure devotional act, hides a more complex matrix of meanings, emerged during the interviews.

Indeed, far from a religious-devotional system, or from a psychological-devotional catharsis, the practitioner, at that time a novice to meditation highly interested by Buddhism, feels a deep vocation coming to the surface of their consciousness and their will. A whole motivation, based on a certain degree of existential bewilderment, matches the immediate realization of the possibility to enter a path of spiritual research. As a participant puts it:

"*all of a sudden, it was as if my whole life became meaningful, even if it was mere research*".

The problematic spiritual research based on the need for existential meaningfulness, becomes mysteriously intertwined with the possibility to develop it. Hence, the master is seen as a valuable example of active engagement, rather than an answer in itself, a guide to passively follow. The following passage is very clear about that theme:

> *"The day I met someone who I could rely on for these matters, I can say it transformed my whole life. Not as a trouble, but as if I finally found again a reason to live. Even if I did not have the answers immediately, I knew that I could reach them since, I will deepen the path myself. I felt confident, thanks to that recognized possibility, based on a 'little' answer to all my questionings, let's say".*

To use a metaphor, it is seen as the rail where the train should run. At the same time, the metaphor is not fitting, as more than a "movement towards" somewhere, interviewees are more prone to depict a return to the "here and now", as meditation makes them feel they are in the "right" place at the "right" moment.

2) In the second shift, meditation is obviously the core theme at stake in advanced practitioners' lives. Meditation is primarily described as an essential re-establishment of a natural balance. Often this sense of harmony is accompanied by a feeling of correspondence between the body and the mind, with a pervading gratitude. This preliminary balance then allows the absorption in deep states of concentration and release, depending on the technique.

The cultivation of compassion and benevolence among the interviewees emerges as a pivotal quality, as well as others. The relevance of that quality is tightly connected with the *Vajrayana* tradition, and consistent with the *Nyimagpa* teachings (as, for example, the practice of the *Dzogchen*). Interestingly, some participants admitted the hardship they experience in connecting what in Buddhism is called the "relative" and the "absolute" truth. Even if persuaded by reality emptiness, they cannot avoid life in its pragmatic features, and they engage in it. But some of them would like to be able to shift more from the "doing mind" (relative truth) to the "being mind" (tied with the absolute truth) more easily. In particular, many report difficulties immediately after long periods of retreat, in facing daily life as noisy, complicated and distant.

Interestingly, all the samples showed a common strategy in connecting both point 1) and point 2), i.e. connecting the relative and the absolute truth. For example, when speaking about their social identity and interpersonal attitude, all of them reported compassionate attitudes as the core principle of their practice. When in touch with others' pains or suffering, the occasion to recognize that condition as universal seems to effectively bridge the relative, dualistic world, with the deeper unity of suffering. Spending time with them, their natural attitude of compassion towards animals, for example, was an evident fact. This attitude is present in all their lives, and is attuned with the principle of harmony. For example, all of them are actively involved in ecological causes, worrying about food consumption and pollution. Almost each of them is vegetarian and devote great attention to healthy nutrition.

## QUALITATIVE RESEARCH ON CLINICAL PATIENTS

### 1. An exploratory MBSR pilot study with epileptic patients

During my internship at the French National Institute Of Health and Medical Research, I collaborated in an experimental pilot study with epileptic patients. The analysis are reported below and the outcomes of interviews conducted with six adults with epilepsy who followed a six-week Mindfulness-Based Intervention (MBI). This qualitative data shows which aspects of the MBI were important for them from a first-person perspective and it provides important insights that will help tailor MBIs more specifically to the needs of people with epilepsy.

Adult participants from the outpatient Neurology department of Grenoble University hospital were offered a six-week MBI as part of the standard therapeutic education program. Participants provided written consent to participate in the interviews, questionnaire and scientific publication of the data. These clinical series were not a priori set up as a scientific study and, as such, no study protocol was written. The MBI was based on the MBSR program and conducted by a trainer experienced in open presence Tibetan meditation. The adapted program consisted of six sessions of 2.5 hours each in which the following topics were addressed:

1) Introductory session to discuss expectations and introduce the program and the practices;
2) Integration of the practices in daily life: becoming aware of sensations, thoughts and emotions;
3) Becoming aware of the relation between thoughts and feelings: how do thoughts make one feel, which thoughts trigger which feelings;
4) How to deal with unpleasant emotions;
5) Life balance and life hygiene: which activities are energy giving and energy taking;
6) Further integration and future plans for the continuation (or not) of the practice.

Interviews were conducted by phone in the week following the last group session and repeated three months later. The questions were as open as possible in order to allow the participants to share their personal experience. The recordings coming from the

interviews and the ethnographic diaries have been treated through an iterative, interpretive process. The following approaches are used:

- We read each transcript in its entirety to gain a sense of the whole; considerations and feelings arising while reading were discussed in order to build a peer-reflexive and interpretive process between the authors;
- Themes were constituted through a preliminary content analysis of the data, with the support of Atlas.ti 7; eventually, themes were organized into main categories;
- Procedures for ensuring reliability were included in order to enhance mindful reflexivity, as peer debriefing and review, prolonged engagement with the data.

Sample heterogeneity: from 1/day to only 1 seizure in the whole anamnesis.
During the MBI a general lack of strategies in handling both seizures and external stressors emerged. After the program, a large part of the group reported difficulty in continuing minduflness exercises without the group support and the teacher's guidance. For that reason, various participants looked for other groups, or contacted the master in order to take part to other mindfulness initiatives.

Interestingly, a participant who after the program took part in a non-epileptic mindfulness group, reported it as a useful experience. Without being disease-centered, the interactions and the exercises appeared more focused on mindfulness practice. In that case the condition of suffering emerged in its complex universality, rather than on the specific problem. Tab. 6 and 7 below, present the emerged themes during the interviews. The letters associated with each cluster (A-a, B-b, C-c, D-d) match the four clusters presented in both Tab. 6 and 7, since the emerged categories connected with epilepsy (tab. 6) and with mindfulness (tab. 7) are directly or indirectly inter-related. The codes keep voluntarily some original words presented in interviewees' accounts, in order to faithfully report the internal dynamic for each code. Table 6 reports the themes directly connected with epilepsy, principally related to seizures unpredictability and associated factors.

| | |
|---|---|
| **A – Existential suffering** | Seizures prompts derealization and depersonalization<br>Coping ineffectiveness goes with destabilizing feelings<br>Social stigma and shame increase irritability<br>Recurrent traumatic episodes trigger emotional reactivity<br>Puzzling treatments ineffectiveness and lack of explanations |
| **B – Lifestyle and stressors** | Incertitude between pharms side-effects and relative efficacy<br>Environmental constraints, perturbations and consequences<br>Family and working milieus hardship occurrence<br>Daily hurry, driving risks and weak sleep quality<br>Overwhelming lifestyle and need of free time |
| **C – Seizure Unpredictability and fluctuation** | Seizures increase in critical periods of stress and fatigue<br>Anticipatory worry goes with false positive predictions<br>Fuzzy bodily precursors just before seizures<br>Seizures based on light-intensity and temperature<br>Cyclic turnover of seizure frequency and pharms efficacy |
| **D – Coping strategies** | No possible to cope with too violent seizures<br>Need to share and compare phenomenology of epilepsy<br>Concentrating on breath can occasionally shift a seizure<br>Reliable predictions allow to stop pharms and hide theseizures<br>Other complementary practices usefulness (hypnosis, kinesis) |

**Table 6:** Epilepsy related themes

Tab. 7 below, presents the themes associated with the development of the program.

| | |
|---|---|
| **a - Group connection and trainer guidance** | Cyclic meetings as motivational, morally supportive milieu<br>Self-decentering discussion and perspective taking<br>Condition similarities trigger suffering relativisation<br>Trainer's guidance enhance interconnection and self-confidence<br>Physician's participation enhances adherence and compliance |
| **b - Shifts in facing epilepsy-related hardships** | Anxious anticipation-avoidance reduction<br>Improved acceptance and self-compassion<br>Seizure prediction allow to handle them<br>Need recognition triggers lifestyle reorganization<br>Lifestyle reorganization and perturbative stressors reduction |
| **c - Shifts in facing seizure-related hardships** | Seizure analysis "de-dramatises" and reframes catastrophism<br>Reduction in frequency don't' direct impact predictability<br>Non-reactivity decreases seizures intensity and worry<br>Acceptful attitude removes the controlling-suppressing strategy<br>Reassuring complementary approach humanizes care process |
| **d - Mindfulness-based coping strategies** | Breath and body recentering improve non-reactivity<br>Mindstate clarification/de-automatisation improve acceptance<br>Movements slowdown enhance proprioception in activities<br>Self-awareness and relaxation may impact stress<br>Increased familiar connection and social reintegration |

**Table 7**: Mindfulness meets epilepsy

Table 8 below resumes the aforementioned findings (tab 6-7) in a pre-post design, i.e. coupling the eight emerged categories into four main arguments (A, B, C, D). Each argument is split into an "epilepsy-related issue" (left column) and "mindfulness-related issue" (right column).

| EPILEPSY-RELATED ISSUES | MINDFULNESS MEETS EPILEPSY |
|---|---|
| **A - How the hidden individual suffering meets the program** | |
| 1. Unpredictable seizures trigger derealisation and depersonalisation | a. Condition similarities lead to relativize the condition |
| 2. Need to share and compare phenomenology of epilepsy/seizures | b. Trainer's guidance enhances group interconnection and self-confidence |
| 3. Social stigma and shame increase irritability | c. Strengthened connection with the group, the family, and society |
| 4. Recurrent traumatic episodes trigger emotional reactivity | d. Cyclic meetings as motivational, morally supportive environment |
| 5. Ineffectiveness of treatment and lack of explanations | e. Physicians participation leads to shift in patient-physician relationship |
| **B - Shifts in epilepsy-related hardships** | |
| 1. Incertitude between medication side-effects and relative efficacy | a. Reassuring complementary approach humanises care process |
| 2. Environmental stressors, perturbations and low sleep quality | b. Lifestyle reorganization and reduction of external stressors |
| 3. Family and working environment hardship occurrences | c. Improved acceptance and self-compassion |
| 4. Periods of stress and fatigue increase seizures frequency | d. Mindful awareness and body relaxation impact stress |
| 5. Imbalance between busy life and need of free time | e. Recognition of hidden needs triggers lifestyle reorganization |
| **C - Shifts in facing seizures unpredictability** | |
| 1. Driving risks and seizure potential consequences | a. Seizure prediction allows better management |
| 2. Anticipatory fear of seizure and false positive predictions | b. Mindfulness reduces anxious, reactive anticipatory avoidance |
| 3. Unclear physical signs just before seizures | c. Mind-body awareness and cognitive deautomatisation improve acceptance |
| 4. Predictabilty of seizures triggered by specific conditions | d. Mindfulness improves seizures attentive, reliable recognition |
| 5. Seizure frequency reduced by anti-epileptic drugs, but with side-effects | e. Concentrating on breath can delay/prevent an impending seizure |
| 6. Reliable predictions allow to stop anti-epileptic drugs and hide seizures | f. Seizures analysis "de-dramatises" and reframes catastrophic anticipations |
| **D - Shift in coping strategies** | |
| 1. Coping ineffectiveness linked to feelings of uncertainty | a. Breath and body recentering improves emotional instability |
| 2. Impossible to cope with violent seizures | b. Mindful non-reactivity decreases fear-worry intensity and increases confidence |
| 3. Avoiding or suppressing as a control strategy | c. Accepting attitude reduces the cognitive inflexibility |
| 4. Usefulness of other complementary practices | d. Self-centering meditation, self-decentering discussion and perspective taking |

**Table 8:** Overall pre-post thematic analysis

Figure 21 below shows two principal coping loops relevant in the interplay of the themes presented in Tab. 8, category D: on the one hand, a group mediated process (left side), on the other a self-mediated process (right side).

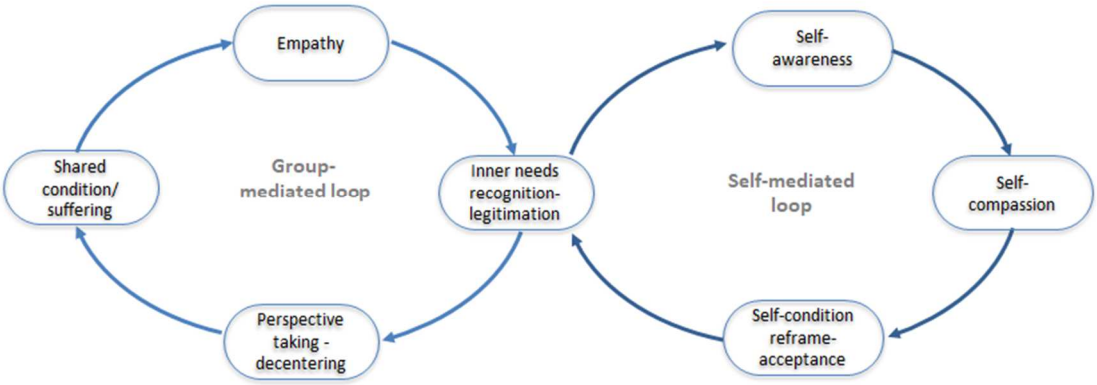


**Figure 21:** Descriptive map of key coping processes of the program

1) **The first coping loop** shows the core process of the program. Participants reported how sharing their experience of epilepsy and underlying suffering with other people relieved their feeling of isolation and helped them reframe their condition. Participants seem to develop spontaneous empathy for the other participants and for themselves, acknowledging the specificity of their difficulties and the common challenge in facing them. Due to that recognition, participants de-center their perception on the problem and become less absorbed in a narrative identified with "their" problem. Recognizing the phenomenological invariant characters of epilepsy, in particular regarding problematic feelings, each participant is motivated to adapt to it more constructively.

Through the group discussions, participants could compare and recognize the singular and shared aspects of their needs, often hidden by their focus on the difficulties. For this reason, taking others' perspectives during the discussions enhanced the perception of the shared features concerned in the common condition of epilepsy. A participant worded it as follows:

> *"Hearing others talk about the same condition helped me to relativize it. I now see it more as a handicap. There was a real change of perspective in relation to the condition. Seeing the others, we all live despite having epilepsy, we all have different ages, we all have our activities, that really helped me to relativize."*

Mindfulness exercises also helped them to recognize their socio-relational needs, the need to rest, the need to distract themselves, and need to take care of themselves. To share their condition with the group allowed them to decenter their perspective and relativize it:

> *"Meeting people facing the same problems as me, the same fears, the same thoughts on seizures, left a strong impression on me, I found it very enriching. It was the first time I could share like this, I really would have liked to deepen that."*

Another participant says:

> *"The group was a very warm environment. To exchange with people experiencing the same pathology was very enriching, I really appreciated to discuss about meditation and epilepsy. I'm sorry it is finished."*

Interestingly, a participant who subsequently attended a meditation group with people without epilepsy, said:

> *"I was positively surprised by others people's sufferings, by the fact that also without epilepsy, you suffer. Everyone passes through his own suffering, and meditation can help you live it better. Taking part to this group, also helped me to re-implant into society in general".*

2) **The second coping loop**, connected to the second loop, shows how participants develop a renewed sense of self-acceptance and self-compassion by the exercise of self-awareness. Almost each attendant puts in connection body-scan and meditation exercises with the clarification of their feelings, thus paving the way to self-compassion. While the first two processes are linked to the group dynamics and the trainer guidance during the discussions, this third loop is connected to the mindfulness practice. The themes that emerged during the group discussions triggered emotions and feelings connected with the individual difficulties of participants. After the group discussions, each participant was alone in their practice of self-awareness.

This seems crucial, as they had to suspend their judgments on themselves and had to focus on the reality of their problem. They were instructed to just focus on the bodily sensations and on the movements of the breath, being with their own feelings and perceptions. In that moment, they could recognize emotional and cognitive patterns, accept them and learn to let them go. Many participants discovered how a proactive way to handle their problem is not necessarily based on a problem-solving attitude. Rather, they discovered the possibility to let-go and accept what is happening in themselves with kindness and self-compassion:

> "*I usually only take medication during my seizure clusters, and I often worry about not having a daily protection against them. Mindfulness helps me to handle that worry in daily life*". and: *"and I integrated this kind benevolence towards myself. I have a strong tendency towards self-destruction, to feel guilty when I have a seizure, to hide to not disturb others, to become more withdrawn. There is double suffering. With this kindness, I think I can learn to live better with my condition. It is really something that I want to integrate in my awareness."*

The alternation between group discussions and individual practice helped participants to reframe difficult feelings and to disentangle them from the negative emotions connected to their sometimes catastrophic narrative of their problem, associated with traumatic memories and anxious anticipations:

> *"At the beginning, I was leaving immediately after the sessions, because I did not feel like interacting with others; then this changed throughout the weeks, and a group was formed."*

Along with the mindfulness practices, each participant felt at the same time:

1) protected by the group intimacy;
2) guided by an expert leader;
3) responsible for their own present, ongoing experience

Finally, many participants mentioned they felt reassured by the presence of the health professionals (two physicians) who took part to the program. Their presence felt like a symbolic engagement of the health system and a "humanization" of the hospital environment. For participants it was important to discover the "human side" of these professionals, often overshadowed by their expertise and responsibility:

> *"It was good that my neurologist participated in the sessions, and to see that she is trying to find a way to improve life with epilepsy, doing research. That you were there, in the evening [sessions], after work.*

This may help the positive integration of the program with medical-clinical samples: in the left column of table 9 (see below) we indicate the themes composing the "positive integration-continuity" category. In the right column we report the second-order associated themes. In Western medicine, the health professional, in particular the physician, is seen as a very busy and highly skilled person. Closing this

gap between the physician and their patients in a safe environment can be enriching for the patients' clinical course, and potentially improve adherence and compliance to treatments. Accordingly, a participant's words witness this possibility by addressing the physician who took part to the group:

> *"I am truly happy you are exploring this method in order to address epilepsy: in 17 years, I didn't really find a solution for this link [I see] between [my] emotions and my seizures and I am really happy that you are open to this."*

Intuitively, to reach a more human interaction with the hospital personnel, re-enhance the whole human personality and complexity of each patient, helping them to exit the label of a mere "sick" or "ill" person, often associated with a problem to be solved, rather than a person to be approached. Furthermore, the program *per se* weakens the sense of isolation reported by those who feel stigmatized.

| Positive integration-continuity | |
|---|---|
| Composed by: | Associated with: |
| Changes in attitude | Meditation present-centering |
| Need of support for meditation | Voice as a support |
| Disease relativisation-recentering | Need for complemetary approaches |
| Lifestyle reorganization | Stigma-isolation |

**Table 9:** participants' positive integration of meditation

Integration of the program in daily life requires a shift in lifestyle and reassessment and reorganization of personal needs and priorities, often linked to those of the family and close friends. Participants describe that this reassessment and changes in attitudes are strongly interconnected with their personal practice on one hand, and the need of a supportive environment and guide (meditation-present centering, need of support for meditation, voice as a support), on the other hand:

> *"I really need a moment to stop and a silent space around me when I practice at my place. During the meetings it was different: to practice in group it was helpful, but however, I really need silence."*

### *The meetings*

As one of the authors, a physician acquainted in meditation and engaged in both clinical and research activity on epilepsy, took part into the program as a participant observer, an ethnographic diary was collected taking notes on relevant aspects observed after each meeting. The Participative Physician will be referred to as "PP".

#### *First Meeting: expectations*

In general, a certain sensitivity to the emotionally charged setting is reported as something expected to enhance each one's problem salience. For some it is the first time that participants choose to interact with other people with epilepsy: they usually do not tell others that they have epilepsy. For others, it is a chance to hear testimonies of other patients. Each participant shares her personal history and relation with epilepsy throughout her life. The common expectation is the hope that meditation will help with stress and its relation with seizures. The instructor tones down the expectations by saying it is by no means a magic bullet and that it requires effort and dedication. At the end of the session a participant told me: "*I'm actually quite lucky, I do not have as much trouble as some of the others have*".

One participant has a seizure right at the start of the session. It is handled swiftly and professionally by the epileptologist present. It has an effect on several of the other participants. The PP sees at least two people with tears in their eyes and one or two visibly distressed by it. It has a profound effect on the PP as well. For the rest of the evening, PP feels tormented, feeling responsible for patients she knows since a long time. Even if, during the seizure, she feels ready to react, she keeps sitting in meditation, staying with the situation and accepting it. Seizures were always going to happen in a group of people who have regular seizures. PP discovers that she is actually grateful that it happened so early, as it takes away the anticipatory fear. She never realized that people with epilepsy sometimes have never seen a seizure, as participants do not see themselves when they are unconscious. This could be an important aspect of being together in a group. It may be a way of confronting their

own fears for some. While the meditation practice was going on, the seizure came: then, the instructor chooses not to elaborate on it, or on the emotions that arose.

One of the most troubling emotions for PP was the different way of interacting with participants: before they were just "well-known" patients. At Med school physicians are taught a type of distant compassion to enable them to care effectively for their patients. Participants are taught to focus on the illness, and generally speaking, not too much on the person. PP states how physicians are generally told not to share too much of their own past: each MBI group shapes a peculiar situation. PP is going through the same experience as the participants, the focus is on the person and their emotions, and both share their personal experiences. It is gratifying, scary, emotional and slightly disturbing to do this. This is what PP missed in her clinical environment, but at the same time, it is scary because it allows people get much closer to her.

***Second meeting: integrating practice at home and intellectual challenges***

Most participants have managed to do some homework, either formal practice or informal practice. Experiences are the "slowing down" of experiences in time, which is described by some as pleasant. Others talk about their very active mind, some even manage to notice when it is active and to bring it back to the meditation exercise.

One of the participants did not remember the instructions for the homework, but tried to find another practice instead. Upon the posture explanations, she says she prefers sitting on the ground, which is indubitably accepted. After the session, PP wonders whether this is not an impairment of understanding. Having TLE, this participant has attentional, memory and some cognitive impairment. Like many others with epilepsy, it is not apparent at first (or even second) sight. Hence, some questions arise to PP's mind: how much are patients gaining from the sessions? Are they understanding and remembering enough to take something useful home? This is definitely something to be verified, keeping it in mind for future sessions. Different types of epilepsy come with their own challenges and maybe the MBI will have to be adapted to the intellectual capacities of the participants. This should be possible as

MBIs have been done in children and people with intellectual disabilities. For this cycle based on MBSR, the instructor has chosen a very cerebral approach, with a lot of explanations. The neurologist mostly selected participants with good intellectual and verbal capacities, so it seems that for this group this is probably a good approach. Surprisingly, just one participant is not there, but says she will come the week after.

One of the goals of this session is to start creating awareness of sensations and to describe them in order to become aware of sensations and emotions. During the body scan, people are asked: "what did you feel?" and asked to investigate. For example: "*I had the feeling of breathing just with one side of my chest*", "*can you describe how this feels?*", "*just one side moving*", "*how does that feel?*" "*a tightness in my right side, but the left side of my chest moves*". The crucial point here is that the participant is made to focus on the sensations (moving chest) rather than on the interpretation of the sensations ("*I breathe with one side*"). People start to 1) be aware of those feelings 2) describe them as feelings.

PP is worried about the extent patients will be able to learn this and to apply this to seizures, since the MBI is relatively short.

***Third meeting: becoming aware of thoughts and their relation with feelings***

The aim is to become aware of thoughts and the effect they have on our feelings, with the aim to recognize them as just thoughts. One of the exercises consists in the visualization exercise of walking down a street and seeing a well-liked friend. Trying to get his attention, he does not react. How does this make you feel? There were very mixed reactions to this; some people were very upset that the friend did not react to them and were angry, having thoughts of worthlessness and sadness. Others were not affected at all. This all goes to show the assumptions that we make. The other practice is to experience who we are in movement. The subsequent meditation of unpleasant feelings brought up memories of seizures in some, that were visibly affecting them. Participants wanted to share these experiences, but the instructor prevented this, feeling that it could destabilize the person. One person is absent because of seizure cluster preventing her to drive.

***Fourth meeting: working on unpleasant emotions***

The aim is to sit with the emotion, and to learn strategies to be okay with them cultivating a non-evaluative, accepting attitude. All participants seem to adhere to either formal or informal practice. Also, the people who seem to have memory troubles seem to integrate the teachings and to deepen then, through mindfulness practice. For some participants, this course seems to have profound effects: they are observing their minds. One asks whether the active mind is specific to epilepsy.

After walking meditation participants are invited to practice 30min of sitting meditation, which is clearly too long for some. For PP it is a particularly interesting experience: sitting with the sadness of loss of a loved one, she watches it, and suddenly it disappears, making place for a deep feeling of gratitude for having known this wonderful person. PP can sit with the memories without being overwhelmed by sadness. Suddenly, the smile of that departed person appears in her mind. She suddenly realizes that there is no need to be sad, experiencing gratefulness.
Two people are absent.

***Fifth meeting: dealing with seizures and life balance***

The session starts with a reflection on how people experienced the previous session about difficult emotions. For most, it was difficult to apply the instructions directly. One participant says she practiced several times, without putting pressure on herself. She thoroughly enjoyed it, and felt great benefit from it. She did not directly work on fear or emotions. There was a clear motivation: "*I think it may really benefit me*" that ensued without too much analysis, bringing to directly follow the instructions. PP recounts her own experience of feeling emotions and the fear of them dissipate. The trainer picks up on that and explains how there can be a second layer on top of negative emotions or feelings, i.e. the distance from some emotions due to fear or other feelings such as the guilt, shame, anger or the suppression. Meditation can help reduce this second layer. She then asks all the participants to share their experience of what they have learned from their dealing with seizures. Some

participants recount that they feel partial seizures arise, like a mounting tension that comes to a point of no return, when it becomes inevitable that the seizure occurs.

Instead of tensing, participants have been able to delay the seizure for 10 minutes, and to let it come at a moment when it was less inconvenient to them. This type of control was new, and something that the meditation may have contributed to develop. A participant describes how premonitory symptoms used to mean that there would inevitably be a tonic-clonic seizure. This changed a while ago (probably due to medication) and now, the premonitory symptoms are not necessarily followed by a tonic-clonic seizure. But the fear remains.

