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Doctoral Dissertation Thesis

***Application of Relational Mindfulness in Management Education:  
Development and Validation of Relational Mindfulness Training  
(RMT)***

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## **Declaration**

I declare that this dissertation thesis “Application of Relational Mindfulness in Management Education” represents my own work. Used literature and sources are mentioned in the literature section.

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## **Application of Relational Mindfulness in Management Education**

### **Development and Validation of Relational Mindfulness Training (RMT)**

#### **Abstract**

The application of mindfulness in management practice and education has recognized notable growth in recent years. The development of mindfulness has shown positive effects in several domains such as stress management, work engagement, well-being and cognitive flexibility. However, the effect of mindfulness training in the domain of interpersonal relationships is still a rather unexplored area. Furthermore, little evidence has so far explored the domain of relational mindfulness that focuses on the development of awareness of one and other's condition in a social context. In order to address the lack of evidence, the goal of this thesis is to develop and validate an 8-week mindfulness-based intervention (MBI) named Relational Mindfulness Training (RMT). Research was conducted in the pilot (N = 66) and main study (N = 128) that included students of the University of Economics in Prague. Results showed a significant effect of participation in RMT on mindfulness, self-compassion, authentic leadership, compassion, perceived stress and subjective happiness. Results from the main study further confirmed significant effects of RMT participation on mindfulness, self-compassion and perceived stress in the long run, and indicated that individuals who maintained the individual practice after the end of intervention showed notably better results than individuals who did not. However, the individual practice did not affect the level of compassion. It suggests that an increase of compassion was not affected by an individual practice but by a relational practice of RMT. Two studies described in this thesis are the first ones that validate the effects of a relational-based mindfulness program in management education and the first ones to validate the effects of MBI in the Czech Republic. They also suggest that training in relational mindfulness has a potential to become a beneficial part of management education curriculum as it may help future leaders to handle their challenges in more aware and caring way.

**Key words:** mindfulness, relational mindfulness training, self-compassion, compassion, stress management

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## **LIST OF ABBREVIATIONS**

ALSAQ	Authentic Leadership Self-Assessment Questionnaire
CS	Compassion Scale
LKM	loving-kindness meditation
LKMIs	loving-kindness meditation interventions
MAAS	Mindful Attention Awareness Scale
MBCT	Mindfulness-Based Cognitive Therapy
MBIs	mindfulness-based interventions
MBSR	Mindfulness-Based Stress Reduction
PSS	Perceived Stress Scale
RMET	Reading Mind in the Eyes Test
RMT	Relational Mindfulness Training
SCS	Self-Compassion Scale
RCT	Randomized Control Trial
SHS	Subjective Happiness Scale

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# 1 Introduction

We live in times of great change. Rapid advances in technology, on-going globalization, cultural shifts, economic and political instability all put a high degree of pressure on organizations and their members (Baard et al., 2014). Contemporary organizations operate in conditions that are increasingly complex and uncertain (Hunter & Chaskalson, 2013). This situation is suggested to be one of the factors that increase the importance of *mindfulness* in management practice and education (Good et al., 2016). *Mindfulness* can be defined as the state of being attentive and aware of the present moment (Brown & Ryan, 2003). It refers to one of the main kinds of *meditation practice* that have originated in traditional contemplative practices, especially in *Mahāyāna* and *Theravāda Buddhism* (Sedlmeier et al., 2012).

A modern secular form of *mindfulness training* mostly occurs in the form of 8-week *mindfulness-based interventions (MBIs)* that have been mostly examined for their effects on quality of one's life and functioning. *MBIs* have repeatedly showed the positive effects on mental and physical health, stress reduction, self-regulation and cognitive abilities of individuals (e.g., Creswell 2017; Keng et al., 2011). Application of *MBIs* in the organizational settings further revealed beneficial effects on job-performance, work-life balance, client satisfaction, *work-related stress*, anxiety and fatigue (e.g. Michel et al. 2014; Gregoire et al. 2015). And *MBIs* were also repeatedly examined in higher education where they improved empathy, *well-being*, self-regulation, sustained attention, social adjustment, *stress*, anxiety and depression (e.g., Shapiro et al. 1998; De Vibe et al. 2013).

Despite this rich and growing evidence in the field of *mindfulness*, the contemporary studies still have not focussed on several promising areas (Creswell, 2017). One of those areas is *relational mindfulness* that focuses on a development of *mindfulness* in the inter-relational domain. *Relational mindfulness* represents a potential to bring the whole *mindfulness practice* closer to real social situations because it develops one's attentiveness and awareness during social interactions (Falb & Pargament, 2012; Surrey & Kramer, 2013). It also represents one of the ways on how to contribute to the research in regarded but unexplored area of *mindfulness* and relationships (Creswell 2017; Good et al., 2016). Although some pioneering studies

have already focused on the examination of *relational mindfulness* (e.g., Krasner et al., 2009; Jennings et al., 2013), none of the studies have examined the effect of *MBI* that would be dominantly based on *relational mindfulness*.

**Goal of this thesis is to develop and validate *Relational Mindfulness Training (RMT)* for its impact on the development of characteristics that indicate *effective handling of daily situations, well-being and healthy relationships*.** This thesis, therefore, examines the effects of *RMT participation* on *mindfulness* and *self-compassion*, the individual-focused outcomes that can be considered as supportive qualities of the *effective handling of daily situations*. Secondly, this thesis examines the effects of *RMT participation* on *perceived stress* and *subjective happiness*, the individual-focused outcomes that can be considered as indicators of one's *well-being*. And finally, the impact of *RMT participation* on *empathic accuracy, compassion* and *authentic leadership* is examined. Those relationship-focused outcomes can be considered as supportive qualities of the *healthy relationships*. This thesis also aims to address the lack of evidence in the field of *relational mindfulness*. *RMT* is an 8-week *MBI* which is primarily focused on the relational form of *mindfulness training* (in dyads and triads). Training is focused on the development of three levels of *relational mindfulness* (*mindfulness of self-in-relationship, mindfulness of other-in-relationship* and *mindfulness of relationship-in-relationship*) (Surrey & Kramer, 2013), and guides participants to be more opened and caring towards both others and themselves.

This thesis also supports the evidence of *MBIs* in the management education. Research in the field of *MBIs* is widely spread in higher education. However, it seems that none of contemporary studies have been conducted on the sample of management students, as most of the studies focused on students of psychology. Although I do not expect that validation of the training on the management student samples would bring significantly different results than in the case of other students, I consider application of *RMT* in management education important for two main reasons. Firstly, although higher education cannot fully prepare management students for their future role in organizations, it may support the development of some qualities such as *stress management, adaptability* and *creativity* that are highly demanded in contemporary organizations (Good et al., 2016). Training in *relational mindfulness* might, therefore,

help management schools to pre-equip their students with skills that could enable them to better mentally handle their future challenges.

Secondly, the *RMT* might also represent an answer to the criticism of management education for overlooking or undermining the moral aspect of education (McCabe, Butterfield & Treviño 2006; Alimo-Metcalfe, 2013). One of the main goals of training in *relational mindfulness* is to help participants to be more aware of the needs of others, to feel more concern for others and to be able to attune to the shared human experience. Furthermore, the *RMT* also combines relational practice with a *loving-kindness meditation (LKM)*. *LKM* refers to the traditional Buddhist training in the *four immeasurables* that helps practitioners to overcome the selfishness and develop moral integrity and is closely linked to mindfulness training (Santideva, 1997; Sayādaw, 1985). Secular training in *LKM* shows positive effects on compassion, ability to give and receive emotional support and feelings of positive purpose in life (e.g., Fredrickson et al., 2008; Neff & Germer, 2013; Weibel et al., 2016). Training in *relational mindfulness* combined with *LKM* and individual mindfulness practice might, therefore, make moral education more vivid and attractive for the students of business universities.

This thesis also contributes to the development of the *mindfulness research* in the Czech Republic. Few local studies have already conducted the *mindfulness research* (e.g., Vaculik et al., 2016; Zalis et al., 2017; Vyšata et al., 2014), but it seems that none of the studies has focused on the examination of the effects of an 8-week *MBI* so far. However the demand for mindfulness training and number of programs is growing in the Czech Republic. We live in times when the field of personal development is becoming a highly profitable activity, including the fact that mindfulness has been recently labelled as a *billion dollar business* (Wieczner, 2016). Profit seems to attract many brand new mindfulness teachers who do not always possess enough experience and knowledge, and provide reduced programs that lack solid evidence and cannot guarantee any real results. This trend of so called *fast-food mindfulness interventions* is happening all around the globe and it has been labelled as *McMindfulness* (Purser & Milillo, 2015). Therefore, this thesis also wants to inspire discussions about the quality of *mindfulness training* and also to motivate other

researchers and facilitators to contribute to the development of the evidence-based approach in the field of *mindfulness* in the Czech Republic.

The examination of the effects of *RMT* was conducted in two studies. Both studies included students from the University of Economics in Prague. Thesis firstly focuses on the theoretical part (Chapter 2). Chapter 2.1 focuses on the introduction to the origin and conception of *mindfulness*. Chapter 2.2 presents correlational effects of *mindfulness* and the benefits of *mindfulness-based interventions (MBIs)*. Chapter 2.3 focuses on *loving-kindness meditation (LKM)* and presents its relationship with *mindfulness*. Chapter 2.4 is dedicated to *relational mindfulness* and its contemporary state of art. Chapter 2.5 focuses on the role of *mindfulness* in leadership and inquires about the possible emergence of the *mindfulness leadership theory*. Chapter 2.6 briefly reviews *mindfulness research* that was conducted in the Czech Republic. And the last part of the theory, Chapter 2.7 is dedicated to the challenges and issues of *secular mindfulness*.

Chapter 3 focuses on the methods. Firstly, Chapter 3.1 presents the *Relational Mindfulness Training (RMT)*, its practices and schedule. Chapter 3.2 focuses on *Study 1*, the hypotheses, sample, measures and data analysis. And finally, the Chapter 3.3 presents the hypotheses, sample, measures and data analysis of the *Study 2*. Chapter 4 focuses on the presentation of the results of the data analysis, more specifically from the analysis of variance and paired sample t-test. Chapter 4.1 presents results from the *Study 1* and the Chapter 4.2 presents results from the *Study 2*. Chapter 5 is devoted to discussion. Chapters 5.1. and 5.2 interpret the findings from *Study 1* and *Study 2*. Chapter 5.3 focuses on the implications of the results from both studies. Chapter 5.4 inquires about the limitations and Chapter 5.5 presents the recommendations for future studies. And finally, Chapters 5.6, 5.7 and 5.8 inquire about implications for *mindfulness practice*, pedagogical practice and organization practice.

## **2 Theoretical Foundations and the State of Art of Mindfulness**

This chapter serves as an introduction to the *mindfulness* and its role in organizational and educational research. The following text presents the origin of *mindfulness*, its beneficial effects, interventions and complementary approaches. It also focuses on the contemporary state of art in the field of *relational mindfulness*, *mindful leadership* and *mindfulness research* in the Czech Republic. The last part of this chapter is dedicated to the inquiry about challenges of the development of *mindfulness-based interventions (MBIs)*.

### **2.1 Introduction to Mindfulness**

Modern forms of *secular mindfulness training* firstly appeared in the early 80s' of the last century (Kabat-Zinn, 1982) and its evidence has grown remarkably in recent years (Creswell, 2017). Most of the modern programs that are based on the *mindfulness training* are derived from or inspired by a *meditation practice* that has originated thousands of years ago in many contemplative traditions, especially in Buddhism (Williams & Tribe, 2000; Kabat-Zinn, 2003; Gethin, 2011). The following text explains what is *meditation* and contemplative science and presents the traditional Buddhist view of *mindfulness* and *meditation*. The thesis also focuses on the presentation of the modern conception of *mindfulness* and its aspects. The last part is dedicated to the presentation of the role of *mindfulness* in Western psychology.