Every time the premonitory symptoms occur, participants are afraid of a big seizure occurring, especially when the symptoms happen at work. The trainer suggests participants continue working on the emotions and the fear, as they add an extra level of suffering to the symptoms that are there. Another participant recounts how she had 2 seizures, in one she could not act, but in the other she had the feeling that breathing helped. Participant 4 explains how she perceives a clear link between their seizures and their emotions. The meditation helps to accept the condition and to eliminate anticipatory thoughts of "what if they see me?". Participants also describe that they can be sponges for the emotions of others, and that this sometimes aggravates seizures. The trainer advices to work on the grounded posture, finding balance and stability in the lower body. Participant 5 says she cannot feel seizures come anymore (since about 6 months ago). Previously, she would get 30 seconds warning, and would use the time to hide and put herself in safety. In secondary school, she suffered a lot of abuse when the seizures happened, especially the postictal phase, when she was not reacting adequately to the environment. This has had a profound effect. She describes how she is constantly tired, partly due to the medication, but also because of the lacking of activities and goals (no work, difficult situation).

The trainer suggests working on bodily sensations to try and understand her tiredness better, as this may affect wellbeing. Knowing bodily sensations and recognizing them can be extremely useful in adjusting to one's life (as, for example, "I'm tired, I need to rest"). Participant 5 also explains that she has been able to delay a

seizure because she was with someone she cared about and she did not want to worry/upset him. The trainer remarks how participants are very concerned with other's wellbeing, and suggests working on practicing the same concern towards themselves, for example, by being attentive to their bodily sensations and acting on them. Participant 6 says she is very lucky to not have had many seizures. She will try to pay attention to premonitory symptoms, should any recur.

The next part of the session is dedicated to life balance. Participants are asked to list the energy giving activities in a typical day of our lives, as well as the ones that suck energy. Everyone makes a list and then works in pairs. The person PP works with has very little energy giving activities in their lives. Through gentle questions PP tries and sees why. Interestingly, participants start seeing solutions very quickly: "*I enjoy cooking, but I never do it anymore*", "*I like sports, but I lack the motivation to do it, maybe I can go for walks*". After this work, the trainer asks whether everyone has received any new ideas to start adding more energy to their lives, or modifying energy, sucking activities or their relation to it, such that they become less energy sucking.

PP announces the plans for the last session (questionnaires, interviews). The session is closed with a short sitting meditation. The trainer remarks how serene and deep the calm is in the room. PP recognizes the quality of that atmosphere: there are no movements, and there is a very still vibe.

### *Sixth meeting: final considerations on dealing with practice*

The session starts with a short meditation and a body scan. The peace of the group is intense, and as the teacher comments afterwards, nobody fell asleep. The participants are asked to compare their experience this time with the very first time they did this exercise. People report the coming and going of thoughts, but several individuals do notice the ability to bring back their attention to what they were doing. One person expresses how, concentrating attention on the body, reveals sensations of light pain that he did not notice before. These sensations motivate him to take better care of himself and his body.

The teacher then asks participants to describe what they thought of the practices and which one has been particularly helpful for them. Participant 1 says that the body scan was helpful. Stress is a major problem for them and doing the body scan was pleasant and helpful for relaxation. Attendees never fell asleep. It is hard to find the time to do it, but participants feel motivated by the good feelings it had brought and sense that they could benefit from the practices to deal with all the thoughts they have. Participants did not notice any effect on their epilepsy, but said "*I am not advanced enough yet*", suggesting the need for more training. Participant 2 says that she enjoyed the sessions, meeting others with the same condition, but that she had not managed to implement practices in her daily life. Attendees valued the positivity of the teacher and this gives them the motivation to try and find a way to implement the practices in their life. Especially the breathing exercises. Listening to the audios may be one possible way. Participants do not expect any effect on their epilepsy. Attendee 3 shares their deep gratitude for these sessions. She sees them as a great opportunity offered to her and wholeheartedly commit to pursue it further. For them, the aspect of loving kindness towards oneself and kind acceptance has been the most important aspect. Participants realize that they will not heal their epilepsy, but they can heal themselves and accept this condition better.

This kindness towards themselves makes the (perceived) negative view of others easier to bear. Attendees will definitely try to continue the practices and express the wish to find a weekly group, but not necessarily with other epileptic patients. Participant 4 says that she gained a lot from the sessions. She has a lot of stress, and many thoughts and the practices have started to help them to deal with this. She wants to try and find a group to continue practicing. Participant 5 explains that despite missing two sessions, he found great benefit from the course. The most important thing is that she has been able to reconnect with her body, feel like her body is alive and connected to her mind. Participants have also been much less afraid of the seizures. While they have still been coming, it now appears easier to live with them. Patients started with the hope that this could help cure their seizures, but now have given up on this. Instead, they expect that the practice of meditation will help them

live better with their epilepsy. Participants also have started talking more about it with people around them (mainly, family). Being less fearful themselves has helped this and it makes others less fearful. They want to continue the practice through a group.

Participant 6 says that he enjoyed the course but do not expect to continue. He found the focus on bodily sensations helpful and has noticed a reduction in seizure duration (from 10 to 3 minutes) and intensity, but attribute this to mostly other things that have recently changed in his life, thereby reducing stress. He would have liked to have more time to share epilepsy-related specific experiences with the other participants.

Other things that come up are the huge social stigma associated with epilepsy as well as the difficulty participants have experienced with coming to the sessions. For some it was as much as 2h drive each way, accounting as the exact reason why one of the participants could not be there. In general, all seem very satisfied with the experience. One participant was lost for a follow up for unknown reasons. Interestingly, she experienced the least amount of seizures.

## 2. The pilot MBSR study with cancer patients

*"Okay, so, it's this: I have cancer. The start is difficult.*
*It's like a battle, but has to be confronted as an elastic reed,*
*bending when the overflow has passed, without breaking.*
*Because it is not a single war, but many battles,*
*you just have to go further day by day.*
*We bow the head, but we keep going on*"

"*Thanks to this group I feel I can accept more,*
*I can be more at ease with myself: I have this path to cover.*
*I need a hope. When health practitioners and nurses say*
*"you should be positive" it is not helpful for me:*
*the situation is hard, the therapy is so hard, how can I be positive?*
*Here, in the group, I have a lot to learn, I enjoy*
*the exercises we do, I really enjoy our school*"

The following section describes the development of three MBSR programs in two Italians hospital settings. Both hospitals are settled in two relatively small cities of Emilia-Romagna region, Modena and Carpi, thus contributing to a calm environment, compared to major cities general hospitals. The three complementary medicine programs took place in 2014, 2015 and 2016, with two overlapping phases, involving three cancer patient groups.

An MBSR instructor with a personal history of 20 years of supervised meditation practice conducted the sessions. In order to conduct it, he followed a training program for 2 years in "Mindfulness and neurosciences in helping professions" at the Medical University of Florence (Italy). In order to become a mindfulness teacher, the trainer started these programs at the Modena University General Hospital in 2012, organizing a convention between Florence and Modena Universities. The project was processed through the University Ethical Committees, allowing him to access to a group of patients affected by Interstitial Lung Diseases, in particular Idiopathic Pulmonary Fibrosis. The outcomes of this first, pilot clinical study has been published in the British Medical Journal (Sgalla et al. 2015), as a single-centre observational study on safety and efficacy. After this first, encouraging experience, the instructor's volunteering initiative brought to the development of many other groups with this kind of diseases. All of them fostered the feasibility, safety, and overall efficacy of the MBSR program for these patients. The Modena Asia Cultural Association Insurance

covered programs material costs (CDs, diaries for the homework, books). Asia association is an active organization engaged in spreading yoga, meditation and Buddhist philosophy in the region, while mats and cushions were made available by the Hospital. In the Modena Hospital, adjacent to the Centre for Rare Lung Diseases is settled the Oncologic Centre, where some oncologists became interested in the program for their patients.

Accordingly, following the same procedure, the ethical committee approved an additional program with oncologic patients who had recently received surgery after their first diagnosis, therefore experiencing acute pain and bewilderment due to the recent, bad news. After that promising experience, two more programs were then extended with the same design to the nearby Oncological Hospital of Carpi as an Early Palliative Care intervention. In general, given the pilot nature of these studies, no randomized control groups were designated, except for the first oncologic group developed at Modena General Hospital, where both participants were randomly assigned to the experimental and control groups. These programs represented a new experience for both the hospitals' Ethical Committees. The trainer's insurance was covered by the Oncological Patients Association (A.M.O.) settled in Carpi, which already had an agreement with the hospital. It is important to acknowledge the relevance of autonomous associations in promoting this kind of approaches in clinical environments.

Through informal discussions during hospital shifts, patients were selected by purposive samples by their attending physicians, based on the following information: patient's healthiness, availability, personal inclination and openness to complementary approaches. Across the three groups the three principal medical conditions, accompanied by chemotherapy and radiotherapy, were:

1. Patients in acute care who just passed the surgery with relatively good prognosis: these patients however were quite shocked by the recent onset;
2. Chronic patients with metastatic cells and one or more surgery interventions;
3. Mixed conditions of recent diagnosis in one side and severe relapses in early palliative care.

Attending doctors treated for some time both pulmonary fibrotic patients' and cancer patients' clinical conditions. Although patients might not practice meditation or necessarily be interested in this domain, the mindfulness intervention has been introduced as a useful complementary tool able to support an integrative care process. A dedicated physician explained to selected patients the degree of effectiveness of mindfulness on stress and cancer treatments derived from evidence-based medicine literature (Pascoe et al. 2017). Often, the oncologist volunteer had already taken part in an MBSR and/or practiced meditation as part of their daily lives.

Therefore, attending physicians verified patients' availability to take part in that practice, with the beginning and end of workdays marked by nine meditation sessions. Then, all participants provided informed consent and were reassured that they could give up on the program if they deemed it too demanding, since the involvement was voluntary.

As a registered psychologist and meditation practitioner, I negotiated access to the hospital as a researcher and volunteer psychologist in the first intervention at Modena General Hospital and in the two more interventions with Carpi Hospital. The hospital administration granted the ethical review process and authorized to proceed with the study[20].

The MBSR program was conducted in a 2-month period. Data collection occurred before the start of the program (pre), at the end of it (post) at 2 and 4 months from the end of the program (follow-up 1 and follow-up 2). The MBSR involved the following data-collection materials:

1. Researcher participative-ethnographic diary of the meetings;
2. Meetings recordings and verbatim analysis;
3. Patients' homework diaries;
4. Mindfulness trainer's diary;
5. Participant's semi-structured interviews;

[20] Other programs are still going on with health professionals and practitioners in Modena General Hospital, as burn-out prevention and quality of life improvement intervention in health care systems.

Qualitative data was generated through reflexive participation of both the mindfulness trainer and from the researcher. Mindfully attending to the development of the program, the trainer took a field report and personal diary immediately after each meeting. These notes gave a first overall sketch then refined at home with more detailed impressions. This "logbook" was shared after each meeting with the researcher and with a volunteer physician, in order to program and supervise the development of the program in its benefits and possible weaknesses.

Whereupon, at the end of the program (when the researcher and participants were familiar with each other to a certain degree), the researcher recorded each meeting and lead open-ended unstructured interviews with 10 participants. Interviewees were selected in connection with their availability, health status, and attendance at the program. On average, each in-depth interview lasted around an hour and fifteen minutes and took place in a dedicated room of the hospital.

The interview started exploring participants' background, then moving to their experience of the mindfulness program, connecting its impact to both the personal life, healthcare treatments and deep beliefs. Conversations were audiotaped and transcribed verbatim. When looking at the three groups as a whole, the average age was 57.3 years, with 1 man and 23 women.

Even though the eight MBSR weekly meetings were supposed to last 150 minutes each, taking into consideration patients' weakness, we reduced them to 120 minutes in order to make the session lighter. For the same reason, the final full-day of practice was reduced to 4 hours.

Meetings took place in a quiet room inside the hospital. Referring to Kabat-Zinn's principles (1990) the principal techniques taught were:

- Focus on sensations moving the attention to different bodily districts, with reminders from the instructor to center breathing on the abdomen (body scan);
- Formal meditation (sitting on a meditation cushion or in a chair) with a straight back, paying non-evaluative attention to natural breath and mental events (awareness);

- Informal meditation, paying intentional, non-evaluative attention to a daily activity such as walking, brushing teeth, or listening to sounds;
- Instruction in simple movements and postures with controlled breathing (light yoga). Participants were asked to continue doing exercises each day at home for 45 min along with the weekly meetings, providing CDs with vocal instructions.

Each practice session was defined as formal or informal meditation, two or three times per meeting, for 15 to 30 minutes.

A preliminary explorative meeting presented the program to attending doctors and then to patients. At the end of the course an all-day meeting (around 7 hours) completed the eight sessions of two months. At the end of the intervention, patients were asked to continue practicing alone at home every day. Normally, in order to support home practice, additional group meetings were developed after the program, along with the post-hoc observational period (Sgalla et al. 2015).

With respect to all the aforementioned programs developed with cancer patients, the following part examines the overall themes emerged during the 9 meetings. The analysis takes into account both the recordings of the meetings and the individual interviews, refining the phenomenology of the program by each participant's perspective. To this aim, I will summarize, through a global overview, the encounter between the themes proposed by the trainer and the themes proposed by the patients during the sharing-speech moments of the MBSR. I experienced this encounter as a constant interplay of needs, where the whole personality of the trainer was at the same time engaged in the availability and presence to participants' needs, and in developing the target-theme of the meeting. This exchange obviously involved a rich non-verbal repertoire, mainly characterized by a sort of para-verbal synchronization based on the accordance of the volumes and the attunement of the emergent emotions.

For instance, this work implies text analysis oriented to beliefs, values and concepts through the language. For this reason, eventual non-verbal and para-verbal significant aspects noticed during the program will be presented along with the verbatim hermeneutic analysis, in order to help the reader catch the whole sense and 'flavor' of the considered themes.

### *Structure of the program*

**During the first three meetings** the first two groups started with 9 participants, the third with only 6. One drop-out after the first meeting occurred in all the groups. In the second, a participant could participate in only half program.

**The first meeting** in general was characterized by general exhaustion, confusion in the discussions, and emotional reactivity, even if the trainer managed to let the deep motivations of each participant emerge during it. Particularly, in the second group, his effort to permit each participant start from her own experience in facing the situation, rather than discussing difficulties with the therapies, with the hospital, the families and other duties. Often, during this meeting, the trainer recognizes the usefulness of receiving and giving help to others, but the focus of the question during the program is brought back to our own difficulty in facing the situation. This, for the trainer, is the basis where to build the motivation to embark on the program: "*the center of the question is us, not who is helping and who is not*".

**In the second and the third meetings,** the participants are invited to meet their inner feelings by starting with body sensations. As discussed, the second group, in particular during the second and third meeting, reported a reduction in pain and relief from psychological or moral suffering. In the third group, the effects were more relevant regarding anxiety and the valorization of awareness. In this group, the theme of consciousness and spirituality is significantly boosted by some participants' past religious engagement.

**During the fourth meeting** unpleasant sensations and feelings were approached in a more guided way. This meeting explores the process of their rise in the body, their interpretation and their disappearance, with reference to the personal way to experience and interpret feelings. From that meeting the fear of death, anger, and rebellion emerged as a meaningful feeling; then the trainer tried to inspire in participants the force required to accept them and trust the possibility to overcome them.

All the groups showed an increased capacity to rely on their feelings, distinguishing them and analyzing them. That attitude demonstrates a relevant usefulness in addressing physical pain.

The **fifth and sixth meetings** were driven by common reactions to relational hardships, clarifying the possibility to go back to "an inner reference center", in order to rebalance and re-attune to critical situations. The discussion of the center of reference prompted the letting-go attitude as a key point in facing difficulties: abandoning the controlling attitude, some participants report the possibility to interact in more transparent ways with others, feeling a deep connection with themselves and with others. Some participants invite each other's to pass through the discomfort and the anguish accepting them, and living them fully, eventually communicating them with others. They found this very helpful for discovering that possibility, without hiding themselves.
During the seventh and eighth meetings, the practice has been more prolonged and disciplined. Themes such as incertitude, existential bewilderment, and anguish are faced more and more directly, with clear dynamics of effective mutual help between the participants. The group identities seem increasingly consistent during these last meetings.

Finally, the **full morning** lasted four hours in silence: many participants describe it as the most meaningful moment, a unique occasion to dedicate to themselves. In particular, participants appreciated the eye-contact practice in couples.

***First meeting: the motivations***

During the first meeting the trainer delivers home practice book notes, diaries with minutes of practice per day and audio CDs to support home exercises.

At the beginning is palpable the collective curiosity for mindfulness effectiveness, therefore the trainer responds to this need with a short description of mindfulness history, possible benefits and meaning. Initially the trainer, encourages a postponement of discussions on mindfulness theoretical framework after its

experience, in order to explore it in first person. In this initial phase, he focuses specifically on the possibility to be more present in our own experience, to be more centered upon it, discovering a present-centered strategy to cope with confusion and hardships. Then, the well-known “raisin exercise” is proposed, i.e. the slow experience of tasting a raisin, eyes closed, with refined instructions to explore each detailed tactile, gustative and olfactory sensation. Requesting general feedback on this exercise, a diffused enthusiasm is reported, since many hidden aesthetics features appeared during a frequent action, opening many questions on mental presence during daily activities.

Then, each participant is invited to share his/her motivations to take part in the program, providing evidence for the common need to share all the difficulties to find help in order to clarify them and feel supported. The speech rhythm and its speed often communicates a state of urgency, associated with the anxious alertness waiting the next clinical outcome. The most important need in the first encounter is to talk of the actual exhausting situation and the difficulties encountered: the setting becomes emotionally salient. Recurrent is a lack of hope mixed with rage and anger: the general frustration is often associated with medical treatments heaviness, pharmacological side-effects, lack of explanations and clear prognosis.

Another recurrent issue is the lacking support from familiars and friends. This comprehensible irritation produces incertitude, physical pain, psychological exhaustion, thus revealing a relevant vulnerability. A recurrent reaction is refusal: a refusal to persist in such a condition. Participants reveal a fear of different features, such as physical pain, psychological balance and possible incoming death. Another relevant issue is the threat of cancer reoccurrence: after the first combat and some partial victories, the lack of energy creates an unfathomable expectation of hope. For many, cancer has become a pervasive obsession, fostered by incertitude. Questions such as “why me and not someone else!?” are recurrent, with feeling of solitude and rage, as the only coping available response. Often the rage is directed towards the previous medical treatments: even if patients overcame heavy hardships, nourishing

hopes in order to face each day's fatigue, the metastasis reoccurrence renders the whole effort completely useless.

The more long-term, "experienced" patients, say that anger disappears progressively. Firstly, this is due to a progressive lack of energy; secondly, to simply stay with the problem for what it is, brings to a gradual adaptation and acceptance of it. A quite shared narrative is connected with culpability: some participants interpreted cancer onset as a "sign" or "message" aimed at changing their life and making their perspectives and actions more ethical and, sometimes, religious. This strategy allowed them to answer the question "why me?", transforming a possible guilt into a responsible, proactive reaction.

With the hope of a final resolution, many fought with first onset "like heroin against the evil", believing that a "divine lesson" was hidden behind that suffering. The impact with cancer's reoccurrence represents a deceit, a terrible injustice which devoid the first effort's sense, re-obscuring any perspective and hope. Few say that they would have preferred to end their life with the first onset of cancer, rather than restart everything with this complete loss of trust. But together with the incertitude, a space for some hope still seems possible. A central role is played by more positive participants, often with "lighter" clinical conditions. Who survived the metastasis, represents an example of hope for the others: soon or later, cancer can end. Interestingly, some of these living examples, in retirement dedicated to voluntary social works in hospital.

In the second group, a participant expresses confusion with respect to mindfulness' possible utility, declaring a strong perplexity connected with her Christian beliefs. She wants to discuss her reluctance to find any human contact during this period, in connection with her grief for her recent father's loss. She says she abandons everything, and she states she will probably desert the course as well. Consequently, she does not attend any of the following meetings, representing the only example of a voluntary drop-out from all the three groups. It was not even possible to reach her in order to collect additional information.

A collective, invariant motivation is connected with the perception of being unable to face the situation. Furthermore, after a period of denial, many find it difficult to acknowledge the heaviness of the situation itself. A participant of the second group states in a clear way: "*Sometimes it is difficult to stay just with what is there*". Suggesting a kind of existential bewilderment and loss of life purpose, participant 1.2 of the same group expresses a felt, lived perplexity:

"*So, I ask myself: for which purpose should I go further?*
*Do I have any motivation to do it?*"

She is the only who survived in her hospital unit, passing through many surgeries, chemotherapies and radiotherapies. That participant could participate only in a few meetings of the program, but she influenced it from its very beginning with her courage to face the hardest questions, mainly avoided, controlled or suppressed by others participants.

The thematic analysis shows three principal motivations:

- Helplessness: isolation, solitude, stigma, lack of support;
- Hopelessness: no perspective, problem absorption, lack perspective, incertitude;
- Anger-exhaustion-vulnerability, culpability;

As will be shown by the interviews after the program, often throughout the meetings the motivations changed with a more open, trustful and accepting attitude.

Another relevant point discussed in the first meeting is the necessity to regain the priority of personal needs respect to others' ones. Widely shared among participants is the endeavor for an improved capacity to cope with cancer and to take time to think to themselves, a lacking condition in participants' daily life. Their participation is connected with that need of taking time and getting more intimate with themselves, their feelings and needs. This is witnessed by their high adherence to instructions and self-discipline, even if some adaptations were needed, due to physical weakness and post-surgery pain.

Participants' mood shows clear shifts connected to anxious anticipations, bad news about prognosis, and stress that occurs with familiar complications and duties.

The whole program is characterized by moments of breakdown and rage in order to face the impotence, depicting a generally difficult period with different layers of heaviness.

With respect to personal motivations, participants manifest a common lack of resources in facing cancer's hardships. Some of the participants already received psycho-oncological support: often what they bring from that previous experience is a warrior-narrative aimed at fighting the problem. The role of that combat-narrative appears to counterbalance a deep, discouraging sadness and anguishing powerlessness. Dealing with that kind of psychological coping-strategy background, the trainer often expresses some perplexity, arguing that fighting the problem could limit the possibility to acknowledge and accept it. Some participants explained how this narrative allowed them to find the courage to take on surgery interventions, chemotherapy and radiotherapy.

Within the second group, the trainer found it was pretty hard to keep the program's rhythm, i.e. to let each participant express her feelings, then to pick up mindfulness themes and exercises. A preliminary practice of body scan is proposed. After it, participants give divergent feedbacks. While few of them experienced a lack of focus, with an occasional degree of confusion, many reported a first experience of relaxation and even, in some cases, of pain relief.

With some difficulties, the trainer managed to develop a final discussion where he presented and explained the mindfulness program, home exercises with specific instructions, and mindfulness potential usefulness. The trainer's effort was centered on supporting the authenticity of each participant's suffering, which sensibly brought her to join the group. In a closing note he states:

> "*even if to help and being helped is important, in the illness we are alone, and from here we can restart: what we are is at the center of the question, not everything that turns around us*".

At the end of the program a participant will admit:

> "*During the first meeting, I realized that while I was annoyed by other externalizations of distress and bad feelings, this would not help the group, I realized that I, more than everyone else, externalized my suffering, complaining all the time*".

***Second meeting: cultivating attention and scheme awareness***

The atmosphere is generally warmer, with less tension and more connection between participants entering the meditation hall, as well as more easiness in speaking. Usually, the second meeting involves a certain enthusiasm in sharing and comparing experiences. Discussing home exercises, few participants report uneasiness in practicing outside of the group, experiencing difficulties in relaxing, listening to bodily sensations, or becoming sleepy. Conversely, some reports of objective pain decrease during the body scan, bringing them to reduce painkillers doses (morphine). Surprisingly, some already include family members in their homework, with a certain degree of enthusiasm.

An alternation of body scan and yoga positions is then proposed. While the body scan has already reached general approval as a congenial practice, yoga positions need to be adapted to each individual's needs: some positions are hard or painful due to surgery scars.

After some refined body movements practices, participants are usually introduced to the breath as attention support during meditation practice. Holding yoga positions or sitting position is hard for somebody. After this session, almost everybody wants to share his or her experience: some show a certain enthusiasm about the effectiveness of these practices on pain perception. After these practices and some short feedbacks, the session continues on to the discussion of the theme of the meeting. Discussing the role of judgments in our perception of reality, the trainer distinguishes the usual automatic reactivity from the direct perception of a situation, depicting the possibility to decrease the degree of reactivity. In order to show the impact of implicit schemes on perception, the trainer proposes a classical logic exercise, solving the nine dots problem. Connecting nine dots with four line segments without lifting the pencil. While only few participants solved the exercise or knew it already, numerous amount of them could not reach the solution because they did not think to exit the imaginary square drafted by the linear position of the nine dots. The exercise elicited a discussion on the role of the "mental box" which limits our field of perception and action. Interestingly, it was encouraged by the trainer, participants

reported some physical and emotional feelings associated with the alternation between frustration and gratification during the exercise. A participant who solved it, describes the insightful process by which he found out the solution, which suddenly appeared to his mind as an image.

As a general conclusion, the trainer highlights the importance to let go habitual mental schemes, in order to let new answers emerge intuitively. Surprisingly, participants already declared to acknowledge the spontaneous, automatic nature of their recurring thoughts, even outside of the meditation practice. A participant of the first group explains how this seems absurd to her, and that she could not focus and escape recurrent, automatic thinking and schemes. Participant 2.1 answers that she feels the possibility to exit schemes, since through mindfulness approach she caught the imaginary nature of thoughts. Various individuals declare the experience of daily activities as support for mindfulness practice, as stated by a participant of the first group: "*I realized that I can be highly present in myself during little daily actions, like ironing, looking at a plant or cooking*".

These examples sound encouraging for other participants who declare that i twill be hard for them, but they will try. In particular, at the end of the meeting, mindfulness practice triggers the need to distinguish facts from judgments, considering the possibility of a more objective, equanimous attitude grounded on an internal state of open calmness, and acceptance. Following a sort of dialectic counter position between different perspectives, the theme of acceptance reopens the lack of hope and the rage experienced by many participants: some of them state they cannot accept to undergo very heavy and seemingly useless therapy without reliable, sure effectiveness. Many face this lack of certitude cultivating rage as a source of inner energy.

Other participants remark the need to recenter personal needs dissociating them from others' ones, through a sort of "healthy egoism": in this way they could limit their acquiescence towards others' needs (mainly familiars). The theme of egoism allows many participants to be more independent and find an intrinsic purpose based on inner needs, rather on extrinsic social or familiar functioning. At the same time some

consider family support and quality of daily life as a source of energy:

> "*Maybe I will live one more year, maybe two, but I want to have the strength to spend time with my children, let them laugh, eat together. Life goes on, it's when you make someone else happy that you kill the evil.*"

To be peaceful results to be relevant for many, and this attitude seems to also give back energy in terms of gratification and social support. Therefore, a common solution is to find the right balance between available energies and other's requests, with an act of wise responsibility both for themselves and for others.

Finally, the trainer assigns some "homework": respect to the mere attention to daily activities in a mindful way, this time participants are asked to pay attention to at least one moment they will experience as nice, beautiful or pleasant.

### *Third meeting: pleasant sensations, feelings and meanings*

In general, the session starts with a short feedback on home practices: every participant chooses a precise activity and diligently pays mindful attention to its development. Some choose taking a shower, brushing teeth, rubbing a cream, sewing, or simply drinking a glass of water, a tea, or a coffee. Every participant appreciated practicing these methods in autonomy at home as a habitual activity, discovering in it a surprising pleasure and a wide range of new sensations that went unnoticed before.

After the collection of individual experiences, the trainer suggests walking meditation, adapted light yoga and body scan: during these practices, the trainer guides participants to recognize the connection between physical sensations and mental events. The trainer asks for feedback in respect to the practices: both the body scan and the walking meditation are appreciated. The contact of the feet on the ground is reassuring and the movement sustains concentration, while the body scan offers a moment of tension reduction and pleasant concentration. A participant of the first group shows a sharp change from the previous meeting, where she was completely overwhelmed and terrified by her situation: she now looks calmer, since practicing at home during the last whole week was really helpful. She also explicitly expresses joy to participate the group.

As usual, during the third meeting, the trainer takes the occasion to analyze pleasantness: "*how could you know that the sensation you were experiencing was pleasant? How did it arise and where?*".

Initially, some participants allocate pleasantness in the head space, reducing it to a thought activity or to mind clarification, then they start to add chest zone sensations, in particular heart beats and shifts in breath patterns. Many report aesthetic moments with a general sensation of connectedness and fusion. During the week, participants were supposed to write down in their notebooks the bodily sensations associated with six pleasant moments: collecting them together, some invariant bodily activations can be summarized: warm shivers in the back or diffused warmth in the body, heartbeat accelerations or intensification, stomach-chest-throat deep feelings occasionally associated with tears of joy, peripheral muscles relaxation, full-body suspension and lightness, and the rare condition of neutral pain suspension or absence. The trainer tries to make each description as precise as possible, supporting participants in the recognition of other details. For example, some discover how some pleasant interaction was associated with the expression of a smile, often implicit or unconscious. A participant of the third group says she felt relaxed, particularly in the high part of the body. She finds it hard to describe pleasant sensations, since she remembers affective and emotional feelings, more than physical sensations.

Participants valued the body scan: some of them report how unrecognized thoughts suddenly appear, revealing simultaneously associated, unpleasant feelings. She would like to practice for much more long sessions, since after it her mind is "clear, free from thoughts, grounded on bodily sensations. Many people enjoyed the walking meditation, experiencing joy during its slow movement, sharing it with the others and following all the similar movements of walking: "*it gives purpose to the walking movement itself*". Some participants associate the walking meditation with trekking in natural environments.

Whereupon, the trainer invites people to share the good moments they experienced during the week, reporting the specific pattern of feelings that made them pleasant. Mainly, participants report short instants associated with various specific

conditions. For example, a participant reports a particular nostalgic feeling that occurred spontaneously when she saw a particular light. She acknowledges in that moment, she was more open and attentive to shades of light. The light which came in through the eyes resounded in her heart and throat, producing a smile contraction. Nostalgia for her native city brought serenity and calmness.
Another participant reports of a special moment of interaction with her son, remarking the preciousness of these moments of connection: she felt a pleasant sense of profound union in the chest and in the stomach.

Interestingly, a participant emphasizes how in the present moment she can explore the connection between mind and body, for example living the embarrassment of sharing and feeling the face warming up and flushing. Then she reports of a pleasant moment of connection with her father, after years of distance: she felt her stomach relaxed, with a breaking emotion, a sense of dissolution of past tensions.
In general many of these episodes are connected with a sense of astonishment, surprise, curiosity, relief.

Finally, the only male participant in all the three programs explains how for him both pleasant and unpleasant feelings involve the whole body. He reports a pleasant moment while he was driving: he felt free and ready to go everywhere. But reverting to that moment, he now feels he is going nowhere in his life. Crying, he describes the sensation of a lump in the throat. Another participant reports sensations occurring during the body scan: the precise sensation of the skin, up to a global sensation of a "deep spiral which embraces the whole body". A further pleasant experience derives from helping a foreign family during voluntary work, with an intense warm sensation centered on the chest, and from listening to music, feeling the body flying as a "joyful feather". Another participant remembers the moment when she held a newborn with a sense of surprise, without specifying the bodily sensations, while another one felt a joyful lightness helping her mother at the hospital, as if a weight was slipping down from her shoulders.

Usually the trainer during this meeting invites participants to recognize the significance these episodes and feelings had for them, starting from the "body

intelligence" in order to suspend judgment categories. In general, participants, after some discussions, conclude that "what you feel, gives spontaneous sense to your existence", putting values to your own specific existence, the existence of "me". Many participants state how often that value is also connected with other people, discussing how others' appreciation fosters a value within ourselves. A participant claims that her body is not "intelligent" since it betrayed her.

Finally, as a home exercise, the trainer encourages cultivating awareness during daily activities.

***Fourth meeting: unpleasant sensations, automatic reactions and their meaning***

For the first time, the trainer proposes one uninterrupted hour of different practices, compatibly with attendants' disposition. The body scan, as usual, is enjoyed widely by everyone, while for many, the standing yoga positions are difficult: the trainer chooses to reduce them to few, simple movements, without involving the arms, which often aligns with scar-related pain. Sitting in the chair still, is the hardest thing for almost everyone, both for back pain and for the need to move, after a few minutes, associated with a lack of concentration and mind wandering.

The trainer suggests another adaptation, encouraging those who prefer to lay down on the floor to do it, instead of practicing on the chair. These moments are recognized as particular and different from the sleeping state, questioning participants on the role of distraction. During that practice, a general high diligence and determined dedication is recognizable: all participants try to keep concentration on their breath for 15 minutes.

This meeting is centered upon six unpleasant or difficult events that occurred within the previous week. Examining diaries' annotations on unpleasant body sensations, the more frequent types are diffused or concentrated pain, repugnance in the stomach with a sense of body shrinking, general refusal and weakness, a mass on the head, trembling legs, heaviness in the eyes, nausea, tension, feeling of oppression in the chest, whole body heat.

In particular, the trainer suggests to reconsider these moments in couples, before the group discussion, in order to scrutinize their bodily correlations, each one separately.

In general, bad moments occurred in two principal areas:

1. In connection with spontaneous catastrophic thoughts associated with a general feeling of sadness, related to anxious anticipations based on cancer, or anguished apprehension, fear or grief. Often these states emerged during or after medical treatments, in relation with physical pain and discomfort. For example, many experience chemo and radiotherapies side-effects as weakness, nausea and aches, post-surgery pain, or pain related to the tumor;
2. Second, in connection with relational circumstances, with feelings of guilt and remorse for themselves, or annoyance, rage, disapproval in relation with someone. In the latter case, the social domain is principally the family, but occasionally also the work environment.

Few participants express the desire to listen without taking active part in the discussion, expressing that they are too tired or sad. The theme brings a certain emotional intensity, warmly supported by the groups, that has reached a good connection through the progressive disclosure of every participant, balanced by the trainer's rhythmic guidance. Those that were shy at the beginning, say that the worry of open disclosures in the group completely vanished: now they feel much more at ease. A participant remembers:

> *"During chemotherapy I heard by chance a physician telling his patient that there were not possible solutions for her. I felt a huge, bitter sadness, accompanied by the sensation to be without a means of escape. How do you deal with that kind of situation? I'm so scared that I do not sleep at night".*

A participant reports a bad moment during a contrast injection, with strong heat sensation and feeling of repugnance: this elicits a wide array of support from many who shared the same experience.

Another participant experienced the fear of a physical threat in a public space: she felt a strong activation in her chest, then from the stomach up to the throat, with a

queasy feeling. She explains that fear due to cancer is different, involving weakness in the legs and a sensation of emptiness.

Many share sensations under the label of “anxiety”, “depression”, fear, sadness: some with a weight on the shoulders or restlessness. Participants feel that they have nowhere to turn, as if they are looking into a black tunnel. Another participant was worried by the possible rejection from an oncological center: finally, she was accepted. They all recognize that accepting physical pain would reduce it meaningfully, even if with just a few years to live: but they feel they cannot accept it. Finally, a participant’s old mother did not recognize her for the first time, making her sad, with headache and a knot in her stomach: she still can feel it.

Participants reports how during these experiences, they suddenly remembered the trainer’s assignment, paying attention to the ongoing experience in order to report it as an “unpleasant episode”, remarking all physical sensations. This task forced them to wait before reacting, putting some distance between them and their immediate feelings.

The discussion shifts spontaneously to each person’s attention on individual coping strategies: for example, the common reaction is to endure the experience, tolerating it and getting used to a certain condition, or simply “thinking positively”, such as going back to good memories. Both strategies are ineffective, since they imply significant suffering. Moreover, at the moment they feel sad, depressed, or anxious, participants say good memories or emotions are not accessible. A possible strategy seems to get distracted by doing something, but also this is not always possible. Therefore, some participants start to consider little beautiful things with attention, with a direct perception, as the only meaningful and precious thing in which they can trust.

The discussion of that point can be considered a turning point for the second group: a participant reports her experience in an oncological group of thirty patients: after three years, she was the only one of five who survived. Watching an empty seat, she suddenly realized to exist, while other patients already left. The mere fact of existence, instead of nothingness, gave her an incredible energy. She said:

"*You must see that you are! Others left, but you, still, you are.*"

While the other patients listened in astonishment, a particular atmosphere pervaded the room, an atmosphere of subtle courage. The dark, anguishing phantom of death has, at once, been directly addressed and, without fear, viewed as a mirror for human existence. Let's say that, thanks to that patient, death suddenly assumed a transcendental meaning, out of the threat narrative. Since that patient was not scared, but, on the contrary, surprised by being a living person, it put some distance on spontaneous life attachment, with an encouraging flavour of wisdom. Feeling the relevance of what she said, that participant immediately specified, with a note of irony: "*this is not a positive thought, I am not a positive person: I see things doom and gloom*".

Interestingly, this passage pushed another participant to consider the connection between death and her Christian Orthodox background. She says that in her native country, when asked "*How are you doing?*" often people answer "*What do you think I am doing? I'm waiting to die!*". For example, her mother prepared the clothes for the funeral, contemplating both a summer and a winter version. She adds that often old people have the coffin ready at home, and engrave the headstone early, leaving only the date space empty.

This is a turning point for the whole group: many participants start to confide in each other that they have the dress ready for the occasion, allowing the group to consider that, yes, maybe cancer will bring them to the end, but they are ready for that. A certain type of liveliness comes from these moments of suspension, and even who was silent showing palpable desperation, says: "*Yes, we are, still, here. And we tackle*".

As a matter of fact, more than a group identity has been built up through these passages: a human identity, I would say, is what encompasses all participants. In the same group, a participant complained "*Yes, I fought for five years…*", the same person, who was overcome by anguish and the terror of death, immediately answered: "*No! It's five years that you are!*". The participant who was complaining realized the meaning of that affirmation, maybe exactly because of who was saying it. That person left one year after.

Again, another participant express discomfort, for another reason:

*"I feel awkward, since I am in a better condition than you, it is a good moment for me, I do not have relapses for long times and I live serene days*".

In reply, the participant who introduced the death argument, expresses as a sort of guilt to be healthy: *"isn't it beautiful that at least someone makes it? Furthermore, you do an extraordinary work when you volunteer!"*

The peculiar charisma of that person added some wise irony to the group. A participant at the end of the program will state: "*For me, her intervention that day has been really significant, at the fourth meeting: her energy and thick dignity has deeply struck me*". Then the discussion follows: "*which sense has all that?*" asks a participant. Immediately, the experienced participant who made all that conversation possible, states:

> *"There is no sense. Everything is absurd! Hence, we go ahead without sense, without a direction! I already thought to that, since I'm going through a lot of adversities these times. Do not look for meaning, don't do that anymore! Take a dog, or a cat".*

Meanwhile, the trainer facilitates the passages between the interactions. The discussion continues:

> "*I have bad days too, confined in bed, with pain everywhere, without the possibility to move alone. One morning, I felt better, I went on the balcony and saw such a beautiful day: I said to myself I want to fully enjoy it! Then, when I become ill again, I go back to that moment*".

The same energetic experience is widely shared, in particular in connection with nature.

In other groups some participants report how for some of them, the cancer diagnosis has been a prophetic realization of their expectations, confirming their worst, hidden fear. Some of them suggest they "achieved" the condition of their own projections, referring to how accepting the diagnosis expended all their energy, leaving them in a state of a passive, slow war with "cancer". Since a univocal cause of their condition is not identifiable, all of them produce hypothesis which cannot be considered explicative, *per se*. Therefore, the only suitable answer for many of them is stress. Usually, participants state to passively wait bad feelings to extinct, dealing with

stomach cramps, throat lumps and, often terror. For this reason, many resort to medication.

In general, the bodily sensation and feelings are not very clear: when deepened the more recurrent types are oppression in the chest, turmoil in the lower abdomen, the clenching of the body, cold blood, fixity of the gaze. Rage is described as a movement which starts in the abdomen, moves up to the chest, then the throat, and ends with a sensation of pressure on the head. Many say they often repress it, trying to be kind even if they feel tensed: too many people ask "how are you doing?" can be very stressful when you feel alone fighting with that challenging existential condition.

During the discussion with the trainer, the "resistance-narrative" is deconstructed, showing a certain opposition to the problem, based on a passive strategy: "*I fight with the time, as an enemy. Time seems to me empty, lost. I'm forcedly condemned to unknown*". Since the opposition implies victory or defeat, the trainer suggests to overcome this narrative towards a more present-centered, unconditioned acceptance. The trainer guides present-centered deconstructions of pleasant-unpleasant reaction patterns inviting participants to recognize and accept them for what they are: reaction patterns, based on our personal constructions and perceptions, often associated with past memories and future anticipations (Guidano 1991). To leave expectations would mean to abandon to any sense of victory, together with the sense of defeat and catastrophe. Besides, recognizing the involved emotions allows us to make sense of personal reaction, showing what is relevant for us in our lives. The discussion of these issues is supportive in recognizing how each sensation, good or bad, has a beginning, a duration and an end, showing a sort of automatic nature.

The trainer after these intense passages, then switches to home exercises: for many yoga positions are hard, due to relatively recent surgery scars. For others, yoga is difficult due to a general weakness. Those who cannot practice in their chair, focus on the breath laying down on the floor. Often, occasional tension is reported in connection with the sitting meditation, while the body scan is easy, calming and relaxing. Nonetheless, they often cannot reach the 45 minutes mark, because they feel tired after a while. Many report highly defined perceptions during it, as different shifts

in heartbeats during the in-breath and the outbreath. Remarkably, some participants start to consider the positive aspects occurred with cancer. For example, the recognition of inner dimensions and needs, often overtaken by others' ones, evoke a whole lifestyle reorganization and valorization.

Finally, two strategies can be considered after this meeting across the three groups, building a common perception of strength and courage:

1. Keeping a direct perception of present moment preciousness, and openness to everything;
2. Catching the salience of being there, alive, in respect to the opposite condition: inescapable death.

***Fifth meeting: mindfulness practice***

The first half of the program has passed, therefore the trainer asks for some general feedback on mindfulness practices: how is it developing? Did some changes occur? In general, the course, in its first half of development, is described as very helpful: the same challenging hardships of many medical treatments and therapies are faced in a different way. Many participants report a new resource rising while facing difficult moments: the occasion to focus on breath and practice mindfulness' principles. Many describe, with a certain degree of satisfaction, how during the last anxious situation, they stopped their body and their mind, concentrating on their breath and other bodily sensations.

The trainer and I are happy to hear further encouraging episodes: some patients say they overcame acute anxiety and panic attacks, even giving up psychopharmaceuticals. Usually, before the program, they had to take drugs for ten days. These kinds of feedbacks seem to also encourage other participants.

Globally, patients pay attention to their breath during both radio and chemotherapy, becoming more aware of their sensations, thoughts and emotions, connecting them more to the experience, finding some comfort even in the same bewildering situations.

Other participants focus their attention in particular perceptions that they grasp

in the environment, which becomes more salient, present, and evident in their awareness. Therefore, after therapy, the usual undermining weakness is reduced, occasionally also in connection with other complementary practices (Qi-Kung, Pilates, reflexology, psycho-oncology). Also, the group and the CDs are acknowledged as a font of motivational support.

The trainer encourages further observations and analyses about the changes in difficulties perception: a patient reports that, removing the port-a-cath, the central venous catheter, she was really scared, since its installation was very painful. Her reaction to that pain was to move continuously and aggressively, talking without interruption: in order to control her, physicians had to sedate her. After the program, the removal happened without any pain. With determination, she said to herself: "*No, stop, let's trust, come what may*"; then she focused on her breath, watching the emerging thoughts and emotions, relying on her home mindfulness practice. Without any controlling attitude, she kept silent, and she did not feel the pain even though she was not sedated, evoking a certain surprise in the attending physician. Other participants experienced a major effectiveness in handling nausea and fear. Others had an improvement on relational activities, and consequent social integration, relying on enhanced self-trust and resilience. Respect to the usual vulnerability, many describe a general improvement in strength and confidence, feeling more responsible and less dependent on others' help. Across the three groups, the interaction with significant others is characterized by a progressive shift towards interruption of automatic reaction, recognition of inner dimensions, reconsideration of adequate reactions, and acceptance. The recurrent expression is "mindfulness gives me more time (to react) and to better perceive the occurring situation". The shared need is to eliminate relational automatic reactions, recognized to be the major, energy consuming, sources of suffering.

With respect to these habitual conditions of discomfort, many participants connect the threat of cancer with the rediscovered great opportunity to recognize the immediate fact of being: "There are more relevant, real, concrete things: I am alive and I feel it now. To breath has its value; I have to rediscover it each time, before it was

obvious to breathe!" That recurrent consideration shows a relevant integration of the trainer's instructions centered on the value of present-centered awareness. That shift in perspective seems to also affect the working milieu, changing personal priorities and reaction patterns: the closed circle of mechanical backlashes faces more open, reflective attitudes. Emotional reactions are lived in a more intense way, leaving for them more "space" and accepting their referential meaning, observing them and dealing with their embodied refined sensations and feelings. The body scan and the exploration of pleasant/unpleasant sensations allow to handle and discern emotional patterns.

The social re-integration is connected with the enhancement of solitude: many patients who felt socially rejected now enjoy the calmness of aloneness, discovering a rich inner observation. However, these encouraging mid-way outcomes, which show to foster persons' resources, still have to deal with incertitude, lack of perspective and hope.

Some participants still feel resigned: for them, what helped others, as for example, the "just lingering and pausing on being there", is useless. When pain increases, discouragement re-emerges, undermining the everyday quality of life. As cancer progresses, the future appears intimidating: for some, it is more urgent to pass through therapies as fast as possible, with an underlying, intense sadness.

When that discouragement arises, often other group members describe how the pain may not change, but each day is a different day, and some days are better than others: very pragmatically, many examples of home activities are suggested: "*Today is bad, but maybe tomorrow is better, and if hands are less aching, you can sew, for example, and focus on that activity!*". Others suggest cooking, or cleaning, enjoying friends' company or participating in social, useful activities. To focus on these activities is relaxing for the mind and supportive for attention: consequently, reflection and proactive action can re-attune mental and physical states, constructively. The trainer specifies that to focus on the mind activity per se can be a transitory strategy to handle physical pain, but does not help in elaborating deeper feelings.

This comment triggers anger and rage connected to the social stigma and

loneliness of cancer: "*why are people scared of me, is it because I'm a cancer patient?*". Interestingly, other participants refocus the question on their common responsibility, as cancer patients, to face cancer dealing with themselves, before than with others:

> "*we have to accept pain because it belongs to us; others are not relevant then. If we accept it, we are in peace with others*".

The trainer takes the occasion to describe the circularity of our relational patterns: to be annoyed by others' indifference is connected with the attempt to catch their attention with the energy of rage: which actually circularly fosters other's refusal, which reinforces our rage, and so on. All this interplay is supposed to be performed in order to sustain the effort of dealing with cancer, but actually can be a very demanding and ineffective strategy.

Therefore, the theme of dignity emerges, once again: some claim how to find dignity in fear and uncertainty, and, when no alternatives are given, how to be brave. To share with someone our feelings, then, can be very helpful. The trainer suggests that others' awareness, as well as our awareness, helps us in overcoming difficult moments, because it lets us perceive that we are more than that problem. Refocusing on the practice he goes back to the practice: breath is the best support we have for cultivating the space of awareness, which reduces the overwhelming space we give to our problems. Is breath, in your experience, helpful in recentering your attention? The overall answer is yes, also in dealing with physical pain. Some describe its preciousness, since through it, they reconsider the doing-mode as often superficial, even when suicidal thoughts occur. As you stop and breath, you can recognize, it is only a thought. Therefore, the issue is how to deal with mental reactivity without nourishing it, making hardships bigger than what they actually are.

The trainer then suggests to keep dialoguing in couples, in order to feel more intimate: the instruction is to analyze recurrent reaction patterns with respect to mindfulness practice. The main theme is awareness and mindfulness, with respect to automatic schemes, considering some possible alternatives to spontaneous pattern of reaction.

Then, the trainer guides 15 minutes of sitting meditation: still, some difficulties

are occasionally reported, even if in average a strong effort and a disciplined position are already evident. Each meeting, the difficulties are reported by different participants, since there is both a meaningful heterogeneity across the samples, and a great variation throughout the same participant's health conditions.

Then, some yoga positions, body scan and meditation practices are proposed: the trainer expresses that for them the sitting meditation will be reduced to 5-7 minutes, increasing the laying down practices, in order to rest a bit.

After them, the trainer acknowledges the improved atmosphere of trustworthiness in the group, and the palpable increased recentering of awareness during the practices. He finally encourages the recognition of mental modalities beyond daily activities: even if it can be difficult to discuss them, it is immediate to experience them.

***Sixth meeting: reaction to hardships***

As usual, the meeting starts with a body scan, yoga *asanas* (all on the ground, without standing positions) and meditation. Then, the sixth meeting concerns stress and coping strategies for facing both physical and psychological pain.

The discussion starts with the usual feedback on practices: yoga has been globally pleasant, while for many the sitting position is always reported as hard. Similarly, the support 40 minutes audio guide for home practices was generally too long. The one of 15 minutes was largely preferred. Participants had to report six relational hardships, connected with communicative difficulties: the trainer explores each anecdote, examining each difficulty, asking how each participant dealt with her pattern of reaction during a difficult communication.

The general negative feelings during these situations were demotivation-frustration, rage, inadequacy, confusion, sadness-depression. Participants reported similar ways of dealing with these situations: when they adopted a good strategy, they refer to mindfulness in the following way. During communicative discussions, disputes or disagreements, many anticipated the effects of their negative feelings, suspending their automatic reaction. Mainly, they avoided to worsen the situation without adding

poison to the discussion, feeling a new "opening". In these cases, they describe the quality of their mental presence as determinant in contemplating an alternative to the automatic path: "no, I do not want to go there!". In some cases, this recognition and intention was followed by successful communicative strategies, for example, communicating assertively what was relevant for them at that moment, without fear or aggressiveness.

As discussed by participants, the effectiveness of these answers, is largely determined by one's character and personality, while the awareness of the process can be invariant. For example, some of them just recognized their feelings, accepting to be responsible for them, instead of reacting against others: in many cases they recognized they could put distance between their feelings (of inadequacy, sadness, fear) and the protective, often aggressive reactions. Other cases report a sense of care for other's difficulty, instead of themselves.

Some other participants say they cannot handle rage and anger: they acknowledge them as they explode, but it is too late, and they feel guilty and sad "it is as if I am seeing myself from outside". After a while they reconstruct what happened and consider possible alternatives, the trainer invites them to acknowledge if some common aspects are shared in both appropriate or inappropriate reactions: "What is already there, in both cases?". The discussion highlights the centeredness of the self, and recognizes their improved ability in slowing down their reactions, becoming more aware of their feelings, and thus less reactive:

> "*how do I feel? How am I living that? Pausing in little things I rest in the fullness of the present moment; before I did not acknowledge it, now it penetrates my skin*".

This new attitude makes some of them feel guilty in respect to the usual priority given to others rather than to themselves: they also acknowledge an improved sense of warm interconnection with others, which contributes to a sense of unity. This sense of interconnection is based on inner perception and exploration, which facilitates attunement (*Befindlichkeit*) with others' feelings and state, through mood (Freeman 2014). Interestingly, being in touch with their own feelings, they can better access others', and better respond to them.

After some Qi-Kung respirations, in order to address some interpersonal difficulties, viewed as relevant factors in determining stress, some Aikido exercise are then performed in couples. In fact, these practices depict some harmonic models of embodied interactions, starting from the attunement with an inner center. Through these exercises the trainer conveys the possibility to discover a balance in difficult relations, maintaining contact with our center and energy in order to harmonize conflicting interactions. The major principle is to transform a negative intention (metaphorically, a strong grab on the arm) into a harmonic attunement of bodily movements. Finally, the trainer outlines the importance of an inner-center when we face difficult situations, either relational or existential: that awareness can downgrade our reactivity and overwhelming chaos of emotions. Then, participants reconsider what they experienced along with the mindfulness meditation with these new instructions, connecting the inner experience of unity with the sense of valuable consistency they experienced when overcoming hardships.