#### **2.1.1 Contemplative Science and Meditation**

*Secular mindfulness* is commonly accepted as one of the hot psychological topics today (Creswell, 2017; Sedlmeier et al., 2012). The examination of *mindfulness* is also one of the main areas of a quite new scientific field called contemplative science, which can be defined as “*an interdisciplinary study of the metacognitive self-regulatory capacity (MSRC) of the mind and associated modes of existential awareness (MEA) modulated by motivational/intentional and contextual factors of contemplative practices*” (Dorjee, 2016, p. 1). Dorjee explains *MSRC* as a natural propensity of the mind that enables introspective awareness of mental processes and behaviour, while the *MEA* determines the sense of self and reality. A practice that



fosters and enhances the *MSRC* and thus helps individuals to shift to more genuine sense of self and reality (*MEA*) is called *meditation*.

*Meditation* can be explained as a set of emotional and attentional regulatory strategies that are designed to train one's mind or induce a mode of consciousness in order to achieve either psychological (emotional balance, greater *well-being*) or spiritual (greater understanding of reality, gaining wisdom) ends (Lutz et al., 2008; Sedlmeier, 2012). *Meditation* can be generally divided into three basic types: a *concentration*, a *mindfulness meditation* and a *meditation with form* (Sedlmeier et al., 2012). The *concentration* (or focused attention *meditation*) is based on keeping the attention on a single object, such as breathing, body part or outer object and thereby to disengage the usual mental processes. *Mindfulness meditation* (or open monitoring *meditation*) emphasizes staying present in the moment, while maintaining an alert and aware state in a *non-judgmental* way. *Meditation with form* works with the conceptual/symbolical content of *meditation* such as focusing on feelings of kindness or *compassion*, or using the visualizations, mantras, chants or mandalas. All three types appear in a different combination in most contemplative traditions. However, it is *Buddhism* that is suggested to be the main holder of the *practice of mindfulness*.

## **2.1.2 Meditation and Mindfulness in Buddhism**

Buddhism originated approximately 2500 years ago when the teaching of Gautama Buddha (also known as Shakyamuni Buddha or Siddhārtha Gautama) spread in India (Gethin, 1998). The early Buddhist teachings were also inspired by Hinduism, a Western-made umbrella term for all traditions that are rooted in the *Vedas*, the ancient Indian text that date back to about 3500 B.C.E (Williams & Tribe, 2000). Both Buddhism and Hinduism give strong emphasis on the *practice of meditation*, while *mindfulness meditation* in particular receives most attention in Buddhism (Sedlmeier, 2012). The following text presents the sources, types and basic teachings of Buddhism, as well as its view on *mindfulness*.

### **2.1.2.1 Tripiṭaka – Buddhist Canon**

*Tripiṭaka* refers to three vessels (groups) of Buddhist scriptures that organize major parts of its teachings (Gethin, 1998). It has been mostly preserved in two ancient languages, the *Pali* and *Sanskrit*. Most of Buddhist concepts are stated in *Pali*

in this thesis. *Vinaya Piṭaka* focuses on ethical and monastic rules that usually relate to monks who take vows. *Sutta Piṭaka* is the main source of instructions and recommendations for the *mindfulness meditation* and other related practices. The third vessel *Abidhamma Piṭaka*, is an ethically-psychological system (also called as a Buddhist psychology) that focuses on a deeper analysis of the process of human thinking and experiencing (Nyanaponika, 1976). Teachings of *Abidhamma* are complementary to the *Sutta teachings* and further extend their knowledge (Nyanaponika, 1962).

### 2.1.2.2 The Three Buddhist Vehicles

Buddhism can be also divided in three vehicles (branches): the Theravāda, Mahāyāna and Vajrayāna (Williams & Tribe, 2000; Gerthin, 1998). Theravāda is the oldest vehicle and it tends to be translated as a teachings of the elders. It is also called Southern Buddhism, because its teachings spread mostly throughout Sri Lanka, Thailand, Cambodia and Myanmar. The Theravāda tradition also holds the *Pali* version of *Tripiṭaka* and its practitioners and scholars give a strong emphasis to the original teachings of Buddha, while the deeper understanding of the processes of mind based on *Abidhamma* is also very important here.

Newer Mahāyāna is also called as Eastern Buddhism, because it is widely spread throughout China (Chan Buddhism), Japan (Zen Buddhism), Vietnam, South Korea and Tibet. The main goal of Buddhism is the attainment of a state of liberation from the suffering, the *nibbāna* (*nirvana* in *Sanskrit*). Both Theravāda and Mahāyāna follow this goal and their common principle is renunciation, which is to renounce attachment to the emotions, mental concepts, body and world and to root out *three poisons*: the greed (*lobha*), hatred (*dosa*) and delusion (*avidyā*) (Nyanaponika, 1962; Santideva, 1997). The main source of the teachings of the renunciation are *Suttas*. However, the general differences exist between both paths (Gethin, 1998). The ultimate goal of Theravāda is the attainment of liberation from oneself, while non-harming others and being *compassionate* is the important part of the path. The fundamental principle of the path is accepting and maintaining vows (e.g., not to harm others, not to engage in sexual behaviour, to give up possessions etc.). On the other hand, the liberation of both oneself and others is the ultimate goal of Mahāyāna. That is also a reason why acting, practicing and living in accordance with good intentions

to help others to self-liberate is more important than maintaining the vows. That is one of the reasons why Mahāyāna is called The Greater Vehicle (Santideva, 1997).

The third Buddhist vehicle is Vajrayāna which is also called Mantrayāna, Diamond Vehicle or the Northern Buddhism. Vajrayāna is the newest branch and it has preserved Tibet, Bhutan, Nepal and Mongolia. The teaching of Vajrayāna is based on the texts called *Tantras* that are suggested to be form the fourth group of the Buddhist canon called *Vidyādhara Piṭaka* (Stewart, 2004). *Tantric* teaching is based on the principle of transformation. For example, negative emotions are seen as potential for transforming into something pure, rather than impurities to be shaken off. Vajrayāna is also the most complex branch as most of its practices work with mantras, mandalas and symbols. However, in almost all Vajrayāna traditions, the practices of Mahāyāna usually serve as a preparation for the path of Vajrayāna and the *development of mindfulness* plays an essential role in such training (Patrul Rinpoche, 2010).

In conclusion, the modern *secular mindfulness approaches* are almost exclusively inspired by *Sutta* teachings that are roots of the training in both Theravāda and Mahāyāna Buddhism (Kabat-Zinn, 2003; Sedlmeier et al., 2012). Among the fundamental teachings of *Suttas* that describe the path of liberation, as well as the purpose and methods of *mindfulness training* are the *Four Noble Truths* and the *Eightfold Path*.

### **2.1.2.3 The Four Noble Truths and The Eightfold Path**

The teaching on the *Four Noble Truths* is recognized as the core of Buddhist teaching (Nyanatiloka, 2016 [1906]; Sedlmeier et al., 2012). It is important for all three *vehicles* but it tends to receive most attention in Theravāda. The most famous discourse on the *Four Noble Truths* is the *Dhammacakkappavattana Sutta* that is considered to be the first teaching that was given by Gautama Buddha (Sayādaw, 1998).

The *First Noble Truth* inquires about *dukkha*, the suffering or dissatisfaction in our life that arises when the perceived reality does not match the desires or expectations of it. This discrepancy generates unpleasant emotions (anger, frustration, etc.) that cloud our judgement and make us feel unpleasant. For instance, when one

holds a certain hypothesis and it turns out that the hypothesis is wrong, one would suffer *dukkha* (Sedlmeier et al., 2012). According to the *Second Noble Truth*, the *dukkha* originates in a tendency to crave for beliefs, perceptions, sensations, expectations, opinions, and images of oneself and of reality (craving). The *Third Noble Truth* describes that *dukkha* ends when the craving ceases. This absence of craving does not mean that one becomes apathetic or without feelings, but rather it means that he/she does not live in self-deception and his/her actions are motivated by appropriateness and *compassion*, instead of lust for power, sensation, or security (Sedlmeier et al., 2012). And finally, the *Fourth Noble Truth* refers to the path of freeing oneself from the craving and suffering. In Theravāda tradition, this path is called as the *Eightfold Path* (Nyanaponika, 1962).

*Eightfold Path* entails eight interconnected qualities that need to be cultivated in order to fulfil the goal of the *Four Noble Truths* - the attainment of the state of liberation (Nyanatiloka, 2016 [1906]). The right understanding/view (*sammā-ditṭhi*) and the right thought/resolve (*sammā sankappa*) lead to the development of wisdom (*paññā*). The right speech (*sammā-vācā*), the right action (*sammā-kammanta*), the right livelihood (*sammā-ājīva*) and the right effort (*sammā-vāyāma*) lead to the development of morality (*sīla*). And the *right mindfulness* (*sammā-sati*) and the *right concentration* (*sammā-samādhi*) lead to the development of *meditation* (*samādhi*). This schema is also called the vertical structure of the path because the fulfilment of training in morality, mastering of meditation and attainment of wisdom represent three gradual steps in one's development (Cousins, 1984).

Some portion of *wisdom* is necessary for having initial understanding of the *Four Noble Truths* and stepping into the *Eightfold Path*. The development of morality focuses on keeping several rules (i.e., no lying, no gossiping, no killing, no injuring, or watching over bad thoughts) that help practitioners not to harm others, to calm down the mind and to develop ideal conditions for *meditation*. In the case of *meditation*, the practice of *mindfulness* further prepares practitioners for deeper *concentration*. *Concentration* then leads to the four absorptions (*jhāna*) that result in the attainment of wisdom. Wisdom is represented by insight to the true nature of reality (*vipassanā*): the impermanence (*anicca*) that refers to the understanding that all things are constantly changing, the non-self (*anattā*) that refers to the understanding

that there is not any unchanging or permanent self in any living being, and the suffering (*dukkha*) that has been already explained in the previous text. Wisdom leads to the attainment of *nibbāna*, the state in which one becomes free from sensual passion (*kām'ā-sava*), the passion for existence (*bhav'ā-sava*) and the passion of ignorance (*avijj'ā-sava*), and thus liberated from suffering.

#### 2.1.2.4 The Buddhist Conception of Mindfulness

Although the word *mindfulness* tends to be used by most of the Buddhist scholars and teachers today, it seems to firstly appear as a translation of *Pali* word *sati* in the book *Buddhist Suttas* that was written by Thomas William Rhys Davids (1881). It is also possible that his work was inspired by the dictionary of Monier-Williams (1872) that suggested the word expression *being mindful of* as one of the possible translations of *Sanskrit* equivalent *smṛti*. The latter translations also explained *sati* as awareness or attention, but only in the form that is good, skilful or right (*kusala*) (Nyanaponika, 1962). However, it is also important to stress that especially in traditional texts, the *sati* was also explained as *remembering* (Nyanaponika, 1962). More specifically, Gerthin (2011) states that an early text of *Abhidhamma Piṭaka* called *Dhammasaṅgani* lists a number of qualities that describe the nature of *sati*. Those qualities include a recollection (*anussati*), a recall (*patissati*), a *remembrance* (*saranatā*), keeping in mind (*dhāranatā*), an absence of floating (*apilāpanatā*) and an absence of forgetfulness (*asammussanatā*).

Gerthin (2011) also provides two possible explanations of *sati* as *remembering*. Firstly, it may refer to one's capability to remember to be present in the particular moment. For example, while doing a *meditation practice*, one remembers to observe and to be aware of the breath. By doing that, he/she remembers to *meditate* and through the *remembering* of doing a *meditation*, one is also *remembering* that he/she is a *meditation practitioner*, and in remembering that one is a *meditation practitioner*, one is also *remembering* that one should root out the greed, hatred and delusion. Secondly, *sati as remembering* can be also characterized as a calling to mind various beneficial (wholesome) and unbeneficial (unwholesome) qualities. This faculty helps practitioners not to get lost in the present situation or related mental states. For example, when one is happy, he/she is also *remembering* how it feels to be unhappy and thus he/she will be less likely to be thrown down when the feeling

passes and also more likely to be sympathetic to those around who are not so happy. Similarly, if in the particular moment one remembers that certain actions led to unpleasant feelings, he/she will be less likely to indulge those patterns of behavior again. Therefore, although the translation of *sati* as *remembering* might be seen as far from a modern conception of *mindfulness*, it implies that *sati* is a faculty of the mind that helps the practitioners to be present and to be aware of what is important in the particular moment, while keeping in mind the wider perspective of past and future.