***Seventh meeting: a place in which to dwell***

The meeting opens with a common practice of the breath. Then the trainer invites participants to exchange their seat positions, moving to another one in the circle, inviting them to keep the silence and observing if the change of positions implies a change of perspective. Considering how each participant always occupies spontaneously the same seat, the trainer claims how we find more comfort in habitual perspectives rather than new ones, facing a sense of incertitude. In the following short discussion, the trainer explains how perspectives shape our life and our choices. The intention seems to link the embodied practice of present-centered attention with the constructive shift in attitudes and behaviors often reported by participants.

Many participants consider how they can feel “at home” in many places, but that when they feel lost, they close on themselves looking for a stable point to cling to: sometimes they find it, and they feel strong, other times they do not, and they feel anxious and confused. Without home we all feel frightened and hopeless: even when we think to have one stable seat, soon it finishes. We cannot rely on it: so, which is our

place in our lives? Some participants say that they use objects as a strategy when they are outside of the home: maybe, they can bring something of theirs dark moments? Others say that when they experience incertitude, they can open to the present experience focusing on perceptions: but a common inner dialogue seems pivotal in finding an internal balance. Many report how, even if this dynamic internal activity was already there, only now they realize its existence. Even if thoughts and beliefs can come and go, many state this internal dialogue is the most solid skill they have in hard moments. Some localize this center in the chest or in the head, other between them, in the throat: this dialogue happens with the sensation of trustworthiness.

Spontaneously, many participants express their gratitude to mindfulness practices, since it allows them to recognize a center which was already there. This experienced center is there in particular when they are paying careful attention to someone or something, with a sense of precious, poetic sensitivity. This sense is pivotal in feeling connected with others, while before, they often felt isolated from others. Hence, now they can be at ease in solitude, because they do not feel isolated: to be alone is not to be lonely anymore.

Even when they feel lost, they can reconnect with this center just by recognizing the phenomenon which appears to them, without absorbing all their energies:

> "*I live a big incertitude. Here, in the group, I can deal with it expressing it. I do not know where I should be, where I would like to be, where I am going. I feel lost. But I'm aware that I am lost, I can acknowledge it. Before, it was different*".

The trainer reminds his pupils the usefulness, in these moments, of paying attention to the breath or to bodily sensations, or external perceptions, getting rid of top-down judgments and considerations and listening to the internal turmoil "as it is." Some state how they feel the same bottom-up comeback while preaching, or when getting inspired by a poetic sensation by nature's beauty.

In these frequent cases, external beauty evokes a sense of preciousness of ourselves. During this discussion, the argument prompts some experienced coincidences, interpreted by someone as an expression of the universal order, with a sense of unity and interconnectedness.

The trainer insists that the focus is not in the external order, but in our possibility

to recognize it. Some of them wonder if awareness has necessarily to come into the world only through suffering. The common observation is that we all have to find our place in the world by finding a place in ourselves. Only here a sense of stability and security can arise, even in the worst situations: you just have to take a break, and breathe, deeply. As stated by a participant:

*"You have to surrender. Then you can go ahead. Then, there is beauty. Beauty, is me."*

The trainer notes the intensity of this participative meeting: he is surprised by how consciousness, which is ordinarily a transparent phenomenon, considered as banal, can turn out to be so precious and significant, making the difference in one's life. At the same time, he finds it difficult to highlight a common bond between the individual meditation practice and a change in everyday attitude, since each participant has his or her strategy, attitude and personal inclinations. Sometimes a change in perspective or a transformation happens, sometimes not, so the trainer is uncertain if it is really the meditation practice which occasionally stabilizes them, to make them think and feel in a different way. He wonders if meditation is for them just an occasional useful tool, or if it provides a deeper sense, for it happens to him. At the same time, he is happy for a nurse who participated without taking part in the discussions: this time she participated with enthusiasm and she is moved. Interestingly, other participants show a great approval, as they were waiting for her to join the discussion. She said that when she experiences incertitude she preaches, embracing all her vulnerability. Leaving her defenses behind, she surrender to something bigger:

"*I let this bigger thing take care of me, as it wants*".

Increasingly, empathy emerges as a key point of the group meetings, and maybe mindfulness exercises support that process, somehow.

This discussion is followed by the body scan. After it, some considerations arise: occasionally the experience of a sense of unity throughout the whole body, as completely connected with their minds. To pay attention to the breath lying on the ground, can go with a sense of deep, progressive relaxation of both body and mind, and it is very satisfying. Using the audio CD as a support, some practice the body scan

as little as one hour per day, between tiredness and wakefulness. The recorded voice is effective in recalling the attention back to the body without falling asleep, but it is not as evocative as the trainer's one. Participants widely appreciate the distension and relaxation associated with the body scan, as a moment to rest, recover energy and cultivate the awareness of the present moment.

***Eighth meeting:***

The meeting starts with the body scan practice, as usual, followed by few simple, refined movements of yoga positions and Chi-Kung respirations, and then, again meditation with the support of breath. After these exercises, the practice on the chair lasts 22 minutes (more than ever): the atmosphere is dense, the silence intense. It is the last meeting. Surprisingly, nobody has problems with the sitting position: now, they can keep it in a relaxed way, without backaches and useless tensions. The discipline has been refined, and there is a deep calm in movements and speech rhythm. But there is not much time left for the discussion: the trainer wants to discuss the strategies each participant will use to keep the practice at home. As a participant, I feel the weight of the trainer's words on each person. For each participant, this group represented a turning point, and the fear to be alone, again, is mixed with gratefulness and sadness of leaving the group until the next follow up (one month later).

Discussing the practice at home without the CD guide (that was the task) was hard for everyone. While some even did not even try, others felt more free to manage the duration and the rhythm. Others kept a mindful attitude while doing ordinary activities and taking a pause between them and then, shifting from one to the another.
The discussion shifts to a final conclusion: what has been learn during this training?
In general, everybody agrees it was hard to face themselves during the practice, in particular to keep a still position, and during the whole program: at the beginning they preferred to practice awareness moving their body. Now, they find a subtle pleasure in immobility: it is worth it. Almost everyone says that she or he feels transformed by the whole program, by the group interconnection and by the trainer's guidance:

"*Here, I showed my soul, here I felt as if I was in a safe place,*
*here I could open myself: there's no other places to do that*".

Then, to see reciprocal changes motivated each participant bringing a global change.

A general observation comes from health professionals who took part in the program: they felt completely changed, looking at their frenetic way of being as a past attitude. This shift improved their clinical work and their empathic qualities, making the interaction with colleagues and patients much more meaningful and rich. Some report a spiritual integration or reconnection with personal backgrounds, associated with a clearer, unified, embodied practice. A nurse uses this metaphor: "*The body has to align with the mind the same way a newborn has to attach to his mother to suck her milk*". In general yoga, is becoming a pleasant practice with beneficial effects on backache, as a completion to breath meditation, walking meditation, mindful attention to daily activities, and body scan.

Those who still find it difficult to do the sitting position in the chair, do the meditation laying on the floor. Many prefer to practice freely, without the CD audio guide, as sometimes can be out of their pace, and can disturb the intimacy of that moment. The intimacy of taking time for themselves is a core aspect, since many participants say it has been the most difficult part which they will not give up anymore: "*Before I always hid myself, as if what I felt was secondary. Now all what I feel and live comes as a prior fact*". To be able to give value to themselves is often reported as luckiness, the luck to take a little space for themselves:

> "*My relation with time has changed: before empty time was a waste, now the incertitude of what will come has become my practice. I can stop and become aware of the present moment*".

This feeling of luckiness somehow counterbalances the awareness of defective aspects in personality constraints or lack of abilities, as well as the strength of keeping the effort of practice alive. The theme of self-judgment has been present throughout the whole program, meeting the trainer's invitation to go back to the practice acknowledging these judgments rising in the space of mind. The indication has often been to avoid idealizations about one's self's as well as others: just trying the best we can to accept our limits. To practice mindfulness does not mean to become suddenly wise or immune to weaknesses or defeats. It is rather proposed as the constant cultivation of little wisdom giving value to little things.

### *Full morning*

"*A day of full awareness: unusual, a day only for you.*
*I noticed new things happening in me and outside of me"*

*"A vacation for the mind.*
*It seemed to me to be in another city or in another world.*
*This experience expands all senses, it is a huge gift.*
*An extra support. But I still have a question:*
*how all the suffering and hardships can be welcomed?"*

Two participants taking part to the full morning

Participants' commitment to this ending half-day of practice is high: the atmosphere is intense, allowing a good concentration. Both sitting and lying meditations are guided, together with some indications of the compassion feeling towards significant others. Each practice session lasts from ten to twenty minutes depending on each group, alternated by yoga *asanas*, Qi-Kung movements and respirations, or walking meditation.

For the majority, the half day has been physically intense, involving a certain effort both to concentrate for more time than the other meetings, and to deal with bodily weakness. For some it is difficult to stay still and in silence for longer durations: this sometimes triggered more recurrent thoughts and worry.

For others it has been demanding to do not fall asleep during the body scan. However, this effort has been widely appreciated as a unique occasion of intense, common practice. Some describe it as particularly calming occasion to rest and to reset: "it is as if I cleaned out all my dirty blood". The intimacy developed in the group is another relevant factor of the day: participants say they feel very connected to each other.

The longer walking meditation, then, is specially appreciated: the contact of the feet with the ground brings a sense of unification and sustained concentration. In particular, a participant says that during it she did not limp as usual, and felt more confident in her stride.

Finally, for the first time the peculiar exercise of relational mindfulness is proposed: it consists in keeping eye contact with another participant for a few minutes:

"*it elicited a lot of tenderness: I would have hug the other participant. It was like accessing her thoughts, I was moved*". Many progressively cry after this intense human interaction, as a magic moment: "*a long time has passed since I cried last*". Another participant:

> "*I felt like it was as if I was looking in a mirror. I would like to hug her. I would like to have the same feeling for myself, accept me and hug me. I want to make peace with me. Now I know I can be more open with others*".

Other participants are worried about the possibility to have communicated their anguish and suffering, and are immediately reassured by the other members of the couple that they felt at ease with them, experiencing great calmness:

> *"looking into the eyes of her instead has cleaned*
> *my mind from all tensions and negative things".*

In conclusion, the balance between effort and the interesting time spent together seems more than acceptable. The overall good impression is to have shared the silence together, in connection.

***First follow up:***

As usual, the meeting starts with a long lasting body scan, followed by some refined yoga and Qi-Kung movements. Then the trainer asks how the last month passed, and if they have been able to continue practicing by themselves. Initially some positive feedbacks are given: many have explored mindfulness alone and looked for books and other stimuli. Few others lost practice continuity without the group support and the regular meetings. Compared to the last meeting, many express a certain degree of distress and bad mood, saying their clinical condition is worsening, and pain is increasing. Mainly, the body scan is still effective in supporting home practice. Many went back to the audio guide to meditate on the breath, yet still experiencing some difficulties. Concentration reached in the program has weakened, with a rebound of negative emotions, in particular for those who are waiting for important medical outcomes; for some pain is distracting them. To handle anxiety and negative anticipations is, again, a relevant problem: "*Again, the wait between the medical check-*

*ups is energy consuming: it is hard to re-appropriate for myself, I have to struggle to take my time since external events overwhelm me. When I practice yoga I feel more tensions in the body*". Another participant: "*I am sad, I don't know if I will make it*".

Also interactions with relatives has turned to some tensions: mindfulness still offers some support, but with some difficulties. Sometimes it works, sometimes not, but many recognize that even when lashing out, they are more aware of some process details:

> "*it is always a restart, you are never ready. I toned to always learn to be with myself. I have to walk alone, as a growing child, but attention always slips away from me. Then, I have to come back to my breath.*"

On the other hand, others kept continuity in their practice and still feel present-centered and not overwhelmed by health problems: "*I started the radiotherapy. I try to do what I learned here: stay still, straight and face the problem as it is, now.*" Another participant states:

> *"They told me I have to do another chemotherapy cycle: I collapsed.*
> *Then, I thought: it is always me… and I restarted again".*

When facing pain or difficult emotions, the trainer suggest, an useful tool, to breathe deeply three times, and then to ask themselves: how am I? What do I feel? What I am experiencing right now?

This suggestion triggers further discussions: many say this is exactly what they are doing, in particular when difficult liminal feelings, with good exits. A participant sees her limbs tremors reducing, and when fear or terror arises, she tests her awareness, centering in the present sensations. The trainer points out that mindfulness is not a matter of control, but rather of down-regulation and rebalance.

Finally, the follow-up is concluded with some refined movements and a sitting meditation. Few patients could not participate in order to abide by their new therapies. They passed the program before to say that they will restart the practice after this hard period. Now they need to be in contact with the world.

***Second follow up:***

Again, the follow-up starts with a long lasting body scan followed by some refined yoga and Qi-Kung movements. Then, a discussion is driven by the following question: what can make me strong or lucid during the hardest moments? What can let us exit confusion, despair and fear?

A major part of the groups suggest that being centered in awareness, with all the qualities practiced, would suit them well the end, but through a difficult path.
For some, what is more accessible now, is to pay attention to ongoing activities, trying to escape the pain of surgeries and therapies without too many painkillers. In fact, chronic pain is associated with recurrent catastrophic thoughts and anticipations.
Breath is very helpful during therapies, calming down negative feelings and annoying physical sensations: "*when I breathe mindfully, the pain is like a guest arriving. Now I have to put an artificial prosthesis: another friend*".

In general, although sadness is there, many declare they know it is an illusion, as a dream you can believe or not. Interestingly, a participant says that we prefer these dreams, even if painful, because they are safer than reality, which is unpredictable and unknown. Therefore, we all have to go back to minimal sensations and reconnect with reality as it is in that special moment, enlarging it and letting things speak to us:

"*reality is not a dream, it is built by little things*".

Other participants feel lighter and practice attention walking in nature, breathing deeply with their families: "In these occasions I feel as a whole unity". A participant reports a peculiar experience which transformed her way of feeling: during a vacation, she experienced an astonishing sense of freedom while entering into the sea:

"*I felt huge as the universe and small as a speck of dust*".

This experience resulted in a different way of feeling and perceiving which still lasts, noticing some details or even looking at death as a natural event. For some, what is more helpful is the group, the time spent practicing with people who share their condition. "*But how is it possible to find in ourselves a reference point stable and certain?*" asks the trainer; "*Is it possible to find in it the energy we need to face illness incertitude?*". The common answer is that dedicating the right time each day, it is

pivotal in order to find this reference point. Through the exercises, they can create a distance between them and the automatic mechanisms connected with anxious worry and rumination, feeling much more responsible for themselves. This helps in not putting too much weight on others' shoulders. Then, some participants find energy by significant others, also playing with domestic animals or recalling good memories. Otherwise, the walking meditation is very useful, in alternation with the body scan and the breath's awareness. So, what is recurrent, is the need to alternate moments of joy and relaxation, with mindfulness exercises, which are demanding. Other participants say they can find something in themselves, but they are not quite sure of what exactly. Increasingly, during the follow-ups, participants helped each other supporting or giving suggestions. The trainer acknowledges its usefulness, but then he interrupts them in order to find the time to practice.

Independently from the severity of the medical condition, what is hard is to continue the practice:

> *"I am surprised by the fact that I had the strength to practice alone when I felt so bad, doing the exercises at home. Now I do not, because I feel better and I had good medical updates. I think I need the regular meeting with the meditation group, to do a daily practice, independently from how I feel."*

The meeting ends with a standing position based on the mountain metaphor, in order to evoke an image of internal stability and rooting, followed by a sitting mediation. A participant closes the meeting: "today I felt very well with you, leaving many sad thought behind me".

***Third Follow up***

This time the meeting starts with the discussion: what is minduflness bringing to your lives? Has something, also even a little thing, changed? Some participants are exhausted by familiar tensions, and claim they are not able to give priority to themselves. The discussion shows how many feel the natural inclination to help others, before thinking about themselves. Recalling past meetings, some remember that exhausting ourselves by helping others, is completely useless:

"*we need to spend more time in solitude, possibly in nature, and simply relax.*"

Some other participants look more confident in reporting their personal, preferred practice. They found an inner motivation and discipline. Many enjoy the walking meditation or the body scan finding it more and more interesting, and increasing the time dedicated to it. During the session, they listen their bodily sensations, playing with the "inner voice" and automatic thoughts. After it, they feel relieved, less judgmental and more accepting towards themselves and the others. This helps in reducing the activities and the frenzy. The same for the practice of mindfulness: if they are tired or the pain make them stop, they recognize the judgments rise in their mind, letting them go. This careful attention is very helpful in making them "less rigid and more placid", inside and outside. Many look satisfied after that new discovery: they can more easily flow with their condition, both in moments of sadness and of happiness, with more equanimity and less reactivity. Recognizing their situation for what it is, they recognize life for what it is, without expecting things to occur in a different way. Some of them start to think they are becoming wise, somehow.

Why is listening to sensations so powerful? Asks the trainer amazed. The question remains unanswered. The meeting is then followed by one entire hour of practice: body scan, yoga positions, refined movements, and sitting meditation. Then, at the end, the trainer delivers another, longer CD guide.

***Fourth Follow up***

Again, the follow-up starts with a long lasting body scan followed by some refined yoga and Qi-Kung movements. Then, the trainer is curious to know if mindfulness gained a spiritual or religious meaning, involving the sense of a bigger, sacred, transcendent or transcendental dimension, or whatever:

"*Is mindfulness preciousness related to a sense of deep respect for life as a huge, unknowable mystery?*"

In personal communication, he then will tell me that, acknowledging the common Christina background, he thought it could be useful to discuss the role of spirituality and religion in their lives. That discussion arose because of the worsening conditions

of some participants. Hence, as death salience increased in the group, he thought that a religious reconsideration, even if far from his beliefs, could support them in hard moments.

The theme permits the emergence of different religious backgrounds, showing a great respect for that dimension, even in atheist or lapsed Catholics and Orthodox Christians. Mothers and fathers educated their children to a Christian creed for that reason. The theme shows also some narratives, which frame the illness as a divine intervention to encourage us to grow wiser. For that reason, each one has his or her path and destiny. Many state nothing is arbitrary, because there is something bigger: otherwise life would be meaningless and valueless.

A metaphysical divergence emerges among the participants, because someone disagrees, remembering past meetings when a participant encouraged everyone to accept life's meaninglessness in order to go ahead, bravely. Therefore, the trainer asks which is their practice used in order to connect to that spiritual world. Many, acknowledging the impotence we have on life, preach surrendering to their destiny.

Many refused their religion in youth, after intense dedication, acknowledging all the suffering and the injustices happening in the world. The aspects which they have been educated to see in God, now they see in nature and in little things:

"*Today I find my spiritual dimension in relation with nature,*
*and dirtying my hands with the grass. In nature I feel nurtured*".

After that discussion the trainer reads a story:

> *"I dreamed that I walked by the sea with the Lord, and saw projected into the sky every day of my past life. And for each past day appeared on the sand two footprints: my and that of the Lord. But in some points I've seen one footprint: there were the most difficult days of my life. Then I said, "Lord, I chose to live with you and you promised me that you would always be with me. Why did you just leave me in the difficult moments? And he said to me, "Son, you know I love you and that I never left you; the days in which there is only a footprint in the sand are just the ones I carried you in my arms".*

The common reaction to this tale is that many feel a deep trust and faith in that "something more" which is always "there." Some admit they are going back to church and they are praying more often. They find it helpful: opening a dialogue with God,

they feel responsible for that challenge in a moral, spiritual framework: "*I feel that the Lord gave me this weight to show me I can endure with it. I can trust in this*." At this point, particularly in the second group, considering the severe condition of some participants, the perspective of death becomes more acceptable, as a destiny, or as a "finish line" we all cannot avoid: "*Things go as they have to go*" states a participant, declaring that this abandon aligns with a sense of gratitude.

The sense of gratitude is widely shared, although some participants say they still fight with God, because he should intervene when you suffer deeply. Hence, other participants say you cannot fight with destiny, blaming God for what happens to you:

"*Life cannot be only pink. If something beautiful happens, we welcome it. If something bad happens, we have to tackle it*".

At this point, the trainer questions if mindfulness is somehow linked to these perceptions of a spiritual "something more", as witnessed by the emotion of gratitude. Few answers testify to the collective feeling about this matter:

"*If I turn to myself, intimately, there, I find the same space of the something more*".

Another example:

> "*I think mindfulness and the ''something more'' are the same. To come here, to empty the body, to feel light, for me is like when I'm in the church, in front of the altar. It is a parallel, but it is the same feeling*".

Another participant says:

> "*I personally do not like to go to church, I do not like priests. The communion between human beings is very difficult, for that reason we need to go to the church, to communicate with someone you feel very close to you, be it God or yourself*".

As usual, the meeting ends with a sitting practice centered on the breath. Finally, the trainer proposes to the group to join the next full day, the next season, in order to meet again and practice together. The hospital will contact them.

### *Final considerations on mood:*

During the program the hospital collected various outcomes, assessing all the biochemical parameters associated with the ongoing therapies. Together with them, we assessed the Profile Of Mood State test (POMS) which measures improvements of mood (McNair 1992). The POMS consists of 40 items clustered into 6 scales, respectively corresponding to: tension, depression, anger, Vigour, fatigue, confusion. As presented in figure 22 below, the timing assessment occurred in six different occasions before, during and after the program (w0-w48).


**Figure 22:** study program and timing assessment

Table 10 below shows means by time and the *p*-value of time effect for the POMS scales of cancer patients database, reporting the results for the average scores of the test.
The outcomes show relevant changes in the mean scores indicating a significant improvement of mood throughout the mindfulness program. The total score calculated by the addition of all the variables ("POMS total") shows a comprehensive statistically significant reduction between the start and the end of the study.
In particular, mindfulness practice shows to impact "depressive mood", "fatigue" and "confusion" clusters, while "anger" is nearly significant.

| measure | t0 | t1 | fu1 | fu2 | timePvalue |
|---|---|---|---|---|---|
| pomsTensione | 12 | 6.3 | 7.5 | 7 | 0.11 |
| pomsDepressione | 16 | 3.3 | 5.6 | 4.2 | 0 |
| pomsAggressivita | 10 | 2.3 | 4.4 | 3.8 | 0.06 |
| pomsVigore | 15 | 14 | 14 | 18 | 0.54 |
| pomsStanchezza | 14 | 5 | 5.2 | 5.3 | 0 |
| pomsConfusione | 14 | 7.3 | 9.2 | 8.2 | 0.05 |
| pomsTotal | 49 | 10 | 20 | -0.33 | 0.01 |

**Table 10:** POMS repeated measures summary

# PART C

## OVERALL RESULTS

## DISCUSSION

The following part discusses the areas previously presented in PART A, Chapter III:

1. Autobiographic disruption and narrative self
2. Embodied self
3. Existential suffering
4. Otherness and social identity
5. Worldviews and Spiritual Hypotheses

First, Part C reports the overall findings on these themes individually, secondly it interconnects their structural invariants, with a constructivist, hermeneutic approach.

# I

## EMERGENT THEMES

The interaction of three principal themes emerged during the interviews and it frames the development of the mindfulness interventions: the mindfulness trainer supportive leadership, the group connection and support, and the personal meditation practice (see figure 23 below).

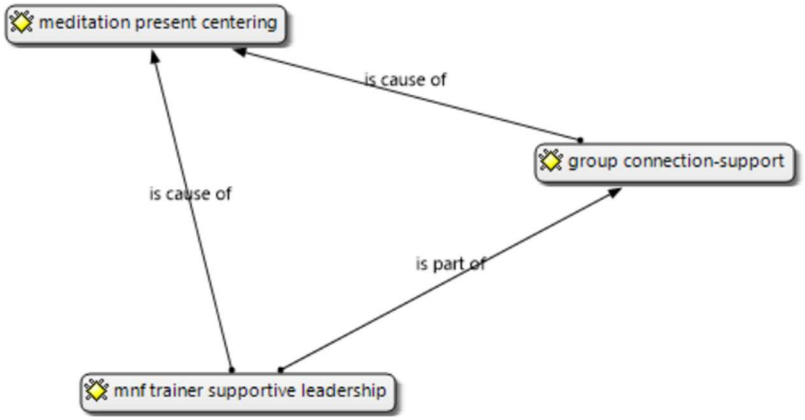


**Figure 203:** The program emerged principal factors

In participants' narrative plots, the personal meditation theme is based on both the human qualities and the expertise conveyed by the trainer's leadership, on the one hand, and the group supportive connection, on the other. More generally, however, it is possible to include the trainer's function within the overall group connection and support (as shown in figure 24 below). In the following part each factor is considered in itself, in all its complexity.