#### 2.1.2.5 Buddhist Training in Mindfulness

In the case of the *Eightfold Path*, the cultivation of *right mindfulness* (*sammā-sati*) is called *satipaṭṭhāna* (Nyanatiloka, 2016 [1906]). *Paṭṭhāna* can be translated as putting forward or as looking after (while used in its alternative version *upaṭṭhāna*). But the whole expression *satipaṭṭhāna* can be also more freely explained as the practice of cultivating of awareness or the *path of mindfulness* (Nyanaponika, 1962). Two important texts that contain instructions for this training are *Satipaṭṭhāna Sutta* (Soma, 2010 [1949]) and *Mahasatipaṭṭhāna Sutta* (Jotika & Dhamminda, 1986).

*Satipaṭṭhāna* focuses on the development of *four foundations of mindfulness* (also called as four contemplations) (Nyanatiloka, 2016 [1906]). *Mindfulness of the body* (*kāyānupassana*) focuses on the development of the awareness of breathing and body parts as well as the development of the non-attachment to one's body. *Mindfulness of feelings* (*vedanānupassanā*) focuses on the development of awareness of the different states of one's feelings and mood states as well as the development of the non-attachment to one's feelings. *Mindfulness of mind* (*cittānupassanā*) focuses on the development of awareness of the different mind states, such as the concentrated mind/non-concentrated mind or the hating mind/non-hating mind, etc. as well as the development of the non-attachment to one's feelings. And finally, *mindfulness of mind objects* (*dhammānupassanā*) is focused on the development of awareness of the different mind qualities that may either support or hinder one's progress in the practice.

Although the roles between *mindfulness*, *concentration* and the other parts of *Eightfold Path* differ across the various teachers and texts (Vetter, 1988), the development of *mindfulness* is considered to be the heart of the entire doctrine in both

Theravāda and Mahāyāna Buddhism (Nyanatiloka, 1962). Teachings on *mindfulness* according to *satipaṭṭhāna* are also the primary inspiration for the training that is a part of the *modern mindfulness-based interventions (MBIs)* (Kabat-Zinn, 2013; Seldmeier et al., 2012). Another teaching that inspired almost all *MBIs* is the practice of the *four immeasurables*.

#### 2.1.2.6 Four Immeasurables

The practice of the *four immeasurables* (or Brahmavihāra) is an important part of Buddhist *meditation training* (Santideva, 1997; Sayādaw, 1985). The practice also existed in Hinduism (especially in early *Vedic Upanishads*) as part of the practice called Brahma-Loka even before the origin of Buddhism (Wiltshire, 1990). *Meditation on the four immeasurables* is described in many *suttas*, as well as in the Theravāda discourse *Visuddhimagga* (Buddhaghōṣa, 2011), and in Mahāyāna discourse *Bodhisattvacaryāvatāra* (Santideva, 1997).

*Meditation on the four immeasurables* uses the principles of *mindfulness*, but it is more likely a *meditation with a form*, because the objects of attention are the wholesome thoughts and feelings that are evoked by the practitioner. More specifically, the practice focuses on the development of the four complementary qualities. *Loving-kindness* (*mettā*) focuses on the development of caring and non-selfish interest for other's well-being. *Compassion* (*karuṇā*) refers to willingness to cease the suffering of a distressed person or other living being. Appreciative joy (*muditā*) entails feeling happiness for other's success or fortune. And equanimity (*upekṣā*) refers to staying calm towards the fate of others based on wisdom.

In both Theravāda and Mahāyāna Buddhism, the meditation on the *four immeasurables* represents more advanced training in ethics, but also helps practitioners to calm down the mind and prepare ideal conditions for the practice of *mindfulness* and *concentration* (Gilbert & Choden, 2014; Olendzki, 2014;). Furthermore, in Mahāyāna Buddhism, the development of the *four immeasurables* is the essential element of the whole path because it helps practitioners to develop morally clear and altruistic intentions to help others self-liberate (Santideva, 1997). The secular version of the training in the *four immeasurables* is also an important part of the most contemporary *MBIs* (Zeng et al., 2015; Shonin et al., 2014a; Kabat-Zinn, 2013).

### 2.1.2.7 Buddhism in The West

Nowadays Buddhism tends to be perceived as an Eastern philosophy (Carmody, 2014), but its integration to the West has more than a 150 years long tradition. The whole process of the integration confirmed the fact that Buddhism is a philosophy that can easily adapt to local circumstances. As much as Buddhism coexisted or assimilated with other teachings and doctrines, such as: Bon in Tibet, Shinto in Japan, and various forms of Animism throughout Southeast Asian, it assimilated with cultural belief systems that have shaped the Western society, such as: science, materialism, psychology, romanticism, commercialism, and the New Age thinking (Olendzki, 2014).

The process of integration took place in several ways. Firstly, it became an object of study of several scholars and translators in the 19<sup>th</sup> century (Tweed, 1992). Perhaps the first translated work was the Eugène Burnouf's (1852) *Sanskrit-French* translation of famous Mahāyāna text *Lotus Sutra (Saddharma Puṇḍarīka Sūtra in Sanskrit)*. The text was then translated in English by Elizabeth Palmer. Palmer's colleague Henry David Thoreau expressed many Buddhist ideas in his famous books *Walden, A Week on the Concord and Merrimack Rivers* (Tweed, 1992). Among the other pioneering works is *A Manual of Buddhism in Its Modern Development* written by Robert Spence Hardy (1853) or already mentioned book *Buddhist Suttas* from Thomas William Rhys Davids (1881) which was also one of the first books that presented Theravāda teachings in the West.

Secondly, Buddhism came to the West with Asian immigrants. The first wave were the Chinese who started to arrive in California in 1850s, while other immigrants from Japan and Korea docked in Hawaii and along the Pacific Coast during the 1890s. Those people brought Mahāyāna Buddhism with them and maintained its practice across the generations. The early phases of encounters between Buddhism and Western society were fraught with misunderstandings and distrust, but the depth and sophistication of mutual understanding have grown steadily in time. In fact, even at the beginning of 20<sup>th</sup> century, many US citizens reported themselves as being Buddhists (Tweed, 1992). The pre-war and the post-war period was witness of another wave of Buddhist immigration. People from Southeast Asia have brought the Theravāda Buddhism and people from Tibet have brought Mahāyāna and Vajrayāna



Buddhism (Olendzki, 2014). An interesting part of the Tibetan wave was also the fact that many authentic masters were part of the immigrants too and their teaching had a major influence on the further development of Buddhism in the west. Among the most famous teachers were Chögyam Trungpa, Tarab Tulku Rinpoche, Dudjom Jigdral Yeshe Dorje and Chögyal Namkhai Norbu Rinpoche.

Thirdly, a major step forward happened when Buddhist teachers and scholars started to interact with Western scientists. Shonin et al. (2014a) named a few factors that supported this process, such as: more a practical and a less religious focus of Buddhism (contrary of other religions), similarities between Buddhist practice and established therapeutic modes (such as *Cognitive Behavioural Therapy (CBT)*) and the international recognition of some prominent Buddhist leaders such as Dalai Lama or Thich Nhat Hanh. The process was also supported by the general increase of interest in the psychological examination of consciousness in 20<sup>th</sup> century. Some traditional Buddhist teachers in turn expressed positive expectations about possible mutual enrichment between Buddhism and Western science (Nyanaponika, 1962).

One of the first psychologists that started this process was Carl Gustav Jung who wrote 30-page commentary to the second release of *An Introduction to Zen Buddhism* of a Japan master Daisetsu Teitaro Suzuki (1948). Jung praised the book as one of the best contributions to contemporary Buddhism, but also warned against an uncritical borrowing from Eastern spirituality. Suzuki also collaborated with humanistic philosopher and psychoanalyst Erich Seligmann Fromm. In 1957, they made a common workshop called *Zen Buddhism and Psychoanalysis* in Cuernavaca, Mexico (Aich, 2013). Fromm also wrote a forward to the anthology of Theravāda teacher Nyanaponika Thera (Nyanaponika et al., 1986). Zen Buddhism has also inspired the founder of the *Gestalt Therapy* Frederick Perls who spent some time meditating in Buddhist monasteries in Japan (Aich, 2013). And some psychologists, such as M. Epstein even started to examine the psychotherapy from a Buddhist perspective (Epstein, 1995). In the case of the Czech Republic, one of the first authors who contributed to the integration between Buddhism and the Western science was Květoslav Minařík. In the times of the World War II and subsequent 40 years of the rule of communism Květoslav Minařík wrote dozens of books that describe traditional

eastern practices in the Western rational style and conducted the first small EEG study on neural correlates of a practice of meditation (Minařík, 1939; 2010).

Finally, perhaps the most important step towards a greater integration between Buddhism and Western science happened in 1983, when the American entrepreneur R. Adam Engle initiated public discussions between Dalai Lama and Chilean biologist, philosopher and neuroscientist Francisco Varela (Hayward & Varela, 1992). These discussions then continued in the following years up until today and included a participation of many prominent researchers such as Paul Ekman, Richard Davidson, Jon Kabat-Zinn, Daniel Goleman, Allan B. Wallace or Daniel Kahneman. Dialogues soon transformed in mutual research projects and the establishment of the new scientific field called the contemplative science that has already been defined at the beginning of this chapter (Dorjee, 2016). Contemplative science became the official field for the interdisciplinary scientific dialogue between the Western science and Buddhism. In 1991, the non-profit organization Mind & Life institute was established in order to support the development of this field, including the development and examination of a *secular mindfulness* (Barinaga, 2003).

### **2.1.3 Secular Mindfulness**

*Secular mindfulness* refers to a practice and conception of *mindfulness* that is stripped from any kind of belief or religious concepts and its rationale is based on the evidence from social, behavioural and cognitive science (Jennings, 2016). In comparison with the classic Buddhist practice, the disadvantage of *secular mindfulness* might be observed in the fact that its practice and conceptions are usually reduced (Olendzki, 2014; Purser & Milillo, 2015). On the other hand, Gethin (2011) suggests that *secular mindfulness* can be also perceived as beneficial for Buddhism itself. It might be seen as the practical application of skill-in-means (upāya-kauśalya), because in the case of many people, *secular mindfulness* represents an opportunity to make an initial step to the practice of *meditation*. Furthermore, the secularization can be seen as a beneficial process of stripping down of some of its unnecessary historical and cultural aspects in order to focus on what is essential and useful. In fact, the state of *being mindfully aware* is considered to be a basic inherent feature of being a human and not to be synonymous with being a Buddhist (Kabat-Zinn, 2003; Creswell, 2017).

However, the fact is that only the cooperation between advanced practitioners and experienced researchers can truly uncover which aspect of the practice is necessary and which one is not. The progress of this field is, therefore, driven both by the research in psychology, neuroscience and phenomenology, as well as by the deeper understanding of its Buddhist origin. The following text briefly reviews a history of the *secular mindfulness* and presents its conception. Last part is dedicated to the presentation of *mindfulness* in Western psychology. Practices of secular mindfulness are described in the *Appendix A*.

### **2.1.3.1 The Emergence of Secular Mindfulness**

The establishment of *Mind & Life institute*, as well as a collaboration of other psychotherapists and researchers with Buddhist teachers prepared the soil for the birth of the *secular mindfulness*. However, the official beginning of *secular mindfulness* happened in early 80s, when Jon-Kabat Zinn created and validated the first *mindfulness-based intervention (MBI)* called the *Mindfulness-Based Stress Reduction (MBSR)* at the University of Massachusetts Medical School (UMASS) (Kabat-Zinn, 1982). Since that moment, the *MBSR* gradually spread all around the globe, accumulated robust evidence and inspired creation on many other programs in the past 35 years (Creswell, 2017; Kabat-Zinn, 2013).

The examination of *mindfulness* and its training became a demanded topic in social sciences and some papers have been published in the most recognized journals of today such as *Nature* (Tang et al., 2016), *JAMA* (Krasner et al., 2009), *Psychological Bulletin* (Sedlmeier, 2012) or *Journal of Management* (Ludwig & Kabat-Zinn, 2008; Good et al., 2016). The topic of *mindfulness* became so popular that in 2010, the impact factor journal called *Mindfulness* has been established under Springer. Many members of *Mind & Life institute* are a part of the editorial board.

A *secular mindfulness training* originated in a clinical environment, but it soon spread to almost all areas of our society, including education, profit and non-profit organizations, army or sport (Creswell, 2017). This process is ongoing and it shows that *MBIs* need to be adapted in order to better fit to conditions of particular environment. Patients who suffer from chronic pain or depression clearly require a different approach than managers who want to better cope with *work-related stress* or

professional relationships (Good et al., 2016). The field of *secular mindfulness* training is, therefore, constantly evolving.

### 2.1.3.2 The Conception of Secular Mindfulness

Modern definitions of *mindfulness* appear in various forms. The first definitions appeared in relation with *MBIs* (Gethin, 2011). The most famous of them is the operational definition of *MBSR* that explains mindfulness as “*the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment*” (Kabat-Zinn, 2003, p.145). In regards to this definition, Bishop et al. (2004) provides a fuller conception that explains *mindfulness* such as a “*kind of non-elaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is*” (p. 232). Another significant source of definitions appeared with the creation of the *mindfulness scales*. Brown & Ryan (2003), the authors of the most used *mindfulness scale Mindful Attention Awareness Scale (MAAS)* define *mindfulness* as “*the state of being attentive to, and aware of, what is taking place in the present moment*” (p. 882).”

Two qualities that appear in almost all definitions of *mindfulness* are *attention* and *awareness* (Bergomi et al., 2013; Sutcliffe et al., 2016). Attention can be explained as a capability of mind to be alert (maintain a vivid focus), to orient (shift focus between objects) or to execute (check whether desired object of *focus* is maintained) (Fan et al., 2002). Awareness can be defined as the ability to perceive, to feel, or to be conscious of events, objects, thoughts, emotions, or sensory patterns. It is also explained as the *background radar of consciousness*, whose role is to continually monitor the inner and outer environments, while attention represents the process of focusing on that awareness (Brown & Ryan, 2003).

Most of the definitions also point to the two main *features of mindfulness* (Bishop 2004; Creswell, 2017). The first one is called *watchfulness* or *lucid awareness* and it refers to an active monitoring of the present moment experience and regulation of the attention. This capability is also ranked with the development of *wide attention breath* (Dane 2011), as it focuses on both external (one’s environment, other people) and internal objects (thoughts, intuitions and emotions) (Leroy et al.

2013). The second feature, the *mindful orientation*, refers to the development of an opened, curious, *accepting* and detached orientation to the present experience. This feature is related to the capability to *accept the situation as it is*, not in the sense of any kind of passive resignation to the current circumstances, but rather in the form of inviting the present experience, even if it is difficult (Creswell 2017). It also helps one not to take things personally, because he/she is less likely to internalize the events he/she witnesses (Sutcliffe et al., 2016).

A review of the existing validated *mindfulness scales* also revealed a more detailed conception of *mindfulness* as a composition of nine distinct, but overlapping attributes (or aspects) (Bergomi et al., 2013). (1) *Observing / Attending to experience* refers to ability to anchor attention and awareness in the present moment (i.e., Baer et al., 2006). (2) *Acting with awareness* involves capacity to be aware of one's mental, verbal and behavioural actions (i.e., Brown & Ryan, 2003). (3) *Non-judgment / Acceptance of experiences* represents one's ability to accept the present external and internal experience as it is without clinging to any assumptions or prejudices about what is happening (i.e., Baer et al., 2004). This aspect has been repeatedly criticized as inconsistent with the original Buddhist conception, mostly in the sense of the possible moral ambiguity as its product (i.e., Purser & Milillo, 2015; Shonin et al., 2014). However, Gethin (2011) suggests that the *non-judgmental* rather represents a quality that may help practitioners to overcome a tendency to express negative attitude toward unpleasant experiences and attachment to pleasant experiences. Capacity to be *non-judgmental* in this sense might, therefore, support the moral capability of an individual, because his/her decision-making is less clouded by a momentarily mood.

(4) *Self-acceptance* refers to one's capability to accept oneself as one is, including the unpleasant aspects of oneself (i.e., Walach et al., 2006). (5) *Non-avoidance / Willingness and readiness to expose oneself to experiences* entails one's ability to maintain physical and mental presence during unpleasant moments (i.e., Chadwick et al., 2008). (6) *Non-reactivity to experience* refers to ability to overcome the habitual patterns of behaviour and thinking, and to respond to the situation in *novel ways* (i.e., Baer et al., 2006). (7) *Non-identification with own experiences / Decentring* entails capability not to internalize present experiences and related mental

states (i.e., Chadwick et al., 2008). (8) *Insightful understanding* refers to one's ability to see the underlying processes of his/her psychological functioning (i.e., Walach et al., 2006). And finally, (9) *Labelling / Describing* entails the ability to correctly recognize and describe one's mental processing and states (i.e., Baer et al., 2004).

Despite some disparities, the listed conceptualizations of *mindfulness* behind current questionnaires show many similarities that point to an implicit consensus among researchers (Bergomi et al., 2013). It also raises two questions. Firstly, it is still rather unclear which kind of *mindfulness training* develops which kind of facets (Creswell, 2017). Secondly, it also remains unclear whether those aspects are really the *facets of mindfulness* or more the wholesome results of its development. Further research might clarify these points. *Mindfulness* can also be practically characterized in a negative way through the explanation of mindlessness and mind wandering.

### **2.1.3.3 Mindlessness and Mind Wandering**

Mindlessness and mind wandering are states or modes of mind that can be characterized by a lack of *mindfulness*. Mindlessness is defined as a “*state of mind characterized by an overreliance on categories and distinctions drawn in the past and in which the individual is context-dependent and, as such, is oblivious to novel (or simply alternative) aspects of the situation*” (Langer, 1992, p. 289). It basically refers to a state during which one perceives the present moment through the glasses of the past, and repeatedly and unconsciously applies the old patterns of behaviour and thinking. Individuals in a state of mindlessness also express a tendency to oversimplify the elements of particular situation and perceive particular tasks as familiar, even if that may not be the case (Langer, 1978; 2014). One of the possible antidotes of *mindlessness* is the *training of mindfulness* (Langer, 1992).

Mind wandering is a stimulus-independent thought process that usually manifests as the rumination about future and past (Mason et al., 2007). It appears to be the brain's default mode of operation (Killingsworth & Gilbert, 2010). However, too much wandering of the mind usually prevents people from perceiving the present moment and focusing on what is important in the here and now (Goleman, 2013). Furthermore, studies show that frequent mind wandering has a negative impact on an individual's physical condition (Mooneyham & Schooler, 2013) and experiencing of happiness (Killingsworth & Gilbert, 2010). Findings also suggest that enhancing the

present awareness through *mindfulness* helps individuals to regulate the issues that are related to mind wandering (Ottaviani & Couyoumdjian, 2013; Sood & Jones, 2013; Killingsworth & Gilbert, 2010). The aim of *mindfulness practice* is not to suppress the mental process in any way. Rather it is about being both detached from and familiar with mind's tendency to wander (Kabat-Zinn, 2013).

#### **2.1.4 Mindfulness in the Western Psychology and Psychotherapy**

The main vehicles of a *secular mindfulness training* are the *mindfulness-based interventions (MBIs)* that will be presented in next chapter. However, the principles of *secular mindfulness* and other ideas or techniques that are close to the Buddhist philosophy appeared in several psychotherapeutic approaches during 20<sup>th</sup> century. Some authors were inspired by Buddhism (or other contemplative traditions), while others seemed to discover those principles solely through the practice of psychotherapy or research. Buddhist teachers such as Chögyam Trungpa considered the latter option as highly possible (Trungpa, 2001). One of the examples of such inspiration can be found in the famous book *The Principles of Psychology* of William James, in which the authors wrote about the importance of *present attention*: “*The faculty of voluntarily bringing back a wandering attention, over and over again, is the very root of judgment, character, and will. No one is compos sui [master of himself] if he have it not. An education which should improve this faculty would be the education par excellence. But it is easier to define this ideal than to give practical directions for bringing it about*” (James, 1961 [1862]). Among the most famous programs that include the principles of *secular mindfulness* are *Progressive Relaxation*, *Autogenic Training*, *Person-Centered Therapy*, *Focusing*, *Gestalt Therapy*, *Emotional Regulation Coping Strategy*, the *mindfulness approach of Ellen Langer*, *Dialectical Behavioral Therapy (DBT)*, and *Acceptance and Commitment Therapy (ACT)*. These programs will be shortly described below.

##### **2.1.4.1 Progressive Relaxation and Autogenic Training**

*Progressive Relaxation* and *Autogenic Training* are similar practices to a mindfulness practice known as a *body-scan*. *Progressive Relaxation* that was developed by a physician Edmund Jacobson is based on monitoring, tensing and relaxing muscular tensions (Jacobson, 1938). Participants are also guided to observe

the differences between tensed and relaxed body parts, as well as to let go present thoughts. Similarly to MBIs, the training in the *Progressive Relaxation* usually last for 8 weeks, where one weekly session tends to be 1 – 2 hours long. Contrary to this practice, the *body-scan* does not work with physical tensing, but rather it works only with attention and imagination.

*Autogenic Training* was developed by a psychiatrist Johannes Heinrich Schultz. This technique is based on a gradual development of *awareness* of different body parts that is combined with visualisations and self-suggestions (i.e., your hand is heavy, your foot is warm) in order to deepen the relaxation (Schultz, 1959). Contrary to this practice, the *body-scan* does not work so much with suggestions (only the simple visualizations tend to be used), but rather it guides participants to *accept* the condition of the body as it is. Furthermore, contrary to both techniques, the main goal of the *body-scan* is not relaxation of the body, but rather a development of awareness of ones body and letting go of thoughts (Kabat-Zinn, 2013).

#### **2.1.4.2 Person-Centered Therapy**

Similarities with *mindfulness* and other *Buddhist principles* can also be found in the work of Carl Rogers, the author of the *Person-Centered Therapy* (Rogers, 1951; 1961). The goal of *Person-Centered Therapy* is to help the client *accept* his current situation and to find the inner resources for solving the problems by himself/herself. The therapist, therefore, does not direct the process, but supports the client with *unconditional positive regard*, *empathy* and congruence (or *genuineness*), three elements that are considered to be essential for creating an environment where the individual can *grow, learn and evolve*.

Brazier (1996) suggests that those elements represent a kind of antidote to the Buddhist three poisons. *Empathy* is the “antidote” to hate, *unconditional positive regard* provides a model of *acceptance of self* and other which counters the grasping, needy nature of greed, and *congruence* is the opposite of delusion (that can be also explained as incongruence - the separation of self and mind from what is real and what is present). All three qualities are also similar to wholesome qualities that are important factors of both *secular* and *non-secular mindfulness training*. *Empathy* is a component of development of *compassion* that is part of training in the *four*



*immesurables* (Gilbert & Choden, 2014; Santideva, 1997). *Unconditional positive regard* is very similar to a development of *self-compassion* that also serves as a preliminary practice of the development in the *four immesurables* (Neff, 2011; Sayādaw, 1985). *Congruence* is very similar to a moral integrity, a fundamental aspect of Buddhist ethics (Olendzki, 2014).