Table 11 below presents the conclusive themes emerged across the three groups with cancer patients. Even if distinguishable, each defined theme is interconnected with the others, as shown by this conclusive statement of a participant:

> *"The most important thing is that I rediscovered a special space within me, in the heart, a solid, stable point, firm, certain, upon which I can rely. Before it was there, but I did not notice it. Now I know there it is, and it will always be there. It is me, it is my own being, my own feeling. For as long as I shall live, it will be there. After… I will see. I understood I usually went back to it automatically, in order to rely on it and immediately restart activities. Hence I thought activities could give me back a*

*center. Instead, the center comes before, and the activity later! To be aware of this now, makes this center much bigger and significant, since I can reside in it without immediately jumping into activity or aggression".*

| | |
|---|---|
| Breath rhythm attunement, listening the body sensations | REFINED ATTUNEMENT |
| Intersubjective balance-attunement, refined perception of others' feelings | |
| Attentive, refined entanglement with the present moment | |
| Heart-centered joyful concentration-compassion towards significant others | INNER CENTER |
| Safe anchor during panic and anguish | |
| Precious contact with myself through long-lasting immobility | |
| Intimacy of the practice as a private moment | SPACE |
| Discovery of inner dynamic space where to dwell with calm | |
| Abide inner space and explore new feelings and emotions | |
| Head-centered mind nestled and dissolves in the body | UNIFICATION |
| Bottom-up embodied feelings and emotions entrust | |
| Group trustful friendliness and reliable support | TRUST-ACCEPTANCE |
| Automatic thoughts breakdown and unknown-incertitude acceptance | |
| Inner need recognition, priorities reorganization, life valorization | |

**Table 11:** Emergent themes with cancer patients

Even if other priorities are urgent and the need to do things more powerfully as life perspective shortens, mindfulness discipline offers a bodily center when facing hardships the in hospital:

*"Initially I thought mindfulness could heal the body: I believed that mind control could reorganize crazy cells. Instead, mindfulness results in centering me in the body, through feelings and sensations, while I always have been centered in the head. In the past, I looked for this center for example by preaching and centering in the heart, but it was difficult".*

## 1. **The mindfulness trainer**

*"The validity of a teaching has nothing to*
*do with the qualities of the teacher.*
*All that matters is whether, when put into practice,*
*it can affect a real change in the way you live."*

Stephen Batchelor, Why I Quit Guru Devotion, Tricycle, Winter 2017, XXVII, 2

The trainer guidance has a pivotal function in transforming spontaneous observations into clear statements and questions, sustaining a dialogue between participants. As a trainer said, the major function he feels he must fulfill is to "*enhance their perplexities*", bringing them out of their patterns of reactivity. Embodying the principles of purposeful behavior (Barrick, Mount, & Li, 2013) with cognitive-affective personality system theories (Mischel & Shoda, 1995), the trainer's personality traits are somehow intertwined with their "performance".

During the development of programs and in interviews, mindfulness trainers revealed an inclination to be conscientious, extraverted and open to new experiences, hence perceiving their work as particularly meaningful in a moral or spiritual acceptation. In particular, trainers' engagement showed, in accordance with the Buddhist teachers and advanced practitioners, the important element of social context transformation through a personalized, ethical accountability.

Therefore, the professional performance of these social actors lies between an inner vocation and consequent commitment and the links of this personal commitment with the external world in the shape of social engagement (as presented in fig. 24). As previously discussed, the iterative overlapping of the personal moral-spiritual commitment with the socio-cultural engagement presents a refined framework of past experiences in various domains, with some psychological analysis of cultural constraints and specific policies. Often the external actions of these peculiar professionals are entangled with inner visions, worldviews or even occasional insights with a profound, existential implication. The principal topic of these "revelations" are about existential suffering and impermanence, in connection with mind-body interaction and Buddhist teachings. Trainers describe these implications as witnessed, at the best of their possibilities, by their actions, and in particular, by their socio-

cultural engagement.

Therefore, their performance as "mindfulness trainers" hides a whole world of meaning and values systems which shape their motivation to act, giving way to a transformational leadership model, enhancing the perception of meaningfulness of that particular function (which in many cases is far from a mere reduction of "work").

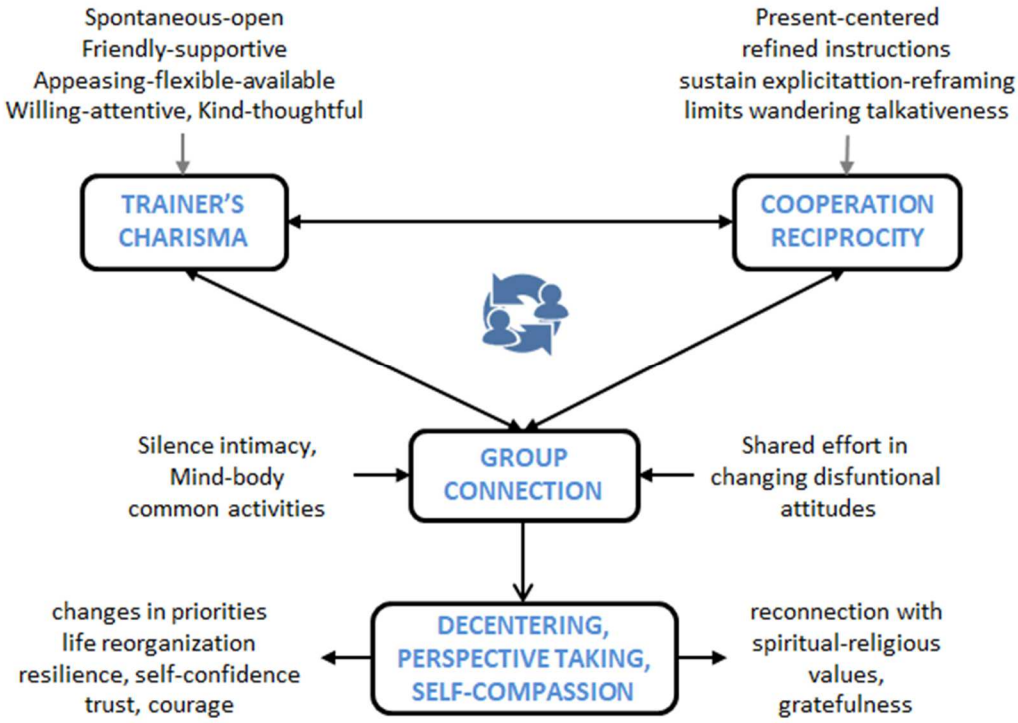


**Figure 214:** Mindfulness trainer's transformational leadership emergent factors

Within the three MBSR developed with cancer patients, the trainer experienced some difficulties in handling the heterogeneity of the groups: for that reason, he addressed a common motivation to find a healing method, both psychologically and physically. Remarkably, an overall discipline and commitment was clearly much more intense than in usual open meditation groups. Chronic pain, death threatening salience, anger, exhaustion, depressive rumination and mood, anxious worry, loss of meaning, were all present in these patients, with a relevant "degree" of sufferance.

For the trainer is pertinent, and also useful, to distinguish three principal areas:

1. The motivations: general urgency, impotence. Acute patients, who recently received their diagnosis and had surgery, are more prone to recentering

themselves in order to solve the problem. In these patients, hopelessness is less evident: they feel their "healthy past life" is accessible, they just have to overcome the onset of cancer, as an obstacle. The trainer acknowledged, in private communication, how that attitude was associated with less commitment to home exercises, while chronic, metastatic patients, who showed an intense lack of hope, showed more personal engagement. But this engagement is more a matter of form rather than of substance: in fact, acute patients practiced 30 minutes per day each, on average. But the themes associated with home practice were significantly different: while acute patients showed interest for effects on health and psychological balance, chronic patients were trapped in problematic bafflement riddled with existential, open questions. Often that question pertained to death and viewed it as a major, unsolvable phenomenon which bonds all human beings together.

2. Attention-proprioception redirection: the major function of the long lasting practices on bodily bottom-up sensations and feelings is intended to foster a clear, calm unified perception of participants' bodies and minds. The brightness of some deep, hidden feelings showed a particular therapeutic effect across all the groups. The principal goal was to cultivate an actively passive-receptive attention, able to catch the most refined details of bodily and cognitive phenomena. Together with this, the deep relaxation regulated the emotional reactivity, associated with evasion of the problem, or the compulsive search of a solution. Interestingly, the effect of the practices initially was to calm the atmosphere of the groups, with a general sense of sadness. With the trainer, we wondered if this was due to the contact with a state many were avoiding. That sadness, built the basis for some final enthusiasm.
3. Life reconsideration and changes in attitude: acute patients displayed the particular relevance of an inner center of reference, enhancing energy and hope. For chronic participants, the process seemed more "subtractive", since many found resilience and coping effectiveness just in acknowledging their reactivity for what it was, relinquishing their usual mental habits.

In this work, as well as in a previous one[21], participants view their ability to "abide in liminal spaces" improved, entrusting themselves, i.e. the consistency of their internal center of reference. Hence, many participants showed more courage in adapting to emotional floods and to overwhelming pain intensity.

**2. The group dimension**

As discussed in the introduction to the emergent theme section, the group connection-support theme emerged in the interviews analysis as a relevant factor interconnected with the mindfulness trainer supportive leadership and the personal meditation practice. As shown in figure 25, another relevant factor played a contradictory function in the early start of the program (mainly, the first two meetings): the effort of self-disclosure.

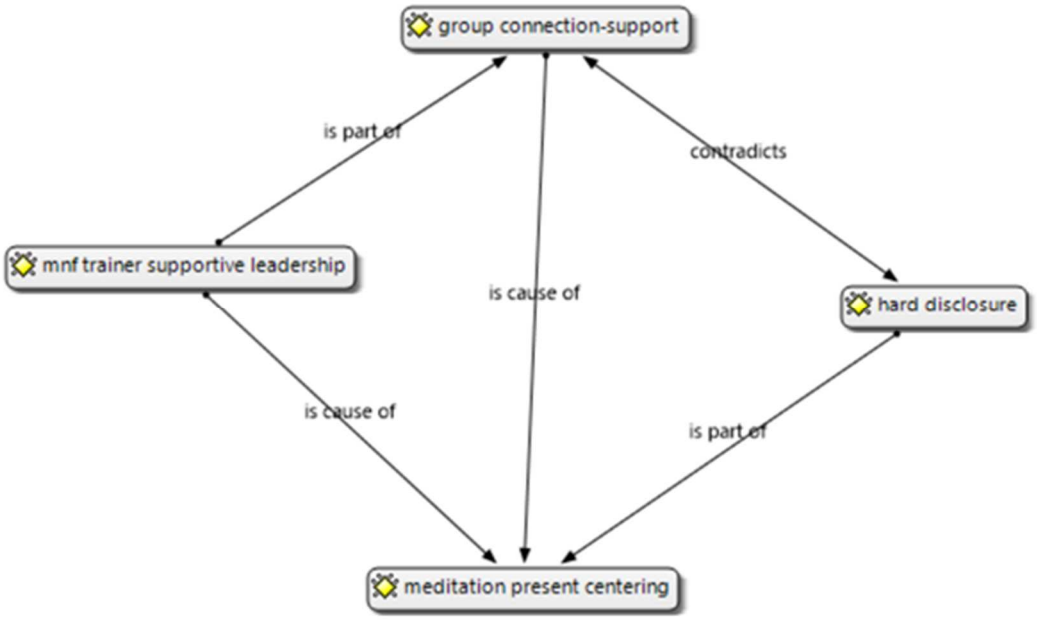


**Figure 225**: The group connection

That hardship is shaped by individual personalities characteristics, aligned with the introvert-extrovert personality continuum. The most "self-defined" introverted participants took time to disclose and share their experiences, while on the contrary, other participants often engaged in refined accounts of personal past and present

[21] this theme emerged in Bruce and Davies qualitative research with hospice caregivers (2005)

problems from the first meeting. The thorny balance between these two polarities disturbed some self-defined introverted participants, who perceived few others' externalizations as a lack of personal intimacy, regardless of the relevance of the themes with respect to the program target. At the same time, some extroverted participants were sorry for few others' lack of participation, and were worried about their verbosity. Of course, the trainer's role was crucial in handling these subtle tensions that could emerge at any given moment, especially during the first half of the program. Interestingly, with the end of each program, the group reached a good self-monitoring technique in equalizing the discussions, even without the direct intervention of the trainer.

As shown in figure 26 below, this change in attitude has a relevant social component: the group boosted a deep feeling of commonality and empathy, producing dynamics of group support and interconnectedness out of it.

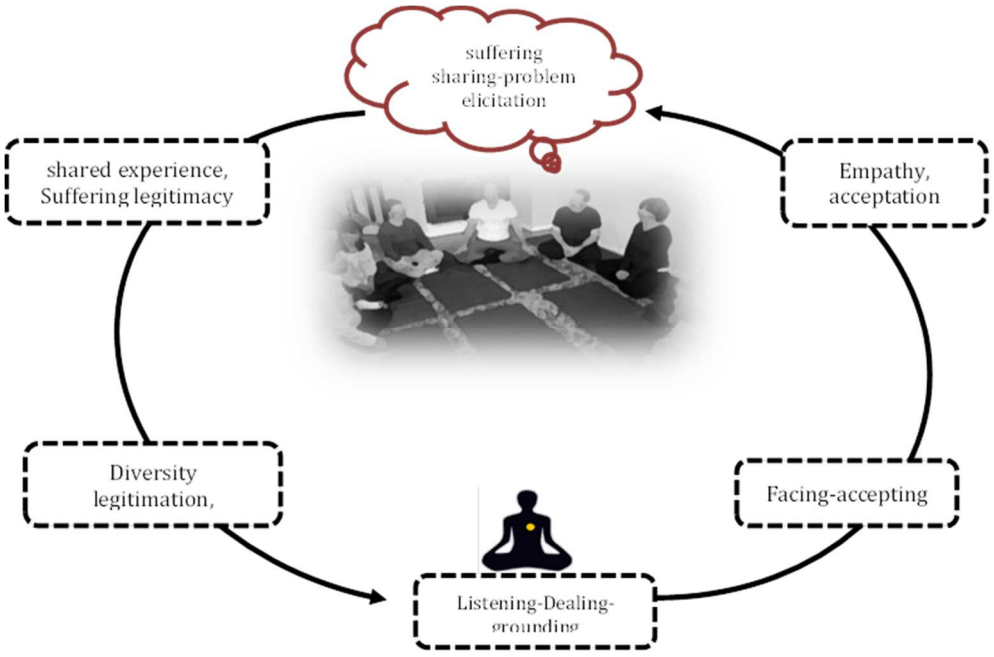


**Figure 236:** The group as a process

Another problematic issue about "team-building" concerns the kind of arrangement of clinical conditions. Whilst some participants experienced the heterogeneity as an advantage, others experienced it as a limitation. Furthermore, participants with the most severe clinical conditions, felt that heterogeneity

uncomfortable, in particular in epileptics. A participant, however, who shifted after the MBSR to a non-clinical meditation group, felt much more at ease.

Personal engagement was often limited by overlapping medical therapies and check-ups, weakening the effectiveness of their efforts. Quite often personal mood swung significantly, depending on other conditions: a momentary loss of hope and catastrophic feelings turned to enthusiasm and positivity the week after, in connection to unexpected encouraging medical outcomes. These sudden shifts were less intense during the last encounters, suggesting a sort of mood stabilization along with the minduflness practice.

Interestingly, the asymmetry within each group between different degrees of severity had relevant effects: for example, severe chronic patients took care of acute patients who just received a diagnosis and the intervention. However, just few of the more advanced patients, who overcame many relapses and metastases, expressed clearly they accepted the end was near for them. Surprisingly, two of these liminal cases, met an unexpected degree of recovery. Other patients experiencing a more uncertain future were more engaged in finding new coping strategies to persevere and in building up inner resilience. The overall exhaustion came through years of treatments and discouraging relapses, hence the prior motivation is to find hope in order to keep fighting the illness. A paradoxical consideration could be that who came out from the ”fight of flight” narrative, accepting the condition for what it was, without despair, had the most unpredictable medical improvements.

### 3. The participants and the mindfulness program

Through the thematic analysis of the interviews after mindfulness programs in clinical samples, the following factors emerged as a determinant for the participants, with the described interactions (see figure 27 below). As shown in figure 27 both in oncological and epileptic participants, some themes emerged as relevant in an invariant narrative concatenation. In particular, three loops characterized by a chronological succession, are presented as inter-twined in participants’ accounts.

1) **The orange loop**: the factors inter-related in this loop represent the difficulty of facing the group dimension as emotionally salient, in relation to a deep, unresolved hardship. Being chronologically related to the early participation to the program, these themes are connected with anticipatory apprehensions (anxious anticipations) and the difficulty to disclose (hard to self-disclose) at the first meeting. Given the reason of the meeting, for all participants the first encounter is both a novelty and a contact with what is shared with other participants (i.e., first of all, cancer or epilepsy).

2) **The blue loop:** this circle represents a very core dimension in the whole development of the programs. Referring to the shared diseases and underpinning suffering, participants reported how during the meetings, they progressively developed spontaneous empathy for other participants, feeling at the same time the specificity of their difficulties and the shared condition of suffering. Thanks to that empathic feeling, associated with the wish to help, participants had the possibility to decenter their perception of their problem (often represented by a deep anguish) and, through that comparison, better recognize the deep, human needs hidden by their difficulties.

3) **The yellow loop:** The connection of both the perspective taking and empathic wish to help, encouraged almost each participant to develop a new sense of acceptation of his/her condition, developing an attitude of self-compassion and legitimation. In fact, the perspective-taking emerged spontaneously due to the open discussions on the themes of the program, raising a recognition of the inner condition mirrored in others participants. While loop 1 and 2 are mainly tied to the group dimension and the trainer guidance during the discussions, this loop is importantly connected with the mindfulness practice. In fact, the thorny themes emerged during the discussions, left every participant emotionally activated but alone in her practice of self-awareness.

This point appeared crucial, as, after the common discussion, suddenly each participant had to suspend her judgmental idiosyncrasy, and just focus on the bodily sensations and on the breath movements. In that moment, they could recognize their emotional pattern of activation, and let them go. Many participants discovered how the courage they developed during the program is not based on the determination of

the problem-solving or the energy to fight with the problem. Rather, they discovered the possibility to relinquish control and accept what is happening, as an authentic source of courage and kindness towards themselves.

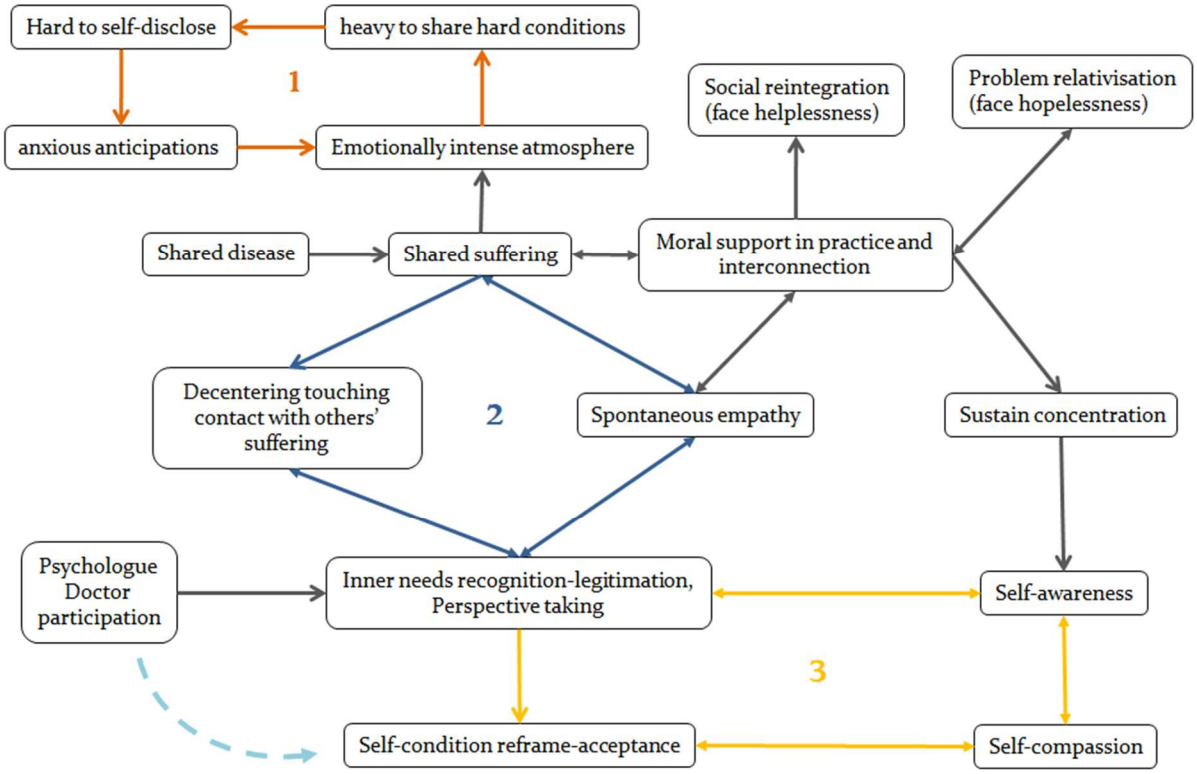


**Figure 27:** Descriptive map of implicated factors throughout the program

Hence, the overall circular shift from the discussion to the individual practice, allowed the reframing of the arduous feelings distinguishing them from the tangle of the negative emotions activated by the represented difficulty as a whole (principally associated with traumatic memories and catastrophic anticipations).

Then, other factors surround these three loops. As shown in fig. 24, 25 and 26 the group dimension progressively took the shape of a horizontal moral support between the participants, facilitated by the trainer, in accordance with a transformational leadership model (Kuhnert, Lewis 1987). Indeed, the trainer ostensibly constructs a relationship of reciprocal stimulation and elevation that converts participants into leaders and moral agents (ibid.).

Along with the mindfulness practices, each participant felt at the same time:

1) protected by the group intimacy;
2) guided by an expert leader;
3) responsible for her own present, ongoing state.

Then, an additional element played a relevant part, more than expected. Each participant spontaneously expressed the gratefulness for the health professionals (mainly one or two physicians or nurses) who took part in the program. Their presence felt like a symbolic engagement of the health system and a humanization of the hospital environment. For many participants was significant to recognize the "human side" of these professionals, often overshadowed by their expertise and responsibility. This factor is involved in determining the positive integration of the program in connection with medical-clinical samples. As in Western culture the health professional, and in particular the physician, represents a very busy and over-skilled person, to close the gap in a separate, protected environment can be enriching for the patient's clinical pathway, improving adherence and compliance to medical treatments.

If we take a look at the themes related to the qualitative analyses, the positive integration of the mindfulness-based intervention and the consequent desired continuity of participants' home practice, is associated with "acceptance and trust in medical treatments." Then, other interesting themes emerge as relevant factors (fig. 28). For example, the social stigma associated with the pathology was an important source of suffering for many participants. Intuitively, to reach a more human interaction with the hospital personnel, re-enhances the whole human personality and complexity of each patient, helping her to exit the label of a mere "sick" or "ill" person, often associated with a problem to be solved, rather than a person to be approached. Moreover, the program weakens the feeling of isolation reported by those who feel stigmatized.

This theme is intertwined with the enthusiasm for the complementary-alternative medicine activities in general, and the need to improve them ("need of cam").

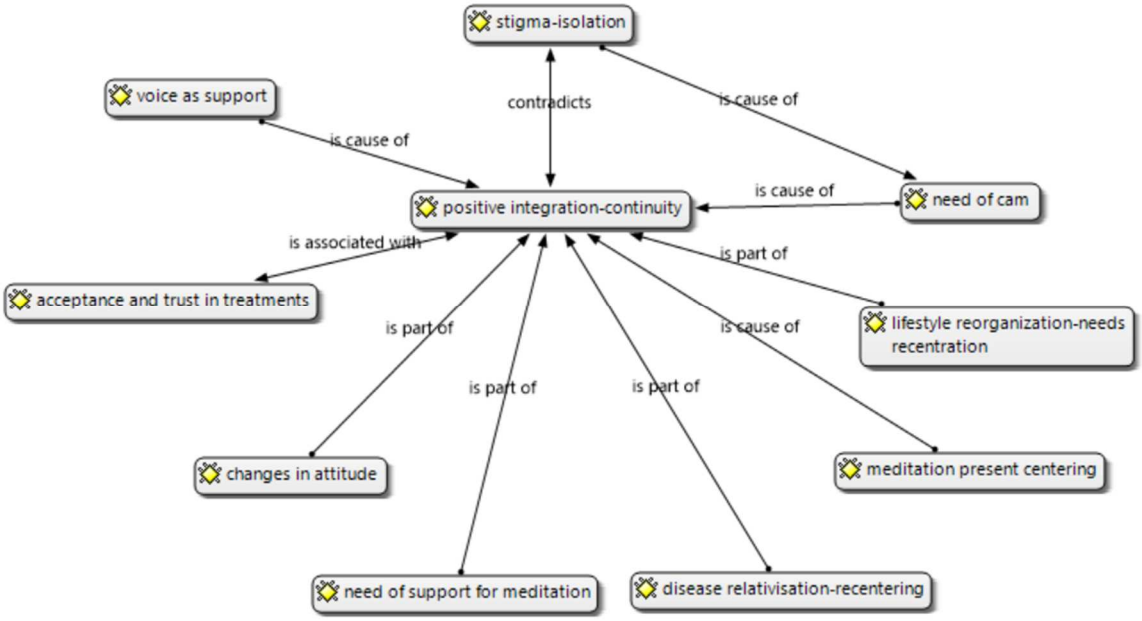


**Figure 248:** Participants' positive integration of meditation

Of course, the positive integration of the program depends on a personal shift in lifestyle and reorganization of personal needs and priorities, often mixed with significant other ones. Participants identify this clarification and other changes in attitudes as strongly interconnected with their personal practice, on one hand, and the need of an environment and a guide to pursue it (meditation-present centering, need of support for meditation, voice as a support), on the other.

# II

## WORLDVIEWS AND SPIRITUAL HYPOTHESES

The trainer expected a slightly more vivid discussion on metaphysical issues and theoretical implications in personal meditation: however, these aspects were somehow present throughout the entire programs, in the forms of embodied feelings of deep incertitude, perplexity, turmoil, and fragility.

For that reason, during the last follow up with cancer patients, the trainer directly addresses the theme, questioning participants spiritual religious backgrounds. What emerges, in connection with individual interviews, is a complementary interconnection between secular-agnostic-laic conceptions in one side, and spiritual and religious conceptions in the other side. As shown by Figure 29 mindfulness practice mediated the hospital and the health system approach in general (with the medical paradigm and the treatments) with the intimacy of these heterogeneous conceptions.