Furthermore, Rogers' work is filled with many aspects of *mindfulness* that are mostly related to a capability to *accept* the current situation and self as it is. Therefore, the main aspect of *mindfulness* that appear in the *Person-Centered Therapy* seem to be the *observing, acceptance of experiences, non-avoidance* and *self-acceptance*. The difference between the *mindfulness principles* in Rogers' work and the *modern secular mindfulness* might be observed in the fact that training in the *secular mindfulness* works less with the conception of self, as the participants of the training are usually invited to *observe* all internal events as just states of mind without any reference to self (Sedlmeier et al., 2012). However, the non-reference to self is less strict in the case of *self-compassion* and *relational mindfulness*, two approaches that show many similarities with Rogers' work.

#### **2.1.4.3 Focusing**

*Focusing* is a psychotherapeutic method that was created by Rogers' student Eugene Gendlin (Gendlin, 1978). This approach has many similarities with *secular mindfulness training*. Gendlin found that successful clients show intuitive tendency to focus on a very subtle and vague internal bodily awareness called a *felt sense* which contains information that holds the key to the resolution of the problems the client is experiencing. The *felt sense* is discovered though holding an *opened non-judging* attention to the internal processes in one's body and mind. *Focusing* turned out to be the efficient method for the development of better understanding of and coping with one's emotions.

#### **2.1.4.4 Gestalt Therapy**

Another psychotherapeutic approach that uses the principles of *mindfulness* is the *Gestalt Therapy*. It has already been suggested in the previous text that Frederick Perls, one its founders, was the practitioner of Zen Buddhism (Pearls, 1969). *Gestalt Therapy* uses *mindfulness* principles in the sense that it focuses on the immediate,

phenomenological and experiential reality of the here and now, in physical, emotional and mental realms. Furthermore, its emphasis on seeing clients as a whole person (gestalt) echoes the wisdom of the *right understanding* that is one of the fundamental principles and goals of Buddhist training (Aich, 2013). Similarly to the *Person-Centered Therapy*, an important contribution of the *Gestalt Therapy* to the field of *mindfulness* is also the fact that it applied the principles of *mindfulness* to the interpersonal domain.

#### **2.1.4.5 Relaxation Response**

The *Relaxation Response* is a *secular meditational approach* that was developed by Herbert Benson and Miriam Z. Klipper (Benson & Klipper, 2000 [1975]). The authors simplified and adapted some techniques of the *Transcendental Meditation*, a *meditation practice* that is based on Hindu-Vedic teachings. The *Relaxation Response* is based on nine steps that support the body relaxation and decrease of stress through the activation of the parasympathetic nervous system. Some of methods such as passive attitude that represent a *non-judgmental* and *accepting stance* to the present situation (Benson & Proctor, 2011) are similar to the *mindfulness principles*. Both the *Relaxation Response* and the *MBSR* were inspired by the Eastern meditation practice and both were founded in Massachusetts in a similar time. It might be interesting to explore, why the *MBSR* enjoys more popularity and possesses much more robust evidence than the *Relaxation Response* today.

#### **2.1.4.6 Emotion Regulation Coping Strategy**

The *Emotional Regulation Coping Strategy* was developed by social psychologist James Pennebaker (1993). This approach is based on expressive writing, during which participants are inspired to write about a stressful or traumatic experiences in their life, while being aware of the related emotions (Stanton et al., 2000). Training in *Emotional Regulation Coping Strategy* is based on two main methods. The first one is an emotional expression that includes active verbal and non-verbal effort to communicate or symbolize stressor-related emotional experiences. The second method, an emotional processing, entails attempt to acknowledge, explore and understand the emotions (Stanton, 2011). Although this approach does not work with *meditation*, its method of emotional processing seems to be familiar with certain principles of *mindfulness*, i.e., the *self-awareness*, *non-avoidance* and *labelling*.

#### **2.1.4.7 Mindfulness Approach of Ellen Langer**

An approach to *mindfulness* that was developed by a psychologist Ellen Langer is also called the *Western mindfulness* (Carmody, 2014) because it does not refer its origin to Buddhism (Langer, 1992). The development of this approach has been inspired by already mentioned research on *mindlessness* (Langer, 1978). Langer (1992) defines mindfulness as a “*state of openness to novelty in which the individual actively constructs categories and distinctions*” (Langer, 1992, p.289). This conception seems to be related with the *mindfulness* principles of *observing, acting with awareness and labelling*, but is also more directly focused on the creative thinking than the Buddhist-derived *Eastern mindfulness* approaches (Sutcliffe et al., 2016).

The training that is based on Langer’s conception of *mindfulness* is focused on learning how to recognize the novel aspects of the present experience and how to overcome habitual modes of behaviour. Therefore, the author herself calls this practice as the *overcoming of autopilot* (Langer, 2014). There are suggestions about the possible similarities between *Eastern* and *Western mindfulness*, but they have not been supported by the evidence so far (Sutcliffe et al., 2016).

#### **2.1.4.8 Dialectical Behavioural Therapy (DBT) and Acceptance Commitment Therapy (ACT)**

*ACT* and *DBT* are clinical therapeutic programs that were derived from the *Cognitive Behavioural Therapy (CBT)* and use *mindfulness* as one of its core practices (Linehan, 1987; Zettle & Hayes, 1986). *ACT* and *DBT*, therefore, do not guide participants to better control their mental states as it happens in *CBT*. Both approaches rather invite participants to *notice, accept* and embrace their past and present experience, especially when it is related with unpleasant feelings. *ACT* and *DBT* are sometimes classified as the *mindfulness-based interventions (MBIs)*. However, they are not included among the *MBIs* in this thesis as they give less focus on *mindfulness* practice and more focus on individual therapy.

*The Dialectical Behavioural Therapy (DBT)* was created by Marsha M. Linehan who was greatly influenced by Zen Buddhism (Linehan, 1987; Linehan et al., 1991; Linehan et al., 1993). The *DBT* combines techniques from *CBT* with emotional regulation skills and *mindfulness*. But *mindfulness* is considered to be a foundation of

other skills. Among the main aspects of mindfulness that are developed in *DBT* are *observing*, *describing* and *non-judgmental*. *DBT* involves (1) *individual sessions* between therapist and patient that focus on client's issues, (2) *group practices* that occur once a week and mainly focus on the development of *mindfulness*, (3) a *phone coaching* that helps patients to integrate skills in daily life and (4) a *therapist consultation team*, a weekly gathering of all therapists that serves as a platform for mutual sharing and support. Evidence shows that *DBT* is an effective therapy in treating borderline personality disorder (BPD) (Linehan et al., 1991; 1993; 1999; 2006), drug dependence (Linehan et al., 1999) and eating disorders (Telch et al., 2001).

*The Acceptance and Commitment Therapy (ACT)* was created by Steven C. Hayes, the author of the Relational Frame Theory (Zette & Hayes, 1986; Hayes & Wilson, 1994; Strosahl et al., 1998). Hayes (2002) does not refer to the foundations of *ACT* in Buddhism, but suggests that there are many similarities between both approaches. The *ACT* helps clients to get in contact with a self-as-context which is a part of ourselves that is always there - *observing and experiencing* - and yet it is distinct from one's thoughts, feelings, sensations, and memories. Although Buddhism does not work with the concept of self, classification of self as a result of the context is close to the already mentioned Buddhist doctrine of *non-permanent self (anattā)* (Seldmeier et al., 2012; Williams & Tribe, 2000).

As the name of the therapy suggests the principle of *ACT* is to *accept* what is out of one's personal control and commit oneself to action that improves and enriches one's life. Among the main aspects of mindfulness that are developed in *ACT* is the *acceptance*, *non-identification* (defusion), *acting with awareness* and *non-avoidance* (contact). The *ACT* tends to be delivered in many different ways, ranging from a long-term therapy (forty 2-hour sessions) to ultra-brief therapy (one or two twenty to thirty-minute sessions). Evidence behind *ACT* shows several beneficial effects on psychological flexibility, seizure-control in epilepsy, disease self-management and parenting of children with long-term conditions. However, more *randomized control trials (RCTs)* need to be conducted in order to better establish *ACT* (see Graham et al., 2016 for a review).

## 2.2 Benefits of Mindfulness

Uncovering the benefits of *secular mindfulness* is the main subject of quantitative research that has undergone since early 80s. A qualitative research is also very popular in the field today, but its main focus is placed on the examination of the processes that are related with the development of *mindfulness*. The following text, therefore, reviews the quantitative evidence that can be generally divided into two groups. The first group on ta measuring of the level of *mindfulness* and its *correlations*, while the second group examines the effects of *mindfulness training*.

### 2.2.1 Measures and Correlations of Mindfulness

In the case of quantitative research, the level of *mindfulness* has been almost entirely measured by self-report questionnaires so far (Creswell, 2017; Sutcliffe et al., 2016). In the case of the scales, *mindfulness* has been conceptualized as either a *trait* or as a *state* (Bergomi et al., 2013). The *state mindfulness* refers to a level of one's *mindfulness* in a particular situation, such as a *meditation session*, while the *trait mindfulness* refers to one's general tendency to be *mindfully aware* in everyday situations (Kiken et al., 2015). In other words, the *state mindfulness* can show whether the training has some impact on one's actual level of *mindfulness* here and now, and the *trait mindfulness* reports whether one's *propensity to be mindful* in other situations has increased or decreased.

That is perhaps the reason why most of the scales focus on the examination of a *trait mindfulness* (*MAAS*, *FFMQ*, *KIMS*, *FMI*, *CAMS-R*, *SMQ* and *PJLMS*) and only two scales (*TMS* and *SMS*) focus on the *state mindfulness*. All those scales (apart from *SMS* has not been a subject of a review so far) show good internal consistency and possess the evidence from convergent, discriminant and known-group validity (Bergomi et al., 2013). Nevertheless, there are few differences among the scales. The following text briefly reviews particular scales and shows their most significant effects.

#### 2.2.1.1 Mindful Attention Awareness Scale (MAAS)

The *Mindful Attention Awareness Scale (MAAS)* is the most used *mindfulness questionnaire* (Sutcliffe et al., 2016). The *MAAS* is composed from 15 questions that

examine one's awareness and attentiveness in everyday situations and thus it is exclusively focused on measurement of the *acting with awareness* facet of *mindfulness* (Bergomi et al., 2013; Brown & Ryan, 2003). Level of *mindfulness* is examined inversely, meaning that the questions focus on one's lack of *mindfulness*. Participants respond how often they go through such experience by choosing on Likert scale from 1 (almost always) to 6 (almost never).

The inverse statement of items is one of the main sources of criticism of the *MAAS*. The main concern is related to the assumption that the *MAAS* may implicitly measure judgmental and critical attitudes towards oneself (Grossman, 2011). Furthermore, although the *MAAS* seems to focus on both basic dimensions of *mindfulness*, the *watchfulness* and *mindful orientation*, the scale does not differentiate one dimension from the other (Bergomi et al., 2013). On the other hand, the *MAAS* has repeatedly showed that it is a suitable measure for both experienced and unexperienced *mindfulness practitioners*, and that it is an appropriate measure for academic and organizational environment (Hülshager et al, 2013; Bergomi et al., 2013; Sutcliffe et al., 2016). Furthermore, unlike the other scales, the *MAAS* also shows a good predictive validity, because it predicts outcomes that are consistent with *mindfulness theory* (Michalak et al. 2008; Bergomi et al., 2013).

The *MAAS* score shows a significant positive correlation with vitality (Brown & Ryan, 2003), life satisfaction (Brown & Ryan, 2003), quality of attention (Keith et al., 2017), self-esteem (Brown & Ryan, 2003), positive affect (Brown & Ryan, 2003; Atanes et al., 2015), optimism (Brown & Ryan, 2003), *empathy* (Birnie et al. 2010) adaptive responses to changing health conditions (Kang et al. 2017), positive mood (Birnie et al. 2010) and *self-compassion* (Shapiro et al., 2007; Birnie et al. 2010). Furthermore, the main negative correlations of *MAAS* can be considered the *level of stress* (Shapiro et al., 2007; Atanes et al., 2015), stress symptoms (Brown & Ryan, 2003; Carlson & Brown, 2005; Birnie et al. 2010), mind wandering (Keith et al., 2017), anxiety (Shapiro et al., 2007; Carmody et al. 2008; Keith et al., 2017), mood disturbance (Brown & Ryan, 2003; Carlson & Brown, 2005), rumination (Shapiro et al., 2007), negative affect (Brown & Ryan, 2003; Atanes et al., 2015) and depression (Brown & Ryan, 2003; Carmody et al. 2008; Keith et al., 2017).

The *MAAS* is also the far most used measure in organizational settings. It shows positive effects on work engagement (Leroy et al., 2013), need satisfaction (Schultz et al., 2015), job performance (Dane & Brummer, 2014), vitality (Allen & Kiburz; 2012), psychological capital (Roche et al., 2014), work-family balance (Allen & Kiburz; 2012), authentic functioning (Leroy et al., 2013) and a sleep quality (Allen & Kiburz; 2012). *MAAS* also shows negative correlations with cynicism (Roche et al., 2014; Schultz et al., 2015), anxiety (Roche et al., 2014), need frustration (Schultz et al., 2015), depression (Roche et al., 2014), *stress* and emotional exhaustion (Hülshager et al., 2013; Roche et al., 2014; Schultz et al., 2015; Reb et al., 2017), negative affect (Roche et al., 2014) and turnover intentions (Dane & Brummer, 2014; Schultz et al., 2015; Reb et al., 2017).

Finally, the application of the *MAAS* in higher education showed positive correlations with academic performance (Bellinger et al., 2016), insight problem solving (Ostafin & Kasman, 2012), emotion regulation (McDonald et al. 2016), ethical decision-making (Ruedy & Schweitzer) and ethical behaviour (Ruedy & Schweitzer), and negative correlations with depression (McDonald et al. 2016), and attachment anxiety (McDonald et al. 2016).

#### **2.2.1.2 Five Facet Mindfulness Questionnaire (FFMQ)**

The *Five Facet Mindfulness Questionnaire (FFMQ)* is another highly used *mindfulness scale*. This scale has been constructed as a result of a factor analysis of *MAAS* and other four scales (*KIMS*, *FMI*, *CAMS-R* and *SMQ* that are described below). The *FFMQ* focuses on five basic *facets of mindfulness* (*observing, describing, acting with awareness, non-judgmental* and *non-reactivity to inner experience*) (Baer et al., 2006). Participants respond to 39 questions by choosing on 5-point Likert scale (1: never or very rarely true – 5: very often or always true). The *FFMQ* is, therefore, a wealthy instrument for accessing the different *facets of mindfulness*. However, the scale is empirically rather than theoretically grounded (Bergomi et al., 2013). The construction of the scale was based on merging of the items of other scales and so the final form of the scale misses some important aspects, such as *willingness and readiness to expose oneself*. Moreover, some items of the *observing* subscale (“*I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.*”) seem to not be appropriate for the beginners (Bergomi et

al., 2013). Another rather practical disadvantage of the *FFMQ* may be observed in the fact that its length of 39 items may be time demanding for a research that employs more scales.

Studies show positive correlations of the *FFMQ* with emotional intelligence (Baer et al., 2006), purpose in life (Iani et al., 2017), openness to experience (Baer et al., 2006), subjective happiness (Iani et al., 2017); *self-compassion* (López et al., 2016), positive affect (López et al., 2016), *well-being* (Iani et al., 2017) and positive relations with others (Iani et al., 2017). The *FFMQ* is also negatively correlated with neuroticism (Baer et al., 2006; Iani et al., 2017), anxiety (Iani et al., 2017), psychological distress (Schellekens et al., 2016), experiential avoidance (Baer et al., 2006), depression (Iani et al., 2017; López et al., 2016), depressive symptoms (López et al., 2016), negative affects (López et al., 2016), absent mindedness (Baer et al., 2006), difficulties with emotional regulation (Baer et al., 2006).

Furthermore, organizational research showed beneficial effects of the *FFMQ* on job performance, job satisfaction, need satisfaction and emotional exhaustion (Reb et al., 2015). And finally, the application of the *FFMQ* in higher education positively correlated with academic self-efficacy (Hanley et al., 2015), positive reappraisal, *well-being* (Christie et al., 2017), critical thinking (Noone et al., 2016), attention (Di Francesco et al. 2017) and *stress management* (McDonald & Baxter, 2017).

### **2.2.1.3 Other Mindfulness Scales**

Other *mindfulness scales* are less used than the *MAAS* and the *FFMQ* and they are also usually focused on specific areas. *The Kentucky Inventory of Mindfulness Skills (KIMS)* is based on a conception of the *Dialectical Behaviour Therapy (DBT)* and therefore is more appropriate for clinical settings. The *KIMS* score showed various positive correlations with effects that are related to personality and mental health, such as higher emotional intelligence, lower neuroticism and experiential avoidance (Baer et al., 2004). Similarly to the *FFMQ*, the *KIMS* is a multidimensional scale that contains 39 items. Application of the *KIMS* in higher education also showed positive correlations with creative performance (Baas et al., 2014) and positive perception of the academic environment (Xu et al., 2016). Another scale, the *Philadelphia Mindfulness Scale (PHLMS)* (Cardaciotto et al., 2008) represents a



shorter alternative of a multidimensional scale to the *KIMS* and the *FFMQ*. However, the scale focuses only on *acting with awareness* and *acceptance facets of mindfulness*. Similarly to *MAAS*, the items of the *acceptance* subscale are negatively formulated (Bergomi et al., 2013). The *Freiburg Mindfulness Inventory (FMI)* gives more focus on the examination of the inner states of individuals (Walach et al., 2006) and is thus less appropriate for the beginners (Bergomi et al., 2013).

Two other scales, the *Cognitive and Affective Mindfulness Scale-Revised (CAMS-R)*; Feldman et al., 2007) and the *Southampton Mindfulness Questionnaire (SMQ)*; Chadwick et al. 2008) are suggested to be more suitable for application in clinical settings, because they focus on clinically relevant aspects such as reactions on distressing inner experiences (Bergomi et al., 2013). The *Toronto Mindfulness Scale (TMS)*; Lau et. al., 2006) and the *State Mindfulness Scale (SMS)*; Tanay & Bernstein, 2013) measure *mindfulness as a state*. They need to be, therefore, applied immediately after the *meditation session* in order to examine one's actual state. It is also more appropriate to apply those scales on the sample of the more experienced practitioners, as the assessment of internal states might be difficult for the beginners (Bergomi et al., 2013).

#### **2.2.1.4 Advantages and Disadvantages of Mindfulness Questionnaires**

Application of the self-report *mindfulness scales* is related with several issues. Firstly, each one of the scales is focused on the examination of different *facets of mindfulness*, which makes comparison of the effects between studies that use different scales an almost impossible task (Brown et al., 2007). Secondly many scales include items that can be easily misinterpreted, especially by the respondents that are not familiar with *mindfulness practice* (Grossman, 2008). And finally, quite a common issue with most self-report questionnaires without exception of mindfulness scales is a *self-report bias* (Bergomi et al., 2013). Some authors also perceive the *mindfulness scales* as an overly reductionist instruments that may have a tendency to distort or banalize the meaning of *mindful awareness* in psychological research (Grossman, 2011). However, the review of Bergomi et al. (2013) concludes that despite these issues, the *mindfulness scales* support the progress of research in the field and inspire the discussions about a more coherent conception and measurement of *mindfulness* (Bergomi et al., 2013).

## 2.2.2 Mindfulness-Based Interventions (MBIs)

*Mindfulness-based interventions (MBIs)* are the main platform on which the *secular mindfulness training* occurs nowadays. Research on the effects of *MBIs* is also the most important indicator of the benefits of *mindfulness*. The most common forms of the *MBIs* are 8-week programs that usually last 20 – 30 hours (Creswell, 2017). Similarly to a traditional form of *mindfulness training*, the *MBIs* usually combine *mindfulness practice* with other kinds of *meditation techniques* such as *concentration* or *meditations with a form*. And utilisation of physical exercises or discussion is also very common. But *mindfulness practice* is always the main part of *MBIs*. The following text focuses on the review of the effects of the two most recognized *MBIs*, the *Mindfulness-Based Stress Reduction (MBSR)* and the *Mindfulness-Based Cognitive Therapy (MBCT)*. Then it presents the effects of *MBIs* in higher education and organizations.

### 2.2.2.1 MBSR and MBCT

*Mindfulness-Based Stress Reduction (MBSR)* is the oldest and most examined *MBI* (Kabat-Zinn, 1982; Keng et al., 2011). The main inspiration for the *MBSR* comes from Mahāyāna and Theravāda Buddhism, but also from Hatha-yoga (Kabat-Zinn, 2003; Kabat-Zinn, 2013). The original form is based on eight 2,5 hour weekly sessions and one 6 hour weekend session. The program is focused on three main groups of practices (Kabat-Zinn, 2013): (1) *body-scan* (approximately 45 minutes long) is based on gradual focusing on parts of the body, noticing sensations or feelings in the particular part of body and releasing the tensions through breathing; (2) *sitting meditation* (approximately 30 minutes long) is based on attending to the breath and *non-judgmental* noticing of the present thoughts, feelings and body states; (3) *yoga practices* is focused on simple yoga positions and movements, that can be feasibly practiced by most of the people.

*The Mindfulness-Based Cognitive Therapy (MBCT)* has been inspired by the *MBSR* and the *Cognitive-Behavioural Therapy (CBT)*; Segal et al., 2002). It was originally created to be the most suitable intervention for the patients with relapse or symptoms of various psychiatric illnesses. The program gives strong emphasis on the development of the ability to *non-judgmentally* observe the present thoughts and

*emotions* in order to help clients not to be so influenced by their actual mental state (Teasdale et al., 2000). Similarly to the *MBSR*, the *MBCT* takes 8 weeks of training, but also includes individual sessions and usually includes post-training sessions in the following 12 months after the end of intervention (Kuyken et al., 2010).

Rich evidence has repeatedly shown that participation in the *MBSR* and the *MBCT* leads to a better attention and working memory capacity (see Chiesa et al. 2011 for a review), better psychological health (see Keng et al., 2011 for a review), stronger immune system (Black & Slavich, 2016), *higher well-being* and *lower psychological stress* (see Goyal et al., 2014 for a review). The *MBSR* further possesses the strongest evidence in the domain of *stress management* (see Chiesa & Serretti, 2009 for a review), while the *MBCT* is the most suitable for the treatment of depression symptoms and relapse (see van der Velden et al., 2015 and Chiesa & Serretti, 2011 for a review). However, the evidence of both programs in higher education is limited to few studies and it seems that none of the studies has so far examined their effects in organizational settings.

The *MBSR* and the *MBCT* also inspired the development of more specialized MBIs such as the *Mindfulness-Based Relapse Prevention (MBRP)* program that shows significant support for lower craving for and use of drugs and alcohol (Bowen et al., 2009; Witkiewitz et al., 2013) or the *Mindfulness-Based Positive Behaviour Support (MBPBS)* that focuses on helping mothers with adolescents diagnosed with the autism spectrum disorder (ASD; Singh et al., 2014). The contemporary situation in the field of *MBIs* is characterized by the emergence of new interventions. Some of those interventions were created specifically for an educational or an organizational environment.

#### **2.2.2.2 Effects of MBIs in Higher Education**

In the academic setting, *MBIs* usually exist in three main forms. The first form entails application of previously validated *MBIs* such as the *MBSR* or the *MBCT* that tend to be adjusted or abbreviated in order to become more acceptable for a particular group of students (e.g., Shapiro et al., 2011; De Vibe et al. 2013). Another common strategy involves implementation of *mindfulness practices* into already existing educational programs (e.g., Hassed et al. 2009). The third and also the most common

form is the creation of new training programs which usually contain various practices of *mindfulness*, *loving-kindness meditation (LKM)* or yoga (e.g. Bond et al. 2013; Morrison et al. 2014). Perhaps the main advantage of this kind of interventions is that they represent the most flexible approach and they can be quite feasibly fitted in the specific conditions of particular university. Disadvantages of these programs can be observed in the fact is that they usually possess little evidence and their quality might not always be appropriate.