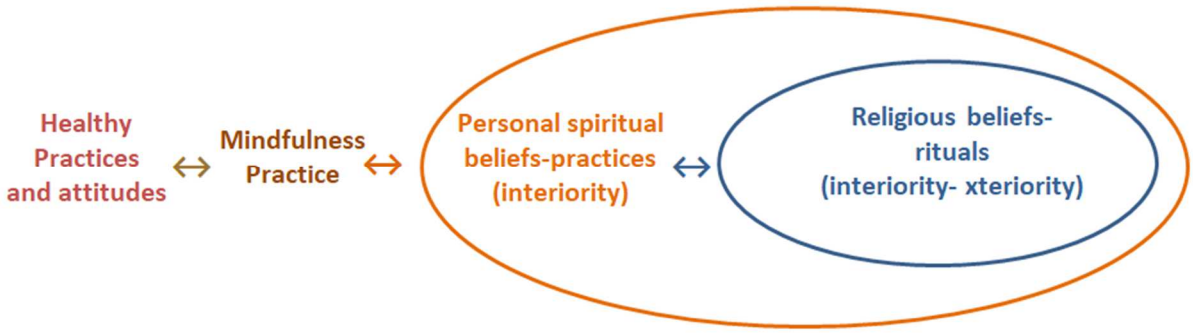


**Figure 259:** Mindfulness in connection with spiritual-religious backgrounds

The theme of spirituality is principally addressed by the theme of gratitude and preciousness of life, together with poetic feelings of nostalgia, astonishment, and absurdity. Some participants addressed directly God, but showed a particular interpretation of it without practicing it.

Finally, some open questions emerged by the considered MBSR clinical applications: which is the best moment to start it for cancer patients? Which is the best way to encourage home practice?

In both MBSRs with cancer and epileptic patients, trainers, which were far from being physicians, were not experts of these clinical conditions, and were uncertain in addressing patients clinical confusion and needs. Another critical point for patients was meditation *per se*, as a ethical-philosophical investigation, with some intellectual aspects. Intellectual stimuli emerged during the groups, in particular with epileptic patients.

While, as shown in fig. 24, novices mainly interpret mindfulness as a laic, healthy tool. In the following part, the aforementioned worldviews will be discussed in connection with spirituality as a coping factor in advanced practitioners. In their interviews the interplay of each aspect, i.e. ethical, epistemological, ontological, is strongly interconnected, as each argument involves, in their account, the others. Therefore, it has been quite hard to clarify each aspect of their worldview as an independent factor with an internal logic. Indeed, the narrative articulation embraces all the following aspects, often anticipating them during the interview.

**1. Ethical worldview**

The interviewer explored interviewees' axiological conception through the following question: what is good and what is evil?

Respect to the clinical samples, expert practitioners reported a clearer shift from a taxonomic distinction of "good" and "evil", to a refined and multilayered axiological conception based on the relativity of these concepts and their mutual interplay. According to the Taoist worldview, any radicalization of these concepts is considered useless and potentially detrimental, in their praxeological consequences. Therefore, both mindfulness trainers and advanced practitioners show a radical critique to "good" and "evil" as universal criteria. They are more seemingly prone to describe an action as "good" or "evil" in connection with the subject involved, his or her intentions, distinguishing them from the effects of his or her actions. Moreover, experts are more prone to consider the distinction of good and evil as partially socially and culturally constructed.

Interestingly, in both novices to meditation (cancer and epileptic patients included) and meditation experts, “evil” is always embedded in the interpersonal harmony and the common wellbeing. The disconnection of inner goals with others’ wellbeing and community identity emerged as clearly defined. A recurrent circular interplay, depicts the damage to others as a damage to ourselves, and vice versa, since wellbeing depends on personal qualities and interpersonal relations. Conversely, suffering is a collective fact, as individual’s suffering enhances collective suffering and vice versa. Again, harmony emerges as a pivotal stance enabling mental and emotional states compatible with personal and collective wellbeing and value.

Few cancer patients showed a deep perplexity about global suffering and evil, displaying a conflicting consideration with God as “good.” For example, a cancer patient, grounding on the practice of acceptance of her condition, asked the group how would it be possible to embrace universal suffering for what it is. This kind of uncertainty reveals a connection between inner suffering and universal suffering as a must, at some point; it is not suffering in itself, but a manifestation of the good. This can be regarded as a strong Christian background at play in clinical samples, where the “good” is tied to the concept of the universal will of God, which is good. Conversely, advanced practitioners discussed suffering as the most real thing, which should actually drive our conception of life: “We have to take care of each other’s, it seems a bit like Christian charity, but it is indispensable. As society progresses, I increasingly see people sensitive to that question. Because contemporary extreme individualism represents a huge source suffering. It is a huge suffering”.

In particular, otherness is regarded as something highly enriching. The experts who spent a significant amount of time (ten years, in average) in retreats with small communities or alone, often report on how the interaction with significant others witness all our limits in handling emotions and, at the same time, the enriching qualities of others.

In a very clear way, an expert claims: “Good corresponds to the acts that are going to reap positive outcomes, whereas evil corresponds to the acts that are going to provide suffering as consequence”.

Hence, the majority of the interviewees, when invited to analyze ethics as a theoretical stance, are prone to see it as interdependent, if not entirely dependent, on praxeology.

With reference to the previous question interviewees' praxeological theory was then explored asking: "then, how should we act?" Although "good" and "evil" can be viewed as mere concepts, they also give useful, intuitive directions of behavior. For example, an expert practitioner claims: "*How should we act? Avoiding what is going to produce suffering and pursuing what is going to produce positive things.*"

Throughout the meditation practice, ethics as a conceptual definition is seemingly reduced to its pragmatic occurrence, as each action, in order to be judged, has to embrace a considerable complexity. Even if folk psychology can easily offer some indications (as, for example, defining murder as a violent unethical act) and a few participants acknowledged that even a murder has to be deeply examined in all its factors, even if, of course, we can approximately say that it is "evil". And almost each participant, considering these similar extreme examples, acknowledged that even the most heinous and brutal act, hide the deep suffering of who is doing it, without justifying it, but allowing an understanding of it.

When asked on how we should act, practitioners are inclined to describe principally "inner gestures", i.e. way of paying attention and dealing with emotions. For example, cultivating a state of a clear mind, open to mismatching novelties, and accepting, is often the core "praxis" indicated by expert practitioners. Therefore, a strong attitude centered on self-transformation, based on self-emptiness, resulted in a structural invariant among practitioners, in accordance with fundamental Buddhist teachings.

Considering the social, interpersonal milieu, all interviewee share a more or less strong conception of cooperative interdependency. The theory of action is thus shaped by the common wellbeing in contrast with individual, competitive goals (i.e. on the competition and on the consequent victory of someone and defeat of someone else).

With different degrees of detail, self-consciousness is described as connected with respect for ourselves, for example respecting the physical body and mind-body healthiness. Therefore, collective healthiness is regarded as the ideal scenario, where

actions would be guided by the principle of common respect and harmony. The bridge between the self-centered conception of the world, based on personal wishes and goals, and the others-centered conception of the world, is empathy. As an expert practitioner puts it: "*To place others before yourself opens your mind*." To take into account otherness is often said to "enlarge" the ego-centered mind, reconstructing a conception of the world inclusive of both our and others' needs.

Walking the tightrope of empathy implies balancing inner views with others, without attaching sociality in itself: "If we have to share ignorance, it is better to attach to the goal of clearing out the mind by ourselves, in order to be, only then, beneficial to the collectivity. We have to share useful things with others, and this is a matter of inner balance". Many experts feel a sense of urgency connected with impermanence, and say spiritual practice should to be primarily useful to ourselves, then, eventually, to others. However, spiritual practice should always align with collective wellbeing, since conventional and absolute reality are inseparable:

> "*I really think we need to deepen absolute reality through altruism. But in order to be altruist you have to be solid, to have something stable in you to share.*"

**2. Epistemological and ontological theory**

Interviewer explored interviewees' theory of knowledge with the following question: "what is true and what is false? How to distinguish between the two?"

Both novices and expert meditators revealed a critical perception of taxonomic distinctions between what *is* true and what *is* false. Far from being described as concepts with intrinsic meaning, almost each participant described them as relative abstractions we normally use to give meaning to reality. Questioning the theme, interviewees view the individual assumptions as a core aspect in defining both true and false, since each phenomenon depends on the perception of someone. Particularly, expert practitioners see truth as a subjective construction, a socio-cultural illusion we need to orient our actions. Since "true or false" distinction is necessarily true or false *for* someone, interviewees invariantly acknowledge the impossibility to define them as "abstract concepts". As an expert practitioner explains it: "What is true and what is

false is connected with what is touching for us, what calls into question our personal convictions and assumptions. A conviction is something that resonates in us". Hence, advanced practitioners frame convictions as something necessary to live, but at the same time relative constructions which aligns with dualistic worldviews. At the same time, when we think other people are wrong, we can acknowledge how we share with them the necessity to grasp transitory beliefs, even if different. Many experts used the expression of "more true" or "more false," claiming the relativity of these concepts, but at the same time their usefulness to evolve our approximate constructions: "*if we are constantly in doubt we cannot progress, hence we have to cling to some assumption.*"

The majority of the experts conceive existence as illusory in itself: all phenomena should be considered as transient mirages which are neither true nor false. In that case, the theory of knowledge is completely based on the occurrence of co-emergent factors: each subject co-constructs phenomena projecting some meanings only partially relying on the socio-cultural background.

In a nutshell, knowledge is described as a necessary individual construction, interdependent on psychological, social and cultural factors, as existence overlaps with the existence of one's consciousness. Centered upon the contemplative practice, practitioners conceive truth as the subtraction of all the misunderstandings that build up our ego-centered reality. A clear awareness is able to show the relativity of our perceptions; it can show "some degrees" of truth. A novice used the following metaphor: "to clean the lens allows us to better see objects, but still through the glasses. Hygiene and purification of misunderstandings and fake constructions allow us to see things more appropriately."

Interviewer explored interviewees' theory of existence through the following question: "what is existence, in its more universal acceptation?"

In a very concise way, an expert practitioner immediately answered: "I would say the non-being". The being, is often, immediately connected with the being of consciousness: to be aware and to exist entered a complex interplay during each interview with expert practitioners.

Expert practitioners are prone to conceive the being as a unique, whole entity, which embraces everything. The totality of that unity makes everything "one" and undistinguishable, as myself and others both, *are*. Due to the reason of the "presence" of that unity, dualism is an illusion:

> "*The being is a presence which takes the shape of an individual, but the being itself… You are a being, I am a being, the ant is a being. The problem is to define it. Because the ultimate reality is indefinable: as we try to define it, it is not that entity anymore. We can employ words, but it is as a treasure in the middle of a circle: we cannot penetrate it, so we try to find a breach or something to reach it, but we can't.*"

However, pushing further the analysis, many experts reach a temporary definition of being: "*if I could define it, I would say it is like a vastness made of living brightness, which embraces each different living manifestation.*"

The metaphor of light is recurrent and seems to bind the personal experience of consciousness to the wholeness of being.

### 3. Explanatory and predictive theory

Interviewees' explanatory theory was explored asking: does being have an origin? If yes, which is the origin of the being?

Expert practitioners immediately consider the question of origin of being as the origin of life-consciousness, considering the interplay and assemblage of material and conscious elements. As a practitioner describes it: "Being is something you experience, so you must be aware of what you experience and feel. It is a play between action/reaction, you need some stimuli and then you are aware, with some… activity or process".

The interdependence of these factors seems essential: then, the question of origin is developed within consciousness itself, as it takes the shape of a being. Interdependency is the core argument which binds the question of origins and the end of existence. Discussing how each factor does not exist in itself, but in relation to all other factors, interviewees move from the question of origin to the question of the present moment, and how it shapes the next moment.

Interviewees' predictive theory was then explored asking: does being have a direction and an aim? From there the discussion continues within the interplay of the living present: as consciousness is embodied it acts and it perceives, producing deep assumptions which influence our future, in this life and in the next one. The question of direction of being and of its end is indeed limited by the dualistic conception, which is based on ignorance. Ignorance push us to conceive mind functioning as independent from body functioning, while existence happens within the movement between the two.

Expert practitioners are prone to mention life as devoid of internal goals, but as a goal in itself. Some speak of a potential within consciousness, which is the potential to reveal its true nature. Even if this potential of consciousness-life is hidden, it is attainable only in the form of subtle intuition or insight.

This insight is centered on the unity of wholeness, but it is not limited to it. A clear structural invariant corresponds to the connection between that intuition and the problem of suffering, as it is shaped by dualism. Here again, interconnectedness is the right perception of that unity, and should push us to live interdependently.

In connection with praxeology, prediction allows us to estimate the value of our actions. Actions which can apparently seem worthy can then reveal their unworthiness, looking at their effects. Hence, suffering can be reduced by predicting the consequences of our actions (including cognitive ones), whereas of course it cannot be retrospectively removed. Even considering suffering as occurring in the present, expert practitioners say it is not avoidable, if we did not work to avoid it before.

# III

## THE ROLE OF NARRATIVE SELF

In expert practitioners, the interplay of bodily ownership, agency and the narrative articulation of the self, is early characterized by a sense of perplexity and questioning, while clinical patients experience a lack of ownership and control, and hence a strong perplexity, with the onset of the disease. In both cases, participants reconceived their existence by overturning the paradigm of agency based on rationality and autonomy: their existence in the world, the way the world is there and makes sense for them, is disclosed by a radical attunement. On that basis, at a certain point, the way the mind affects the body and the body affect the mind becomes of great interest. The motivation, in both cases, is highly related to the possibility of facing hardships and suffering in a more balanced way, i.e. with an inner center. As shown in the following extract, the main change in coping strategy is related to recognizing the problem and accepting it as a relative phenomenon connected with a biased way to perceive and interpret reality:

> "*Before I was focused on myself, on a pain, and the more I was concerned the more it hurt. As I understood existence as a whole, and how, not why, but how emotions work, I found it much more possible to face and accept it, and then to overcome it. This depends only on the confidence we can have on a certain reality of existence.*"

What is central here, is the possibility to change way of conceiving reality, and then occurent phenomena as physical pain. It is arguable that here the interviewee refers to a particular state, or a particular insight reached through his meditative practice. But, as he will discuss later in the interview, that insight is still far from being fully integrated in his worldview, as there is still a sort of dualism at play in his life: on one side, the absolute engagement and a radical vision of existence, on the other, life as a relative phenomenon full of dynamic interactions, duties, responsibilities, as well as fears and desires.

But daily life, however, it is said to be "facilitated", as the transformation of the conception abides by the "letting-go" inner gesture: starting by the feeling of "being someone" with a certain identity, practitioners deconstruct it letting go the feeling of "me", with beneficial effects on their lives.

Participants describe how they figured out that the more they cling on an image of themselves, the more they suffer, following others' or inner expectations. To let go for them means to let go of attachment to wishes or fears as the need to be recognized, accepted, and valued. To deeply let go means for them to relax when they feel tensed, accepting themselves for what is going on in their body and their mind.

That attitude towards themselves is said to contribute to others' acceptance, with a sense of compassion: "also, during the experiment, I realized that open awareness and compassion are not easily distinguishable: when I practice open awareness, the more I dwell on the present, the more I am centered on that openness and the more compassion rises... It is the words that make the distinction, but the sensation is very intense, and maybe compassion itself enhances open presence".

Interestingly, this interplay was the most relevant factor emergent during the MBSR with both people experiencing epilepsy and cancer. However, their definition of the self is quite different, characterized by the heaviness of their condition:

> *"Who am I? I am a person who started to fight since she was born, a person who continues to fight and tackle life: this is what I am. I am still not able to find a moment where I can stop. Maybe, I often say to myself, maybe there that moment will arrive at some point, maybe things will be better. At least decently, I would accept".*

As previously discussed, patients are struggling with anguish, anger and fear, and the definition of themselves is strongly influenced by these feelings. However, during the program, they could experience a similar shift in their way to narrate themselves. This shift is centered upon bodily practices and interaction with the group, suggesting some changes in both bodily and narrative self.

Dysfunctional attitudes as rumination, anxious worry and negative self-focus reifications are prone to be shaped and mutually shape the narrative-self through a diachronic structure (past, present, future). It is arguable that rapid shifts from discussions to mindfulness exercises, are relevant in reshaping and reframing that

narrative diachronic structure. A participant in the MBSR with cancer patients says: "The trainer carefully listened to each of us talking about ourselves, but then he brought us systematically back to the theme of the present experience, highlighting a different perspective of ourselves. Then a mindfulness exercise followed".

As retrospective evaluations of past actions are shaped by idiosyncratic narratives, the same is said of the prospective deliberations (Gallagher 2017). The "what" and "why" of what we have done and we are going to do, unfolds in a specific narrative articulation centered upon the self which depicts it. Self-referential narratives are constructed together with the individual sense of agency, which emerges in the retrospective attribution (Graham and Stephens 1994). With respect to time-consciousness, mindfulness meditation ostensibly suspends the self-confirmatory loop of the predictive, transcendental process (vd. pp. 47-48). In fact, to explain our behavior retrospectively (retention) bring us to embody our proactive intentions, boosting our sense of agency (protention).

At the same time, other interpersonal dynamics are arguably at play along with the MBSR programs, in particular during the collective discussions and the one-to-one interaction with the mindfulness trainer instructions. In accordance with the concept of mentalization developed by Bateman and Fonagy (2010), to make sense of each other and ourselves, implicitly and explicitly, both empathy and mindfulness are involved. Indeed, subjective states and mental processes have to meet affective aspects in order to promote affectivity awareness and psychological mindedness (see figure 30 below). This model well suits the process of the observed mindfulness interventions with clinical samples.

As happens with the Mentalization-Based Therapy, these processes need a significant other in order to be accomplished. In the MBSR, each participant is connected with other participants, and, in a more precise and direct way, with the trainer, whose function is crucial in the redefinition of the narrative-self.

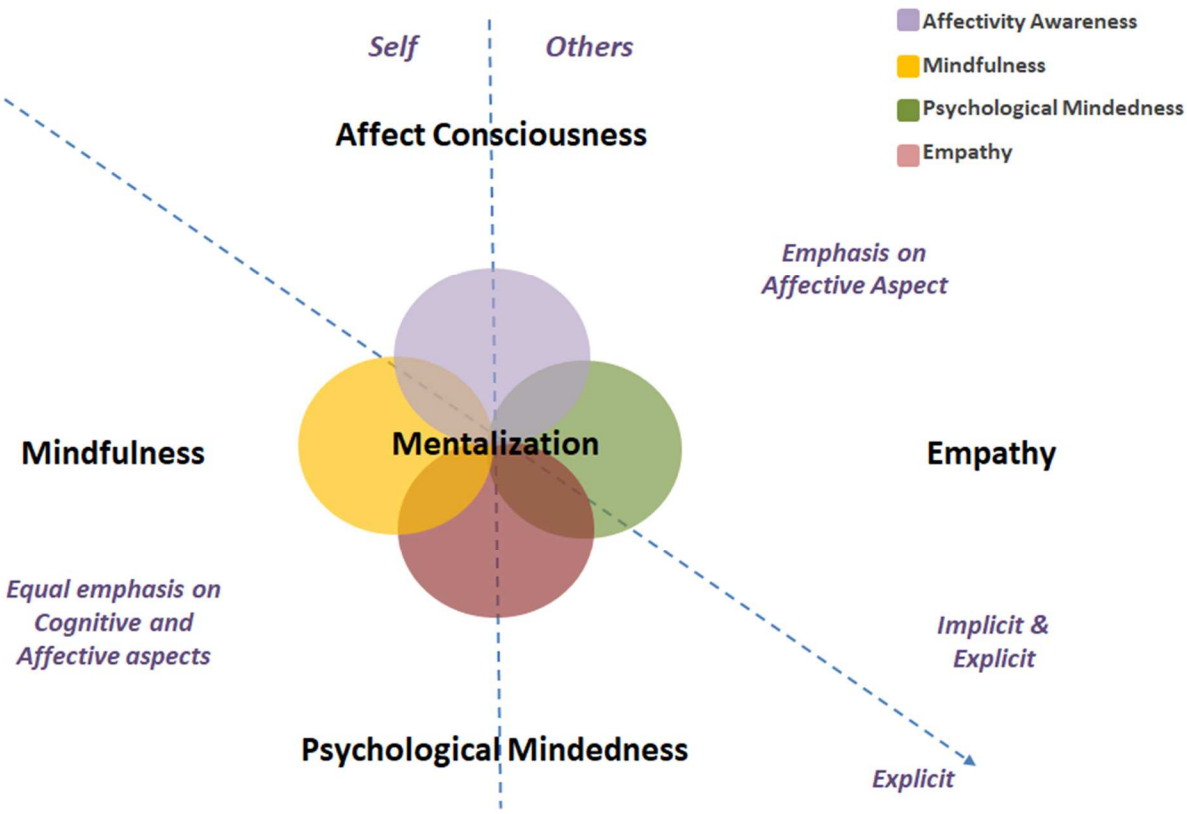


**Figure 30:** 'Self' and 'Other' mentalization[22]

Steven Whitmarsh in his doctoral thesis (2012) argued how the metacognitive monitoring plays a crucial role in this cognitive-attitudinal shift, negatively correlating with depressive and anxious states, characterized by a relevant mind wandering activity (mainly rumination and worry, see Smallwood & Schooler, 2006). As Whitmarch suggests, the mindfulness state improves metacognitive skills constraining mental-emotional elaboration and reactivity. Dysfunctional attitudes can thus be acknowledged and re-framed in a more functional way.

In the contemporary clinical practice, Buddhist original soteriological framework is simplified in hindrances as the state of desire, aversion, sleepiness, restlessness or doubt (Kabat-Zinn, 1990). These states are said to impair the awareness consistency bringing distraction, wander and strive. Within this framework, cultivating a non-judgmental, patient, curious, trustful, accepting and non-attached attitude, should imply an adequate self-monitoring, weakening the dysfunctional narrative reification

[22] Re-drawn from the primary source: http://ajp.psychiatryonline.org/article.aspx?volume=165&page=1127

(as shown in Figure 31). Perhaps, it would be more precise to claim, as Vago does (2012), that existential suffering (Skt. *dukkha*) dynamics rest on attachment patterns, as craving and aversion neglect the impermanent character of all phenomena. In particular, self-attachment is said to align with dysfunctional schema, as presented in Figure 31. As shown, the self-referential activity is framed in a self-evaluative stance, which reifies the self with a particular shape, or reifies life as something generic and all-inclusive ("unfair", "hopeless", or "meaningless"). The arrows represent the influence for integrating self-identity (the "ME") over time and negative circular feedback in a dysfunctional narrative. These are prone to imply affect-biased attention drifts at both cognitive and sensory-perceptual levels (Vago 2012).

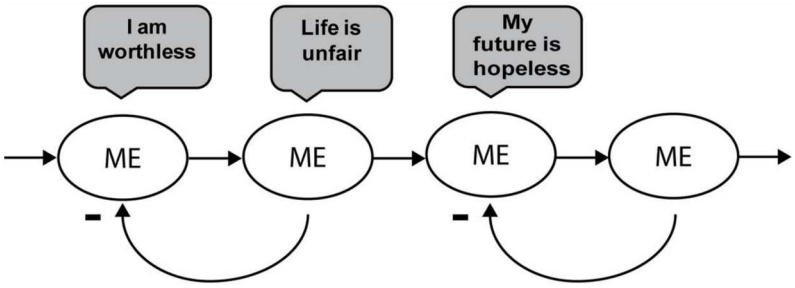


**Figure 31:** Reification of the dysfunctional narrative
Self-based on Beck's cognitive triad[23]

In that approach to personal narratives, the obstacles or hindrances represented by the contents of our narratives can become useful instruments of awareness, allowing us to recognize and suspend certain narrative "paths".

Furthermore, during the programs, in particular with cancer patients, other questions arose as pivotal in determining participants' self-consistency. Few participants showed patterns of questioning similar to expert practitioners in their early life. Their core problem has to do with spiritual, religious or moral struggles, i.e. with the quest for meaning, coming into question: what makes life worth living? In this open question, all human aspects, such as biological, spiritual, psychological and social ones, are at stake in their meaning, leaving the questioner in a suspended indetermination. It is arguable that we all have a philosophical quest in our life,

[23] Beck (1976), in Vago (2012)

reaching some sense-making, implicit, often unrecognized, framing assumptions, beliefs, values and worldviews strongly connected with the socio-cultural environment (Wong 1999). In this sense, we all have both scientific and philosophical perspectives (Wong 2012). Practitioners seem to suspend the narrative construction of these explanatory theories, consequently feeling the need to fulfill them of new, more reliable, contents. In this way, both implicit and explicit theoretical models are renewed and reframed, creating a transition in the nuclear constructs which build both ourselves and our reality (Kelly 1955).

Mindfulness is seemingly prone to reveal the mental habits that characterize how our construction of both external reality and inner personality (through idiosyncratic cognitive schemes and emotional reactivity) conduct our lives' paths. What is at stake during a disciplined, persisted daily practice, are exactly the attitudes that we bring to experience. Acknowledging them, together with some referential theoretical framework, spontaneously engages us in more functional pattern of interaction with our sensations, feelings and with others' ones. The knowledge constructed around the mindfulness practices in general, depicts these nuclear constructions as deep assumptions about us and the reality in general, aimed at preserving the self from threatening sensations, feelings and thoughts. In the Buddhist tradition, the minimal assumption upon which all other assumptions build, is a metaphysical dualism, i.e. the intrinsic division between an agent, a perceiver, a thinker, and the rest of the world. In traditional Buddhism, the dynamic movement of the dualist-construction abides by twelve interdependent conditions, which build the illusory obstacle of self-attachment (Gunaratana, 2011).

# IV

## EXISTENTIAL SUFFERING AND COPING

*"In spiritual life, the problem with fear lies in whether we have the wisdom to respond well to it".*

Dharmavidya David Brazier, The Gift of Fear. Tricycle, fall 2017[24]

In summary, the clinical samples presented similar functioning with regard to the initial "absorption" into their problem (namely: cancer, epilepsy, and related issues). Principally, as presented in figure 32 below, participants presented a threefold threat: the objective threat of a clinical issue, the representation of it, and the prevailing critical emotions associated with it.