Numerous studies have examined the effects of *MBIs* in higher education. Studies show positive effects of participation in *MBIs* on *empathy* (Shapiro et al., 1998; Beddoe & Murphy, 2004; Shapiro et al., 2011; Bond et al. 2013), psychological health (Hassed et al., 2009), *self-compassion* (Bond et al., 2013; Greeson et al., 2014), self-regulation (Bond et al., 2013), *well-being* (Shapiro et al., 2011; De Vibe et al., 2013), sustained attention (Morrison et al., 2014), hope (Shapiro et al., 2011), positive affect (Rizvi & Steffel, 2014), social adjustment (Rizvi & Steffel, 2014), emotional regulation (Rizvi & Steffel, 2014; Kraemer et al., 2016).

Studies also showed significant negative effects on the *level of stress* (Warnecke et al., 2011; Shapiro et al., 2011; Gallego et al. 2014; Greeson et al., 2014; Rizvi & Steffel, 2014; Greeson et al., 2015; Kraemer et al. 2016) psychological distress (Shapiro et al. 1998; Hassed et al. 2009; De Vibe et al. 2013), anxiety (Shapiro et al. 1998; Beddoe & Murphy 2004; Warnecke et al. 2011; Gallego et al. 2014), mind wandering (Morrison et al. 2014), depression (Gallego et al. 2014; Rizvi & Steffel 2014; Danitz & Orsillo 2014), sleeping problems (Greeson et al. 2014) and negative affect (Kraemer et al. 2016). An interesting fact is that most of the mentioned studies were conducted of the samples of the students of psychology and none of them focused on management or business students.

### **2.2.2.3 Effects of MBIs in organizational settings**

Research in organizational settings has focused almost exclusively on specialized or adapted interventions so far. The interventions are usually even shorter than those in higher education, perhaps due to limited time that organizations can provide for the training of their members (Good et al., 2016). Nevertheless, the

studies in recent years showed several significant effects that suggest high potential of *MBIs* for the development organizational members.

The first study was conducted by Wolever et al. (2012). Participation in the *Mindfulness at Work* program showed beneficial effects on sleep quality, autonomic balance and *perceived stress*. In another study, Hülshager et al. (2013) demonstrated that participation in a brief *mindfulness self-training based on MBSR and MBCT* led to higher job satisfaction and lower emotional exhaustion. Shonin et al. (2014b) validated the effects of an 8-week *Meditation Awareness Training (MAT)* that led to *higher* job satisfaction and job performance, and lower *work-related stress*, anxiety and depression (Shonin et al., 2014b).

Furthermore, Michel et al. (2014) examined the effects of a 3-week *online self-training intervention*. Participation in training led to more psychological detachment and satisfaction with work-life balance and less work-family conflict. Study of Gregoire et al. (2016) has focused on examination of a 5-week *brief mindfulness intervention* that was specifically designed for call centre employees. Participation in the training showed beneficial effects on a level of *mindfulness*, client satisfaction, *stress*, fatigue, anxiety and negative affect. In the study that was conducted by De Bruin et al. (2017), the participation in a 6-week *Mindful2Work* program led to better physical and mental workability, sleep quality and positive affect, and lower negative affect, *stress*, depression, anxiety. And finally, the participation in a 5-week *Mindfulness at Work Program (MaWP)* showed beneficial effects on a level of *mindfulness*, health-related quality of life, social functioning, *perceived stress* and psychological distress (Bartlett et al., 2017).

## 2.3 Loving-Kindness Meditation and its Benefits

This thesis also reviews the evidence of the *loving kindness meditation (LKM)*, because this field is closely related to *mindfulness training* (Hofmann et al., 2011). This chapter focuses on the explanation of *LKM*, inquires about its relationship with *MBIs*, presents evidence, the *compassion* and *self-compassion*, and demonstrates the contemporary state of the art of the field.

### 2.3.1 Loving-Kindness Meditation and Mindfulness

*Loving-kindness meditation (LKM)* refers to a secular version of training in the *four immeasurables* that has already been presented in the Chapter 2.1 (Zeng et al., 2015). *LKM*, therefore, entails a simplified but similar kind of training in *loving-kindness*, *compassion*, *appreciative joy* and *equanimity* (Santideva, 1997; Gilbert & Choden, 2014). It might be confusing that the development of all four qualities (where *loving-kindness* is just one aspect) is generally named *loving-kindness meditation*, but most contemporary authors name it in this way (Zeng et al., 2015). One of the explanations might be backed in the fact that while the traditional training focuses on the development of all qualities together, some of the modern *loving-kindness meditation interventions (LKMI)* do not always focus on all of them, while the *loving-kindness* usually tends to be the most popular of them (Hoffman et al., 2011; Zeng et al., 2015).

*LKMIs* tend to be discriminated from *MBIs*. But many authors stress that *secular mindfulness practice* should be developed in accordance with *LKM* (Hoffman et al., 2011; Ricard, 2015; Neff, 2011; Shonin et al., 2014; Gilbert & Choden, 2014), while others suggest that *LKM* qualities such as *compassion* are one of the key markers for evaluating whether *MBIs* actually work (Grossman, 2011). A recent study, for example, demonstrated that short *mindfulness practice* showed the highest effects on the development of metacognitive awareness and decrease of thought content, while the *LKM* led to the greatest increase of the feelings of warmth and positive thoughts about others (Kok & Singer, 2017).

Traditional Buddhist teachers stress that *mindfulness* should be developed in accordance with *LKM*, because *LKM* contributes to the development of many

wholesome qualities such as moral integrity of the practitioners (Santideva, 1997; Sayādaw, 1985). And the current situation in the field of *mindfulness* further supports those recommendations. First wave of *MBIs* focused mostly on clinical and medical patients in terms of pain release, *stress management* and coping with psychiatric diseases (Keng et al., 2011). These benefits are also desirable for other settings, but the institutional environments such as organizations or universities also demand outcomes that are more oriented towards interpersonal relationships (Good et al., 2016). Furthermore, it is especially the domain of management practice and education that tends to be the most criticized for lacking or undermining the moral level of individuals (Alimo-Metcalfe, 2013; McCabe et al., 2006; Trevino, 2011). The domain of management practice and education therefore seems to be a potential incentive for a further integration of *LKM* in *MBIs*.

### **2.3.2 Compassion and Self-Compassion**

*Compassion* and *self-compassion* are the aspects of *LKM* that received most attention in clinical and institutional research, and both of them are also regarded outcomes of *MBIs*. This following text, therefore, gives more focus on the presentation of their conception and evidence.

#### **2.3.2.1 Compassion**

*Compassion* can be characterized by “*feelings of warmth, concern and care for the other, as well as a strong motivation to improve the other’s wellbeing*” (Singer & Klimecki, 2014, p. 875). More specifically, the compassion entails cognitive, affective and behavioural process that consists of five subsequent elements, that is (1) recognizing suffering; (2) understanding the universality of suffering in human experience; (3) a feeling of *empathy* for the person suffering and connecting with his distress; (4) tolerating unpleasant feelings that arise in response to the suffering of particular person and being able to remain opened to and accepting to the person’s suffering; and (5) having motivation to act to alleviate the person’s suffering (Strauss et al., 2016). Kanov et al. (2004) also suggest that the phase of recognizing the suffering can be further divided into noticing, which entails capacity to become aware of the particular person’s suffering and feeling that is related to capability to tune into that suffering. Definition of Strauss et al. (2016), therefore, suggests that *compassion*

entails wider conception than *empathy*, because *empathy* is one of its aspects. Furthermore, Singer & Klimecki (2014) suggest that contrary to *empathy*, the *compassion* does not result in a distress paralysis but it does result in action.

Many authors suggest that *mindfulness* and *compassion* are highly compatible qualities. The development of both qualities simultaneously has even received unique name such as a *mindful compassion* (Gilbert & Choden, 2014) or *caring mindfulness* (Ricard, 2015). *Mindfulness* in particular is the quality that helps people to better cope with presents feelings, while being aware of but detached from the situation (Kabat-Zinn, 2013). More specifically, the *observing facet of mindfulness* helps practitioners to notice the condition of others, while the *non-avoidance, non-identification and non-judgment (acceptance)* aspects help practitioners to maintain presence when the noticed conditions stimulates unpleasant feelings (Atkins & Parker, 2012; Gilbert & Choden, 2014). The development of *compassion*, on the other hand, helps practitioners to develop a motivation to be socially engaged and caring towards others (Ricard, 2015).

Similarly to *mindfulness*, the effects of *compassion* have been mostly measured by self-report questionnaires (Strauss et al., 2016). *Compassionate Love Scale (CLS)* showed positive correlation with willingness to provide support for others and *empathy* (Sprecher and Fehr, 2005). The *CLS* was also adapted to the brief version, the *Santa Clara Brief Compassion Scale* that showed positive correlations with vocational identity, *empathy* and religious faith (Hwang et al., 2008). And finally, the *Compassion Scale (CS)*, a measure inspired by the *Self-Compassion Scale* (that is reported below in this text), showed a positive correlation with social connectedness, wisdom and *empathy* (Pommier, 2011). One patient-report scale, the *Schwartz Center Compassionate Care Scale (SCCCS)* was also developed in order to examine the level of *compassion* and care among medical care personnel. The *SCCCS* positively correlated with patient's satisfaction with communication, emotional support, and recent hospitalization (Lown et al., 2015).

*Compassion* was also examined in terms of *compassionate* versus self-image goals by the measure that was developed by Crocker et al. (2009). Self-image goals are driven an interest about one's impression in the face of others, while the *compassionate goals* are driven by an interest for other's *well-being*. This measure



was repeatedly applied in higher education. Studies revealed that *compassionate goals* were related to greater social support and trust (Crocker & Canevello, 2008), self-regulation, feelings of connectedness and progress towards goals (Crocker et al., 2009), and increased growth belief about friendship and mutual need satisfaction (Canevello & Crocker, 2011). For all mentioned studies, the self-image goals influenced a decrease in those variables.

In terms of organizational research, the development of *compassion* is related to a few promising expectations. *Compassion* is considered to represent a key aspect of healthy professional relationships and a practical answer to the interconnected, suffering and surprising world (Rynes, 2012). Firstly, the development of *compassionate goals* is suggested to foster the ecosystem orientation that entails one's motivation and ability to perceive oneself as part of the larger organism of team, group or company (Crocker et al., 2009). Ecosystem orientation is suggested to be an important aspect of a healthy organizational development, because it fosters trust, willingness to share and ability to face emotionally harsh situations (Rynes, 2012). Secondly, the *compassion* might be a stronger driver of social entrepreneurship than traditional self-oriented motivations (Miller et al., 2012). And finally, the *compassion* is also suggested to help organizations to flourish more in critical situations if the organizational members learn how to respond to such situations in a *compassionate* way. (Fehr & Gelfand, 2012; Madden et al., 2012). However, it seems that none of the studies directly examined the effects of *compassion* so far.

### **2.3.2.2 Self-Compassion**

The conception and practice of *self-compassion* has been derived from *compassion*. It has been a part of the traditional training in the *four immeasurables*, where the rationale for practice is based on the assumption that development of *compassion* towards oneself is the first step for being *compassionate* towards others (Sayādaw, 1985). Author of the modern secular training in *self-compassion*, Kristin Neff, defines *self-compassion* as “being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness (Neff, 2003b, p.67).” Similarly to a *compassion*, *self-compassion* is closely related with *mindfulness*. *Mindfulness* that is mostly represented by aspects of *self-acceptance* and *non-avoidance* is actually one of

the three main components of the whole construct (Neff, 2003a). *Self-compassion*, on the other hand serves as a supportive quality during *mindfulness training*, because it helps practitioners to leave tendencies to be overly self-critical, for being unfocused and letting the mind wander (Neff, 2011; Kabat-Zinn, 2013).