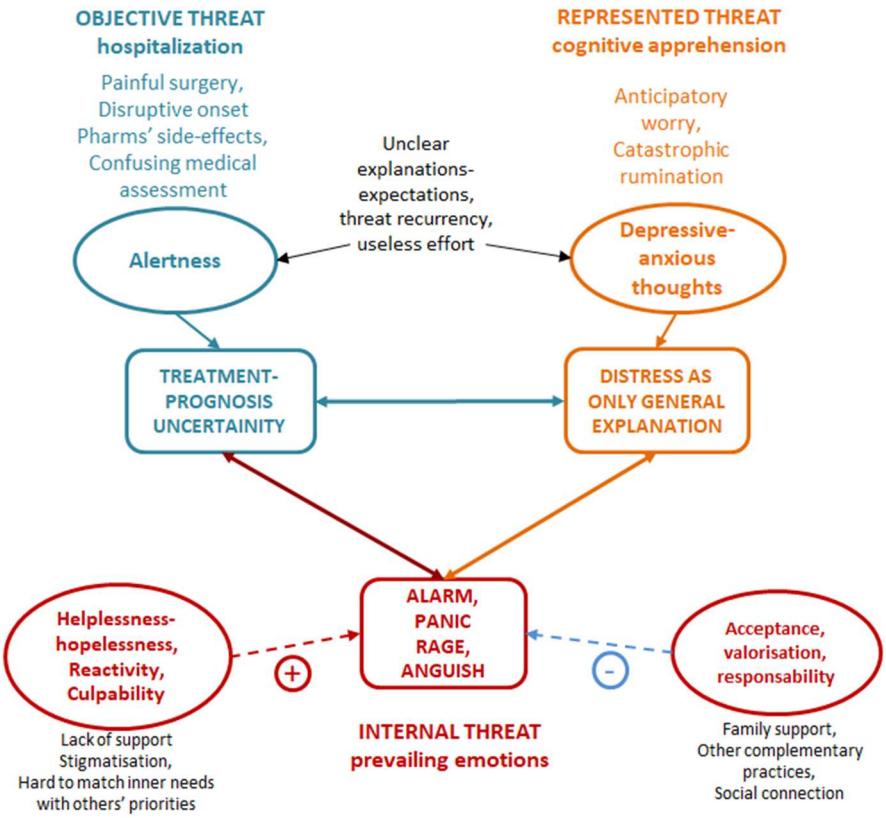


**Figure 32:** Oncological patients "problem absorption" factors

This prevailing climate of chronic anxious alertness is boosted by the lack of clear explanations and expectations. Furthermore, for many the standard medical treatment

[24] https://tricycle.org/magazine/the-gift-of-fear/

is not working anymore. The complexity of each participant's condition depends on many other factors such as, in particular, the family and the social support. Each patient, then, suffers from a different recurrence of his/her problem: however, at the beginning his/her mind seems totally absorbed in it. During the introductory sessions, participants are principally concerned with the impossibility to deal with the heaviness of the clinical condition: no much space is left for other issues. But progressively emerges an overall shift in personal coping strategies.

In fig. 33 the descriptive associations with meditation coping are presented as emerged during the analysis. As shown in it, the involved factors are centered in the qualities fostered by the meditative practice, as present-centered awareness and openness, changes in attitudes, life valorization, acceptance and compassion. Interestingly, the group connection and support is referred to not only as associated with meditation coping, but also as having an impact on present-centering awareness. In a similar way, the exchanges with the group brought new values into participants' conception of life, relativizing the problem pervasiveness (centered on the "problem absorption" attitude). As shown in fig. 34, a more interpretive model can be sketched by the interactions of these factors.

In expert practitioners, different ways allow us to overcome both physical and psychological pain. In particular, expert practitioners consider sharp, acute pain, as an occasion to see the mind, with all its affective influence, at work:

*"If the pain is very acute, it is so much present that it strengthen the perception of existence, the perception of how existence really is".*

Hence, for many of them, the occurent experience of acute pain is a great occasion to be present in existence, in its deepest acceptation. In order to keep the balance between the overwhelming sensation and that deep insight, some describe the effort to maintain the awareness of the present moment in all its manifold complexity, recognized as an absolute unity. In general, expert practitioners' strategy is associated with acknowledging the problem, and creating spaces all around it, i.e. paying attention to the whole experience going on, together with it.

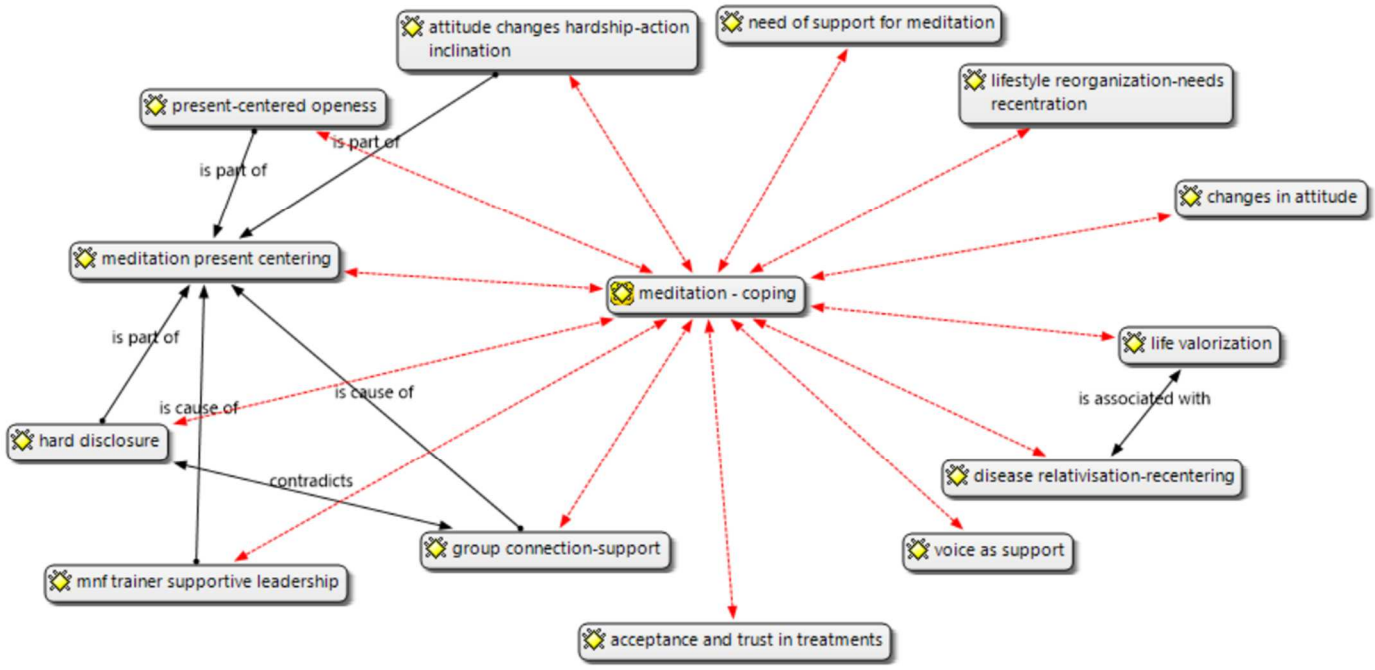


**Figure 33:** Meditation coping associated factors in clinical MBSRs

But who, among them, deals with chronic pain, shows a more refined knowledge about it, and a certain degree of perplexity, as the teaching of impermanence is challenged when a pain is within you for more than twenty years, as it happens with some participants. For them, the dynamics and the transformation of pain in time are therefore more interesting. For example, some observe how meditation can bring energy, and energy can make pain disappear for a while. A participant uses the image of children, saying that when we are young we have a lot of energy, and we can face perturbations and recover quickly.

However, in both acute and chronic pain, meditators frame it as an impermanent phenomenon, as the body is impermanent in itself. In particular, considering the inescapable reality of death, pain is viewed as the most enigmatic evidence we are still alive and attached to our bodies. The only thing we can do in the meantime is "to try to reach, through the training, to that deepest reality of existence, and to its continuity after death". Hence, what is at stake for advanced practitioners, is eminently to stand with that "reality of absolute consciousness, beyond existence, or, at least, beyond this life". Hence, a huge amount of suffering is considered avoidable as we produce it

through self-attachment. We have to prevent it, but "when it is already there we have to face it for what it is, we do not have a choice". When it is too late to prevent it, it is unavoidable, but we are implicated in its process with full responsibility.

On the other hand, the coping strategies that emerged during the MBSR programs with clinical samples, have shown a more contingent, multifactorial interdependence of factors. Far from being related with a full existential engagement, novice practitioners in clinical samples want to handle their hardships, and the related bewilderment, which only occasionally is connected with strong spiritual or religious backgrounds. However, there are some similarities: for example, the role of the mindfulness trainer can be regarded as a soft-version of the Buddhist guide met by expert meditators. As previously discussed, the mindfulness trainer similarly inspires inner values and reconnection with cultural or spiritual beliefs, through a transformational leadership model. This aspect is aligned with, for example, the shift in cancer patients' narrative from "war to cancer" conveyed in hospitals to a "kind acceptation of cancer" as a fact of life. Mindfulness trainers engaged in oncological settings are aware of the biomedical narrative of fight, and encourage patients to develop a more kind, accepting attitude. In addition, in the same way as advanced practitioners, often living in communities and sharing their practice with a *sangha*, patients experience the support of the MBSR group. For them the relevance of the mindfulness-based program relates to the dynamical interaction of all these factors together, in accordance with the need to share their condition. However, as shown in both advanced cancer patients, a relevant stance is the transformation of the feeling of impotence (as both helplessness and hopelessness) in a deep sense of gratitude.

The same imperfection once considered scarring, after is occasionally considered lucky: an important occasion of spiritual growth and maturation (a "hard school", a "necessary evil"). It is conceivable that, through the mindfulness practice, patients reach the hard distinction between impotence and threat, appreciating the mere fact of being alive. Framing "impotence" in a larger meaning, they can now deal with that feeling in a different way enabling them abandon and accept life's impermanence as a precious, mysterious aspect.

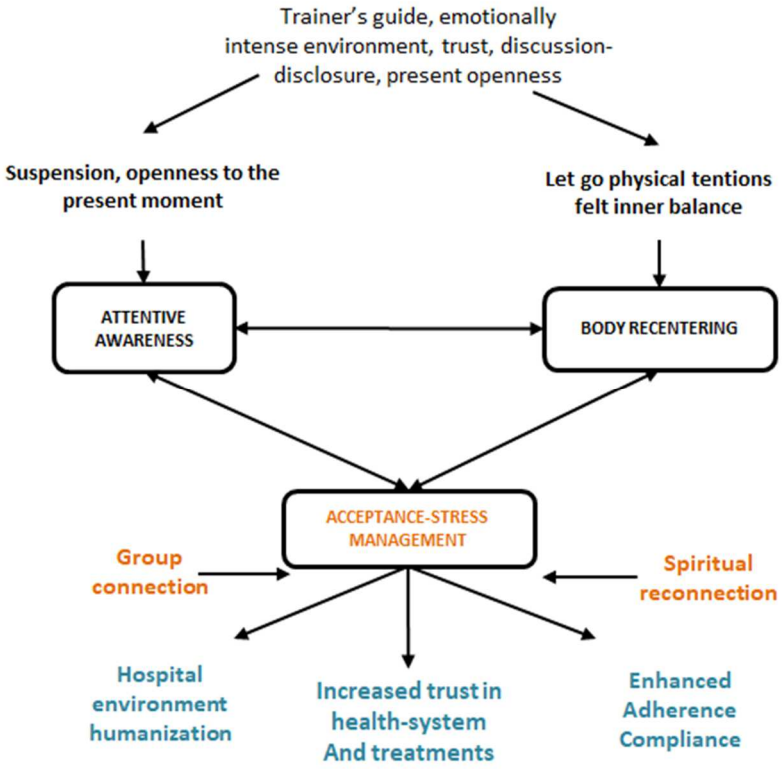


**Figure 34:** Meditation coping factors involved in MBSR programs

Many cancer patients report how impermanence, once experienced as terrible, now gives meaning to the most little, insignificant things. As a matter of fact, many, through the program, started to occasionally suspend an activity, stop and suddenly perceive a particular light, or natural scenario, enraptured by a sense of joyful gratitude, blissfulness or whole unity. This crucial shift has to do with giving up the sense of control and letting-go life as a whole, sacred fact, recalling the existentialist abandonment (as the Heideggerian *Gelassenheit,* in Davis 2007).

According to the Mindfulness-to-Meaning Theory, mindfulness improves decentering from stressful-appraisals through a metacognitive broadening of attention (Garland et al. 2015a; 2015b). Critical autobiographical information is thus regulated reducing distress and boosting proactive attitudes. This reappraisal is enriched by one's life's existential meaning, inspiring values-driven attitudes and engendering deeper sense of purpose. As argued by Vago (2012, figure 35) focused meditation uses the breath as the support, i.e. as object of focus: its processes are shared by similar practices, and it is the principal focus of mindfulness programs. Intention to practice is

connected with the motivation to upkeep the executive monitoring within the working memory level, matching motivation with practice instructions. From both a cognitive and a neuroscientific point of view, focused attentional networks are maintained along with response inhibition, executive monitoring, and emotion regulation. At the same time, un-intentional objects of distraction are conditioned by stimulus in both the exteroceptive and interoceptive sensory and mental domain. Affective responses to unintended objects gain different valences in connection with prevailing automatic proliferations: for that reason, awareness and de-centering attentional attitudes promote inhibitory reformulations of programmed, involuntary responses. Furthermore, the motor refinement (such as during the yoga exercises or the walking meditations) de-automatizes spontaneous movements, sustaining concentration development. It is arguable that, as the program progresses, that continued practice reduces the effort in sustained attention and bodily control, enhancing awareness-field itself as object of attention within the meta-awareness gaze.

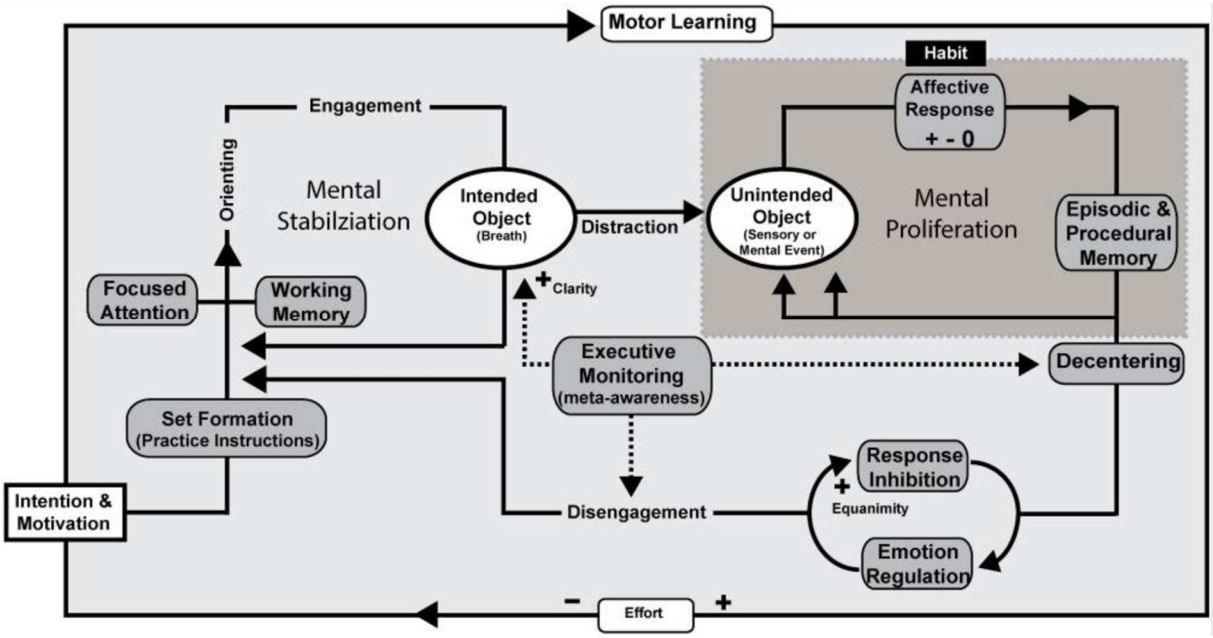


**Figure 35:** Mindfulness process model - concentrative practice[25]

This increasingly happens as the novice upkeeps that practice of "meta-function". The phenomenal intensity of that clarity increases during the practice, as it does impartial equanimity, i.e. the reduction of later attentional and emotional processes

[25] in Vago (2012)

that could imply prolonged peripheral, cognitive, ruminative activations. Ethical-enhancement is connected with the intention-motivation which overlaps within the working memory, during the implementation of the practice instructions. Simultaneously, focused attention reorients episodic memories and help reinterpret them during the discussions, enhancing the narrative component of the mentalizing process. In parallel, open monitoring exercises support the ethical engagement accessing each rising experience: for example, sharing suffering induces a mentalization of one's own and others' experience, constantly reframing the inner episodic memory recall. Contemporarily, clarity of the mind and emotional equanimity down-regulate affective reactivity, keeping attention opened to the field of perception (Whitmarsh 2012). This allows the practitioner to mindfully acknowledge emerging difficult emotions while the declarative (episodic) memory is reappraised. Hence, negative associations are inhibited and reshaped in the flow of the pro-social/empathic concern for the addressed object of meditation. The constant reappraisal along with the pro-social frame is prone to boost exposure, extinction, and reconsolidation of new processes, radically reshaping the meaning of maladaptive forms imprinted in the memory (see figure 36 below, in Vago 2012).

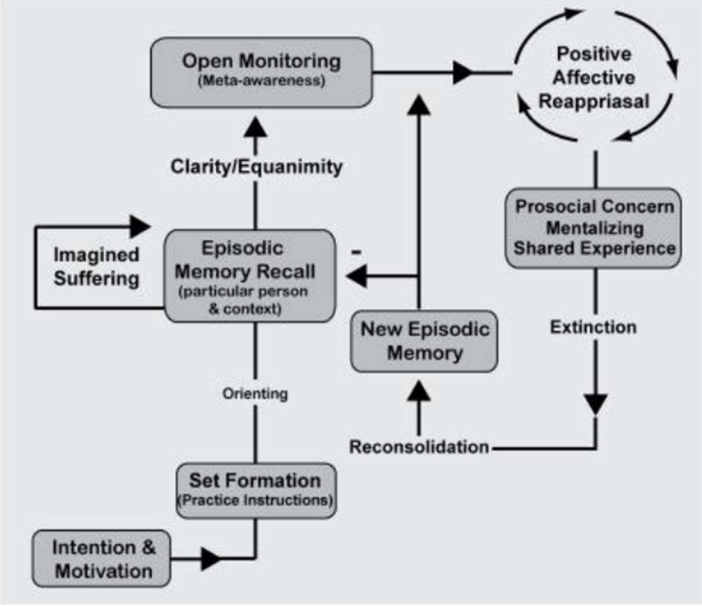


**Figure 36:** Mindfulness process model - reappraisal[26]

[26] in Vago (2012)

Open Monitoring meditation with no object of focus (ambient attention) represents a suitable example which shares different processes across receptive practices as the mindfulness one. Intention and motivation together perform practice instructions keeping them in connection with the executive monitoring, thus matching working memory and attention to the surrounding ambient. Ambient diffused attention networks are maintained along with response inhibition, executive monitoring, and emotion regulation. Observing and labeling transitory stimuli, is a form of attitude that contributes to down-regulate and reconsolidate maladaptive memories that shape sensory-affective-motor scripts and schematics (see figure 37 below, in Vago 2012).

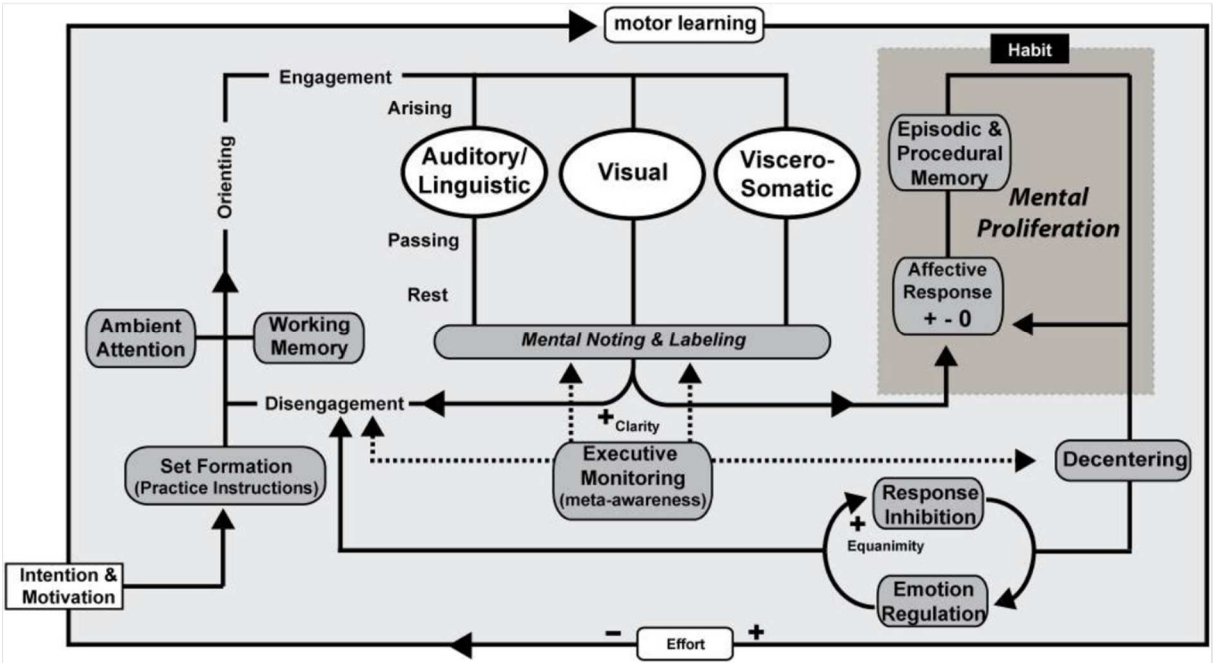


**Figure 37:** Mindfulness process model - open monitoring receptive practice[27]

Affective responses may arise in response to an object of attention with a positive, negative, or neutral valence and are likely to proliferate unless awareness and de-centering boost inhibition of automatic responses. Through continued practice, effortful control is reduced and awareness itself becomes the object of attention as meta-awareness is cultivated as a coping strategy. Clarity and Equanimity increases through practice too (Vago 2012). The contemplative discipline can be regarded as the progressive improvement of the metacognitive self-regulatory spontaneous capacity in

[27] in Vago, Silbersweig (2012).

the mind. The majority of expert practitioners refer to the personal practice as endowed with self-emptying insights, as they let go the feeling of "me" as a unity in itself. In accordance with Dorjie (2016), the "dissolution of the ego" occurring in meditation is progressively aligned with the immersion in mental phenomena, gradual decentering, up to pristine awareness (see figure 38 below).

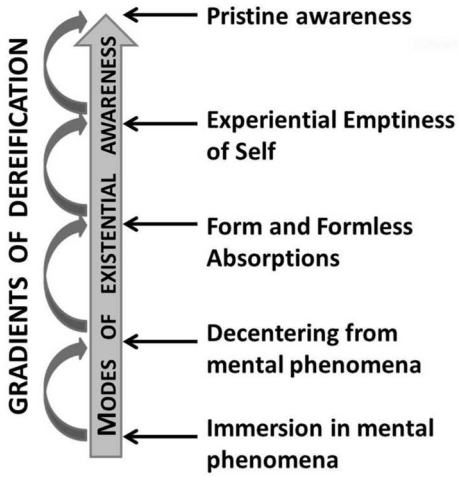


**Figure 38:** Modes of existential awareness[28]

Finally, the analysis on existential suffering and coping emphasized the implications of research findings in spiritual coping for critical conditions, showing:

- a lack of support in addressing patients' spiritual needs: weakness of biomedical paradigms and the usefulness of mindfulness as a secular approach;
- high compatibility with personal worldviews and religious backgrounds, often encouraging a spiritual reconnection with personal background;
- determinant personal engagement, both in novices and experts, in addressing mindfulness Buddhist implications and perspectives;
- Cultural constraints. Lack of philosophical inquiry. Individual possibilities: background spiritual experience and knowledge; critical exploration;
- suitability of enactivist approach in addressing cultural integration of meditation approaches.

[28] In Dorjee (2012)

# GENERAL CONCLUSIONS

"*My own teacher said that learning many of her traditional beliefs were not historically accurate; it only made her think more deeply about their spiritual meaning. This is really the point. When we cease to confuse history and stories, when we look at traditional stories outside the context of literal truth and sectarian debate, we are freer to appreciate the imaginative truths they convey*".

Rita Gross, The Matter of Truth - the heavy cost of literalism (Tricycle spring 2013)

The following point A briefly summarizes and discusses the overall weaknesses, misinterpretations and deficiencies ascribable to MBI's and meditation in the Western environment. Then, point B answers the weaknesses presented in point A, suggesting possible improvements in the research agenda. Almost every point has been addressed previously. Therefore, the discussion provides short suggestions on how to overcome some of them, providing comments with respect to current debates. In general, point A and point B are outlined by the following points:

1. Research on MBIs promote a well-being model of coping based on self-improvement;
2. This model is compatible with Western individualist attitude;
3. That attitude is aligned with shared worldviews and socio-cultural constraints;
4. That worldview is compatible with a hedonistic-consumerist model of well-being;
5. This model provides a plethora of mindfulness quantitative outcomes driven by a mechanistic-reductionist epistemology and boosted by technology-based approaches;
7. That epistemology drives interventions inconsistent with contemplative meaning;
9. Western worldview is aligned with dualistic ascriptions of suffering to either bodily or cognitive processes, overshadowing existential struggles, need for meaning, and value.

## A. RESEARCH ON MBIs IS CONSTRAINED BY EXTENSIVE, RELEVANT FACTORS.

Clinical controlled-randomized studies (Williams et al., 2012; Malinowski, Lim 2015) and meta-analyses (Kuyken et al., 2016) are increasingly addressing Mindfulness-based interventions, adding encouraging cumulative evidence. Even if valuable

empirical and theoretical research developing in regards to the subject of mindfulness, witnessing an overall progression, some paradigmatic limitations are still hindering further progresses.

The amount of research on MBIs reveals little about the ontology, phenomenology and existential dimension of mood from a first-person perspective. MBIs are often seen as a strengthening tool for self-empowerment based on a hedonistic worldview. Research approaches on MBI's are currently promoting a model of coping and well-being based on self-improvement. Then, the majority of clinical mindfulness training programs are informed by biomedical models of stress and well-being. The medicalization of mindfulness has limited program curricula that explain stress as an individual pathology, deflecting attention away from cultural pressures. Indeed, the cultural dominance of the biomedical paradigm has reinforced the notion that psychosomatic diseases tied to chronic stress, depression, and anxiety, are a matter for autonomous individuals. Interventions are hence supposed to heal individuals by enhancing their subjective health and well-being. But the expulsion of systemic factors and their psychological, socio-cultural dimensions, actually limits the access to the personal level. This is systematically reduced to stress-correlated objective parameters. In this way, mindfulness interventions are nourishing expectations inconsistent with their contemplative origins and their ethical inspiration (Huntington, 2015; Walsh 2017).

Extracting and importing eastern meditation is transforming its meaning in respect to Asian societies and cultures. Entire contemplative traditions are somehow psychologized and narrated through a scientific lens, reducing their modalities to *internal* states. In addition, scientists' ethical engagement are not contemplated along with the research activity, precluding existential commitment throughout the educational and research process, building a model of knowledge frankly ascribed to the cognitive and intellective sphere. On the one hand, science neglects inner-investigation setting aside existential issues, thus denying the conjunction between rational and insightful thinking. On the other hand, spirituality has been traditionally reduced to an introspective, intuitive and personal experience. While "scientists" rarely

engage in a fist-person inner-exploration of spiritual realms, "spiritual people" rarely engage in an in-depth scientific analysis of their experience. Based on this dualism, research within the reductionist paradigm integrates meditation as a technique able to treat symptoms and improve healthiness, efficiency, and competitive productivity. In parallel, an amount of non-scientific New Age spiritual initiatives are spreading.

In this way, original principles of mindfulness practices are translated into modern secular needs as "de-spiritualized", secular practices (Almendro, Lopez 2016; Turnbull, Dawson 2006). As stated by Almendro and Lopez (2016) the scientific community is progressively approaching terms as "meditation" and even "compassion" and "enlightenment" as general features associated with "spirituality", without providing a concrete definition of meditation. The lack of agreement on a straightforward definition is fostered by unfamiliarity with meditation practices and the application of inconsistent questionnaires. Measuring mindfulness as a cognitive process varies between terms such as "non-judgmental attitudes", "openness to experience", "no personal identification" (Grossman 2011) and, contrarily, "inattentiveness", increasing inconsistent taxonomies. Self-report questionnaires distort and trivialize Buddhist practices as a decontextualized phenomenon, even implying a negative viewpoint seen as naïve tools (Grossman, Van Dam 2011).

Furthermore, the current lack of agreement on standardized criteria increases multifactorial models of spiritual or religious coping compatible with the healthiness paradigm (fig. 39-40).

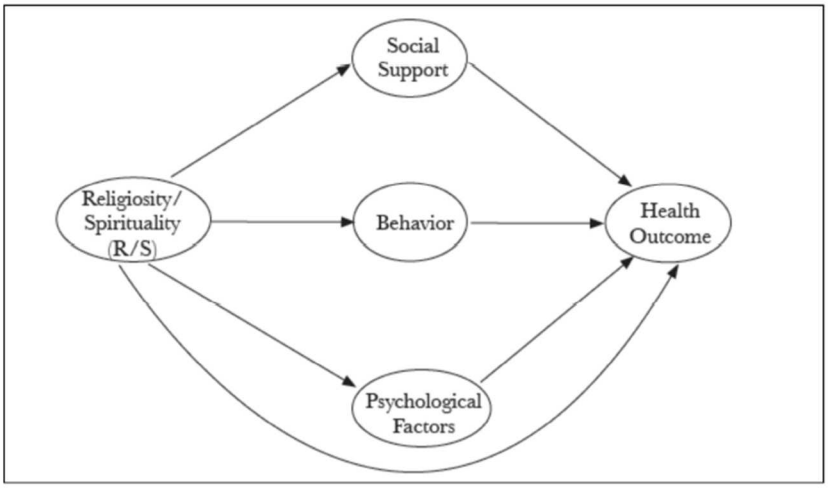


**Figure 39:** Master's Model of Religion and Health. *Source:* Masters, K. S. (2008).

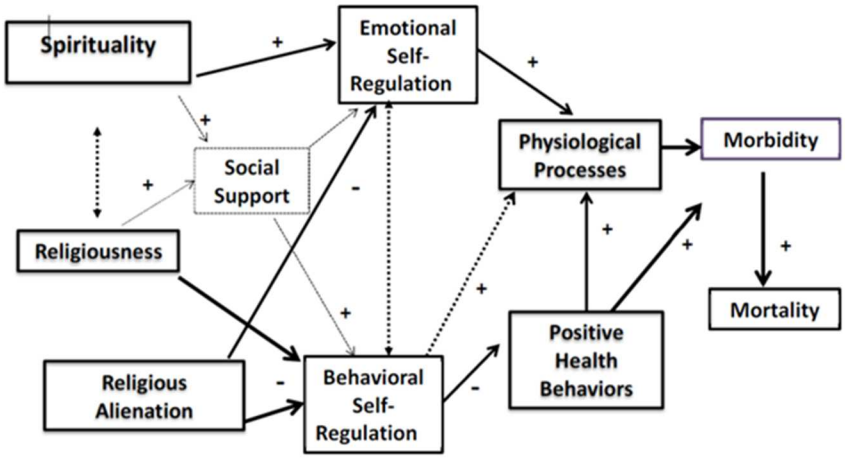


**Figure 40:** Model of differential impact of religiousness and spirituality on Pathways to Morbidity and Mortality. *Source:* Aldwin et al. (2014)

If we take into consideration the original goal of enlightenment, any reductionism devaluates and denaturalizes meditation and associated spiritual or religious attitudes, reducing them to a well-being technique. In addition, explanatory co-factorial models of variables involved in the well-being effects of meditation are still recent with respect to theoretical works (Shapiro et al., 2006; Garland et al., 2015b) and neurocognitive studies (e.g., Tang et al., 2015). While both explicative and descriptive models of consciousness attempt to capture some correlations between cognitive processes and their lived-phenomenology, they do not solve the hard-problem, asking for new methodologies, epistemologies and paradigms (Bitbol, 2012). Through few core instructions, mindfulness simplifies Buddhist meditation in order to make it accessible and useful in many treatments. This approach is supposed to help participants' wandering and bewildered mind calm down, acknowledging and regulating its own dynamics. Moreover, the plethora of patients who are not attaining enlightenment or other spiritual aspects, secularizes, simplifies and spreads mindfulness as a tool adjusted to novices' needs. These needs are mainly concerned with the urgency for help in order to cope with struggles such as illness-related and psychological suffering (Kirmayer 2015), while the moral or spiritual dimensions are only indirectly addressed. Both MBSR practices and metaphors correspond to this audience and its therapeutic goals, converging into factors intrinsic to clinical contexts (Kirmayer, 2007) and leaving extremely limited room for manoeuvre with mindfulness trainers. While Buddhist

teachers share the intention to free all beings from suffering, differing in techniques, traditions, etc., mindfulness trainers are supposed to follow a pre-defined program.

Furthermore, contemplative and mindfulness practices are intended for the relief of human suffering in global society, and significant ethical and political questions have to be addressed along this path (Walsh 2017). In terms of clinical practice, it is yet to be seen how these practices could be harmful, or whether they require a different approach (Lindahl et al. 2017). For that reason, it is important that scientific research, while taking the opportunity to explore consciousness states, deepens its therapeutic meaning and widens the acceptation of these practices. With respect to the involved samples, this study shows the feasibility and safety of MBIs and relevant connections with states of openness and gratitude. However, the spread of mindfulness-based "mental fitness" approaches fosters reductionist conceptions of psychological distress. It is arguable that this point strongly depends on mindfulness trainers' background. The complex interplay of psycho-social and socio-cultural factors is important for determining a synergistic compatibility of self-improvement approaches and individualistic attitude. But MBIs are not supposed to include personality traits, biographical history, and least of all, socio-cultural background. Consequently, the "mindfulness movement" is more often said to succumb to an individualistic worldview, as it overstates internal pathology while underestimating environmental bounds (Goddard 2014, p. 212).

For that reason, mindfulness programs are not sufficiently addressing, if not preserving, institutional structures that contribute to social suffering. Well-being as a pure individual issue could ignore, if not foster, major cultural and political issues, determining common suffering in different social layers. Mindfulness delivery in health care settings mandatorily fails to convey Buddhist cultural and philosophical knowledge, which are needed in order to achieve other purposes, like the spiritual-religious vocation of enlightenment or the socio-cultural shift towards collective wellbeing. Such disconnection from Buddhist original, contextualized, sociocultural background often reduces mindfulness to a symptomatic relief, reducing it to neurological and psychological explanatory mechanisms (Purser et al. 2016). Buddhism

necessarily nests in socio-cultural frameworks, and throughout its philosophical analysis, should examine current socio-cultural beliefs. Nevertheless, mindfulness neglects that shared capitalist worldview and its hedonistic-consumerist model of well-being.

There are a few authors who claim that a "tyranny of happiness" is currently reducing life's existential meaning to a hedonic pursuit (Ehrenreich 2010) and that, intended as a healthy tool, mindfulness is reaching this aim, corresponding to political-economic overall interests. As feeling good can become circularly a product and goal in itself, authors state that mindfulness is dangerously trying to blend with neoliberal models of efficiency, i.e. capitalism and consumerism (Drougge 2016). Actually, at present, the interaction of mindfulness with existential suffering as underpinning worldly life, is infrequently investigated. In a similar way, the ethical implications of one's engagement in mindfulness practice (Skt. *Śīla*) are neglected (Grossman, Van Dam 2011). For example, ambiguity still exists in regards to the principles of compassion (Skt. *Karuna*), reducing it either to morality or to benevolence, without connection to the principle of emptiness (vacuity of the self, *Śūnyatā*, *anitya*). Even if relevant works are helping to distinguish perspective taking, empathy and compassion (Singer, Klimecki 2014) the meaning of that guiding principle (often a concrete practice) has yet to be clarified, urging for some creativity. While narratives and procedures around MBI's limit insightfulness in scientific communities, criticisms from the "Buddhist side" are increasing, including the question of whether or not mindfulness might be the new opiate of the "alienated, narcissist masses" (Turnbull, Dawson 2006).

The foundational non-duality of contemplative states is far from being caught by the current scientific paradigm, which is mainly based on the duality of first/third person approaches as if their modalities were *internal* states separated from the *external* world. Science requires researchers to be objective in making observations and in sharing empirical measurements, defining the boundaries between first-third person approaches and their point of interaction. But such artificial distinction does not capture the way people experience these states: consciousness and its affective-

emotional dimensions are not ending products of a causal relationship. Rather, the way we are affected by the world origins in our ontological constitution and prior embeddedness in it (Freeman 2014). Finally, as Froese, Gould, Barrett describe it (2011), each verdict in consciousness science is inseparable from how we understand ourselves, since it concerns what is most intimate to our very existence. Hopefully, this kind of reflection should bring us to a "second order" science where human beings are not severed and "added" to the world, independently from their socio-cultural, political, historical, thrownness. Rather, consciousness should be situated in the background horizon of practical, social, historical and cultural meanings.

**B. RESEARCH ON MEDITATION COULD BE MUCH MORE PROFOUND**

With respect to the aforementioned inadequacies, what could imply an ethical contextualization of mindfulness within the Western culture? How could mindfulness and contemplative insightful wisdom lead to virtue? Intuition has been skeptically addressed by scientists with the crisis of introspection as a reliable tool of inquiry (Giommi, Barendregt 2014). Regaining confidence in this capacity may lead to relevant shifts in worldviews, through a proper, disciplined training. Shifts in worldviews imply unveiling implications related to a specific approach towards reality, i.e. the framework which defines the constraints and thus shapes a certain phenomenon (Vörös, Bitbol 2017). Going beyond the antagonism between inferential-rational thinking and emotions can actually increase the consistency of scientific approaches, making them more human and ethical (de Sousa 2011). In fact, to engage in meditative practice means to deal with emotions and feelings, often developing their meaning and enriching life's sense and the quality of our human interactions. Mindfulness meditation techniques are supposed to compel us to be more confident in respect to how the mind actually works. Given the role of emotions in propelling force to action, it is reasonable to think they represent a key factor in bringing us to a more ethical way to act in both clinical and scientific practices.

According to Almendro, Lopez (2016), the study of mindfulness could imply a synergistic conjunction of meditation, clinical practice and scientific research (Figure 41): across these three areas mindfulness could reach a fruitful, trans-disciplinary

space. Scientific and clinical research should be embedded in meditative approaches, in order to add a reciprocal, constructive dialogue with experimental designs, empirical evidence and new clinical techniques. Rationality and intuitive knowledge should be coupled throughout precise training, inspiring the dialogue between scientific and clinical teams, hopefully producing a more creative and communicative environment (Dobkin 2015; Charon 2001). Accordingly, both scientific and spiritual communities could find a mutual integration, eminently in clinical environments, where collective suffering matters. On the one hand, ethical features could be implemented by scientists' genuine engagement in meditation. On the other hand, in order to address the ethical point straightforwardly, the personal practice should imply activism in precarious conditions as, for example, in prisons (Samuelson et al. 2007).

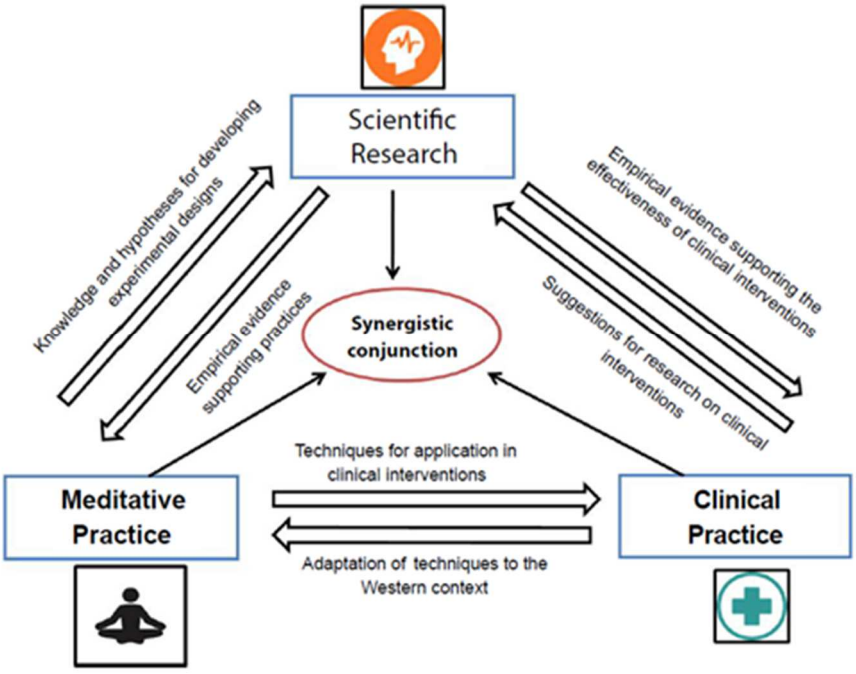


**Figure 41:** Synergistic conjunction of meditative practice, clinical practice and scientific research[29]

While quantitative outcomes are increasingly driven by a prevalent mechanistic-reductionist epistemology boosted by technology-based approaches, Varela's work sets the starting point of an entire experimental and philosophical field of research, based on the Neurophenomenological analysis of consciousness (Thompson, 2017). Varela

[29] in Almendro, Lopez (2016)

overturned the priority of consciousness respect to objective knowledge without assuming any idealism: he methodologically dissolved any metaphysical stance on reality, showing the impossibility to describe consciousness "within nature as it is supposedly described by our best scientific theories" (Bitbol 2002). For that reason, researchers' lack of familiarity with the meditative practices urges a wider integration in scientific communities. As Varela claimed, contemplative sciences and studies should primarily imply a combination of first-person methods with third-person research (Overgaard, Gallagher, Ramsøy 2008; Varela, Shear 1999) engaging scientists on that practice in order to understand the nature of what they are measuring. Accordingly, Almendro and Lopez (2016) suggest that scientists should become more confident on experiential aspects of mindfulness. But, at the same time, as claimed by Kirmayer (2015), a consistent cultural framework of contemplative experience is needed in order to develop contextualized approaches to mindfulness. An accurate phenomenology of the way meditative practices are attuned with the socio-cultural environment should frame human beings as *constituted* by the social world in which they exist, rather than merely "*placed*" in it. For that reason, Martin Heidegger's work should be taken into account, as our ontological structure cannot be severed from the background context in which it is enacted (Freeman 2014; Elpidorou, Freeman 2015).

Our understanding of the mind circularly reflects the extent to which it enacts our ontological structure, i.e. the lenses through which we experience the world. The mind itself discloses the broader context of one's existence in the world and can inform us of more than shared beliefs, representations, etc… But the mind is harder to manipulate as it is the very condition for the possibility to influence our beliefs, needs and desires. The guiding assumption that the mind can be severed from the context of one's life neglects Heidegger's account of Dasein's temporal existence (Freeman 2014). To take his analysis seriously undermines the assumption that drives most of the empirical approaches on mindfulness, i.e. that our attuned existence can be observed by atomizing it into discrete episodes or states. The underlying structure of attunement (*Befindlichkeit*) makes our affective-emotional and situated *being-in-the-world* an aspect which does not come from "inside" or "outside". Rather, our

thrownness in existence (*Geworfenheit*) is relevant for us *as* a peculiar attunement (Elpidorou, Freeman 2015). The abstraction from the context and structure of one's experiences atomizes the mind as something detached from, rather than distributed in, the world. Situatedness and extensiveness of the mind call for an understanding of it as constituted by its relations to others and their social context from the first-personal perspective.

In scientific research, this could be enhanced by person-centered anthropological methods, or "experience-near ethnographies" (Hollan 1997). For example, diary studies may offer a way to reach reliable, textured accounts of mindfulness. Diary writing and reflection is rooted in contextualized experiences, allowing subjects to shape their description. This method often broadens investigators' perspectives and intuitions of their hypothesis. The diary method offers conceptual and descriptive terms and frameworks for articulating and describing the experience, but it presupposes participants' adequate awareness of their attunement with their experience (Freeman 2014). Expert mediators promise suitable conceptual tools, language, and multisensory, embodied awareness, able to convey refined accounts (Petitmengin et al. 2017). Meditation experts can accomplish a relevant requirement in diary method: they already followed extensive training and present high level of commitment and dedication to the awareness of experience "as it is". Therefore, compared to typical data collections, meditators' long-term commitment can be suitably examined through longitudinal diaries.

Furthermore, observing practitioners during meditation and in related activities would enrich the theoretical knowledge associated with contemplative practices, framing their interpretation and perception. The way mindfulness changes personal attitudes needs more than phenomenological, brain imaging data, RCTs, and related quantitative outcomes. Mapping the social environment through accurate descriptions of the cultural enactment of these practices is not completely sufficient (Kirmayer 2015). Rather, meditative practices and their religious and spiritual acceptation need to be embraced in a completely renewed paradigm. Buddhism has changed constantly throughout history, giving rise to syncretic practices, symbols, rites and meanings.

Buddhism itself teaches the transitory character and impermanence of all forms, having shown high adaptability to foreign social and cultural contexts (LeVine & Gellner, 2005; Leve, 2014), and enabling people to approach it and go beyond social distinctions, as the divisions of caste. Historical consistent reconstructions are possible only after that processes of assimilation and integration of 'past' influxes are passed. A relevant, cultural adaptability shaped Buddhism adjusting it to local, socio-political milieus, creating new interpretations of original teachings: but which change can be considered essential, useful or inauthentic distortion? To answer this question, research should address the loss of essential aspects relying on empirical research and full-dedicated scientific communities. On the other hand, those committed to Buddhism, are spontaneously prone to find *a way* to maintain historical continuity and fidelity. The account of people engaged in a personal enquiry of Buddhist principles depicts a deep inquiry into its revealed truths, ethnic and social identity, as well as cultural background. Taking into consideration the very principles of contemplative states, and starting with a personal exploration of them, a critical integration of these principles should also be possible. A personalized clarification may provide authenticity to meditation without necessarily reducing it to standardized models: any univocal description and interpretation will give rise to significant inaccuracies. Reductionism heavily limits a deep account of meditation complexity as it depicts mindfulness states as virtual worlds "inside the head". Overcoming representationalism, Varela addressed the phenomenology of that experience as relevant *per se*. Meditative states can change from person to person, from technique to technique, from a Buddhist tradition to another, also in relation to sociocultural backgrounds.

Moreover, it is hard to access the degree of expertize in determined meditation techniques, and the aptness of their application (Almendro, Lopez 2016). Therefore, the inclusion of experts is central in order to approach the meaning of meditation (Nash, Newberg 2013). In long-term meditators, boundaries between the inside and the outside are weakened, and this can be considered a core issue related to the assimilation of "non-duality" in our culture (Ataria et al. 2015). Personal boundaries

could clarify meditation regenerative processes, defining the link between inner and the outer world. As discussed by Lutz, Dunne and Davidson (2007) and Dorjee (2016) this complexity requires a radical discussion of "top-down" metaphysical-theoretical foundations of reality. At the same time, "bottom-up" approaches are enriching these distinctions: first-person accounts could be a valuable phenomenological data, differing subjective "truths" from scientific, objective ones (Petitmengin's et al. 2017).

First-person approaches can be complex or even unreliable but are essential in order to do research from the perspective of the "third person" paradigm. Petitmengin's microphenomenology enriches both the research questions and refining participants awareness of experiential micro-dynamics. Research should also encourage the analysis of traditional texts, reaching comprehensive descriptions of manifold meditative experience (Telles et al. 2015; Dorjee 2016). The term "meditation" is blurred and the importation of Eastern terms can affect the essence of their Western experience. Hence, in order to open directive guidelines and directions on the nature of meditative states, it is necessary to establish distinctions between meditation technique on the one hand, and the contemplative state on the other (Nash, Newberg 2013; Dorjee 2016; Lindahl et al. 2017). To distinguish the ancient method from the occurrence of a particular state can help in catching some essential features of traditional meditation practices (Nash, Newberg 2013), in connection with the cultivation of associated virtues (Skt. *Paramitas* as compassion, courage, generosity, patience). Western worldview is aligned with the dualistic ascription of suffering to either bodily or cognitive processes, while the improvement of virtues as empathy, compassion, solidarity, trust and awareness of relational processes, could be much more effective. Buddhism may also help in overcoming many of our consolidated, cultural distinctions as objectivity/subjectivity, mind/matter, good/evil, intuition/reason, intellect/emotions, mind/heart, life/death. But to wisely overcome these distinctions implies bridging scientific and spiritual worldviews. Recently, traditional terminology is increasingly studied within Western scientific paradigms, involving equanimity (Desbordes et al. 2014), awakening (Britton et al. 2014; Austin 2013), self-transformation (Tang, Tang 2015), selflessness (Dambrun, Ricard 2011), non-

dual experiences (Josipovic 2014) or enlightenment (Davis, Vago 2013; Sharp 2011). To access the meaning of that terminology first implies to acknowledge the relevance of existential suffering, a concrete evidence for patients facing difficult conditions. Western culture is far from acknowledging it and the possibility of handling it. The translation of the Sanskrit *dukkha* is reductively translated as "suffering", while it represents something minimal associated with life as a universal process. On that note, and often in connection with painful turning points (Bury 1982; Tanner 2006), self-knowledge could regain relevance.

As spiritual needs are going unrecognized (Büssing, Koenig 2010), without even having a shared definition, mindfulness represents a valuable contribution, in particular in clinical settings. Meeting patients' existential struggle and meshing with enactivism, mindfulness could produce a phenomenological "change of context", not only a shift in the way we think about dualities (Vörös, Bitbol 2017). The role of new scientific metaphors, such as enaction (but also autopoiesis, embodiment, etc.), is to function as conceptual evocations of this back-and-forth exchange between knowing and situated being. Developing an integrative worldview is a necessary prior measure to unify scientific, psychological and spiritual domains, and should imply an irreversible transformation on the Western way of thinking and framing life. As witnessed by Varela's life, spirituality and science can mutually enrich each other extending the domain and the methodology of science beyond the constraints of a worldview that considers legitimate subjects of inquiry only observations from the outside, and only for those outer aspects of reality that can be reliably repeated in experimental settings. This unnecessary methodological limitation excludes those phenomena that cannot be successfully reproduced in the laboratory. As reported by Vörös and Bitbol (2017), Varela's main contention is to change our perspective on duality there needs to be a corresponding "change *in the context* in which the problem is seen arise", i.e. a change in the logic used to talk about it, in the scientific ideas and metaphors, and in the cultural conceptions and existential attitudes.

Contemporary scientific approaches do not account for how contemplative states connect us to the world and to ourselves outside the lab. There, each variable is a

controlled abstraction which underestimates the complexity of ecological interactive sociality and temporality. Still less, experiments and RCTs can account for experiences of void and emptiness and associated feelings and emotions: the way emptiness is experienced in the world and what it can reveal to us about our existence in the world, remain hidden.

With respect to Buddhist soteriology, it is arguable that meaning and value can emerge and be developed only throughout the situated experience of emptiness. Only on that basis, life renews its meaning and value. It is arguable that mindfulness allows the diffusion of few core contemplative principles, at the same time offering a relative stability to novices, enabling further deepening. This can be seen as a prior step in order to pave the way to spiritual engagement, as the Buddhist one, for those interested in it. At the same time, mindfulness may counterbalance the lack of emotional and interpersonal development of practitioners fully engaged in spiritual paths (Chandler 2009?). Therefore, mindfulness challenges both psychologies, medicine, social sciences, anthropology and neurosciences, calling for deeper frameworks on consciousness. The exploration of the spiritual dimension calls into question both the scientific and religious worldviews, enhancing the depth and the comprehensiveness of our questions.

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