Many similarities with *self-compassion* can be also found in the work of Humanistic psychologists (Neff, 2003a). Carl Rogers developed principles of *self-compassion* in the already mentioned approach of *unconditional positive regard*. While developed towards oneself, the *unconditional positive regard* entails an unconditionally caring, kind and *non-judgmental* attitude towards oneself (Rogers, 1956). The fruit of the practice is then represented by the possibility for a positive change, as well as the capability to provide an *unconditional positive regard* to other individuals. As the Rogers (1961) states in one of his most famous quotes: "*It seems to me to have value because the curious paradox is that when I accept myself just as I am, then I change.*" (p.17).

Another famous Humanistic psychologist, Abraham Maslow (1968) inquired about the importance of the development of *b-perception*, that is *non-judgmental*, forgiving and loving acceptance of being (oneself). Accepting one's failings and shortcomings as a way to overcome the defensive tendencies of self-esteem was stressed as a necessary step towards a healthy growth. Similarly, Snyder (1994) highlighted the importance of the internal empathizer that refers to an attitude of curiosity and *compassion* towards one's own responses to the experiences. And finally, Ellis (1973) inquired about *unconditional self-acceptance* as a key to psychological *well-being*. Ellis stated that this quality is not based on rating of one's self-worth, but rather on the tolerance for the uncertainties in life, and acknowledging and forgiving one's limitations.

Two differences might be observed between *self-compassion* and the work of Humanistic psychologists. Firstly, the Buddhist-derived *self-compassion* is suggested to be less individualistic as it anchors feelings of self-acceptance on a sense of shared humanity and explicitly encourages the feelings of responsibility for others (Neff, 2003a). Secondly, although Humanistic psychologists stressed the importance of self-reliance and responsibility of the clients for their progress, the central aspect in their approaches was still a therapist-client relationship (Myers, 2007). On the other hand,

*self-compassion* more explicitly calls for the self-reliance of practitioners and the facilitator relationship between facilitators and practitioners serves more likely as an initial door to the integration of the practice into one's life.

*Self-compassion* is measured by the *Self-Compassion Scale (SCS)* (Neff, 2003a). The *SCS* shows positive correlation with *compassion* (Neff & Pommier, 2013), empathic concern (Neff & Pommier, 2013), altruism (Neff & Pommier, 2013), helping intentions (Welp & Brown, 2013), quality of life (Van Dam et al., 2010), psychological distress (Schellekens et al., 2016) and positive affect (López et al., 2016). *Self-compassion* also showed negative correlation with anxiety (Van Dam et al., 2010), depression (Van Dam et al., 2010; López et al., 2016), empathic distress (Welp & Brown, 2013), worry (Van Dam et al., 2010), and negative affect (López et al., 2016).

Other studies also focused on an examination of the effects in higher education, where the *SCS* correlated with higher social-connectedness (Neff, 2007), perspective-taking (Neff & Pommier, 2013), sense of coherence (Ying, 2009) and forgiveness (Neff & Pommier, 2013), and with lower self-criticism (Neff, 2007), anxiety (Neff, 2007), depression (Neff, 2007; Ying, 2009), rumination (Neff, 2007), thought suppression (Neff, 2007) and personal distress (Neff & Pommier, 2013). Similarly to *compassion*, it seems that none of the studies examined the effects of *self-compassion* neither in an organizational practice, nor in a management education.

### **2.3.3 Loving-Kindness Meditation Interventions (LKMI)s**

Similarly to *MBIs*, the *LKMIs* usually last for 6 – 9 weeks. Those interventions focus primarily on *LKM practice* and secondarily on *mindfulness practice*. I have found seven *randomized control trials (RCTs)* that examined the effects of *LKMIs*. Participation in a *6-week program* led to beneficial effects on the experience of positive emotions, feeling of purpose in life, ability to give and receive emotional support, *trait mindfulness*, life satisfaction, illness symptoms and depressive symptoms (Fredrickson et al., 2008). *Abbreviated 3-week version* of this program also showed positive effect on positive affect, self-efficacy, work satisfaction, relationship satisfaction and mental health (Schutte, 2014).

Another program, a *6-week Cognitively-Based Compassion Training (CBCT)* showed positive effects on *empathic accuracy*, and negative effects on *stress* and depression (Pace et al., 2009; Desbordes et al., 2012; Mascaro et al., 2013). *Mindfulness-Based Compassionate Living (MBCL)*, a recently created 9-week program showed beneficial effects on *mindfulness*, *self-compassion* and depression (Bartels-Velthuis et al., 2016). Shahr et al. (2015) examined effects of a 7-week program. Participation in this program showed significant beneficial effect on positive affect, *self-compassion*, self-criticism and depressive symptoms. Another study showed positive effects of *LKM program* on *subjective happiness* and *mindfulness*, and negative effects on worry and emotional suppression (Jazaieri et al., 2014). And finally, *Mindful Self-Compassion (MSC)*, an *8-week intervention* that is primarily focused on the development of *self-compassion*, showed positive effects on *self-compassion*, *compassion*, *mindfulness* and life satisfaction, and negative effects on *stress*, depression, anxiety and avoidance (Neff & Germer, 2013).

Two *RCTs* examined the effects of LKMIs in higher education. A 6-week program inspired by Friedrickson et al. (2008) showed a positive effect on *subjective happiness*, satisfaction with life, and negative effect on depression and somatic complaints (Weytens et al., 2014) and a 4-week *LKM* program showed beneficial effects on *self-compassion* and *compassionate love* (Weibel et al., 2016). Results from previously mentioned studies show that *LKMIs* provide notably more benefits in the domains of interpersonal relationships and happiness than MBIs. These results might be particularly interesting for the organizational environment. However, I have not found any study that would examine the effects of *LKM* in the management practice and education.

## 2.4 Relational Mindfulness

*Relational mindfulness* is an emerging yet less explored branch of the field of *mindfulness*. It represents an application of *mindfulness practice* on the domain of interpersonal relationships. The following text focuses on the introduction to *relational mindfulness*, presentation of its related approaches and evidence, and suggestion of the possible future benefits.

### 2.4.1 Origin of Relational Mindfulness

Similarly to *individual mindfulness*, the origin of *relational mindfulness* lies primarily in Buddhism, but many principles can be also found in Western therapeutic programs. *Relational mindfulness*, therefore, represents another example of the adaption of the Buddhist meditation on the conditions of contemporary society (Surrey & Kramer, 2013). Contrary to society 2500 years ago, world population is approximately 30 times higher, people are more individualistic, relationships are more complex and communication is one of the major aspects of our everyday activities. As much as *individual secular mindfulness* can be perceived as one of the examples of high adaptability of Buddhist teachings (Gethin, 2011), the *relational mindfulness* may be another step in the process of this evolution (Kramer, 2007). Main inspiration for the practice of *relational mindfulness* comes from the *Insight Dialogue*, a Buddhist-derived program that was created by Gregory Kramer (2007). The *Insight Dialogue* was based on the extension of Theravāda Buddhism to the relationships and communication. Although this approach is not entirely secular, it is considered to be the main source of inspiration for the practices and theory of the *secular relational mindfulness* (Surrey & Kramer, 2013; Falb & Pargament, 2012).

Aspects of *relational mindfulness* also appear in Western therapeutic programs. Although the particular therapies differ from one another, *being mindfully aware* during the client-therapist interaction is an important part of the successful therapy (Germer et al., 2016). Although the Western therapeutic approaches use the *relational mindfulness* in specific settings of client-therapist interaction, many of its principles are similar with the conception of *relational mindfulness*, as it is presented in the following text.

#### **2.4.1.1 Definition of Relational Mindfulness**

*Relational mindfulness* can be defined as an “*in vivo technique (within a living thing), emphasizing the interactions between two or more people who take a deliberate stance of awareness and attention to their emotional and bodily states as influenced by their dealings with one another*” (Falb & Pargament, 2012, p. 352). *Relational mindfulness* does not represent a new kind of mindfulness, but rather a conceptualization of its development in a social interaction. Therefore, all nine aspects that are cultivated in the *individual mindfulness practice (observing, acting with awareness, non-judgment, self-acceptance, non-avoidance, non-reactivity, non-identification, insightful understanding and labelling)* are supposed to be developed during *relational mindfulness practice* too.

In the case of the *relational mindfulness*, the *aspects of mindfulness* are developed and further applied in three domains (levels); (1) *mindfulness of self-in-representation* entails the development of awareness of one’s mental, emotional and bodily states during interpersonal interaction; (2) *mindfulness of the other-in-representation* involves awareness of the mental, emotional and bodily states of other individuals during interpersonal interaction; and (3) *mindfulness of relationship-in-representation* represents awareness of the dynamics and aspects of interaction, which the individual co-creates with others (Surrey, Kramer, 2013). Description of the basic *relational mindfulness practices* is in the Appendix A.

#### **2.4.2 Similarities with Other Programs**

First of the Western therapeutic programs that use some principles of *relational mindfulness* is *Gestalt Coaching*, a specific part of the *Gestalt Therapy* that is more focused on the present and future than in the past. *Gestalt Coaching* is based on the three main theories of existential phenomenology, unified field theory and dialogic existentialism (Yontef, 2002). All these theories place a strong emphasis on the development of relationship-focused awareness, while the unified field theory also focuses on the development of the resilience and adaptability of individuals (Parlett, 1997). *Gestalt Coaching*, therefore, seems to focus on all the *three levels of relational mindfulness* that are developed almost exclusively in the individual client-therapist (coach) interaction.

Another approach is training in the *Perspective-Taking*. *Perspective-Taking* leads practitioners to see a particular situation from another's point of view by overlapping other's- and self-representations (Galinsky & Moskowitz, 2000). Methods of *Perspective-Taking* are based on a rich legacy of moral reasoning, pro-social behaviour and *empathy* (Davis, 1986). It is also suggested to overlap with the *theory of mind (TOM)* which is explained as an understanding of one's and others' mental states (Baron-Cohen et al., 2001), although the *Perspective-Taking* tends to be focused solely on the others and not on self (Mori & Cigala, 2016). And the form of the training in *Perspective-Taking* tends to be more focused on retrospective writing and less on the noticing in the present moment. Contrary to the *Perspective-Taking* the *relational mindfulness* occurs in the present moment and focuses on a broader relational area of self, others and common relationships (the *three levels of relational mindfulness*) (Surrey & Kramer, 2013).

Another approach that contains principles of *relational mindfulness* is the *Bohmian Dialogue* that was developed by theoretical physicist David Bohm (1996). *Bohmian Dialogue* is a freely flowing group conversation during which participants seek to reach a common understanding, while experiencing everyone's point of view fully, equally and *non-judgementally*. Purpose of the dialogue is not about reaching of any kind of ending goal, but rather it focuses on a development of awareness of one's mental processes (including the preconceptions and prejudices), experiencing the perspective of others and exploring the process of thinking together collectively. The *Bohmian Dialogue*, therefore, seems to be related with the development all *three levels of the relational mindfulness*. Bohm's work also inspired work of management scholar Willam Isaacs who adapted the principles of the *Bohmian Dialogue* for organizational settings. Isaacs (1999) also employed both dyadic and groups discussions, which are the practices that are commonly used during the training in *relational mindfulness*.

Methods of *relational mindfulness* can be also found in the programs that focus on an enhancement of the intimate relationships. Among the most recognized of those programs can be considered the *IMAGO Relationship Therapy* (Brown 1999) and the *Mindfulness-Based Relationship Enhancement* (Carson et al., 2004). Those programs focus on the development of all *three levels of relational mindfulness*, and

use its basic aspects such as eye contact, a silent pause, a formal *mindful conversation* and *formal mindful listening*. Although those programs are exclusively focused on intimate relationships, they are considered another predecessors of *secular relational mindfulness* (Falb & Pargement, 2012).

Finally, ideas of *relational mindfulness* can be also found in the work of Carl Rogers, who considered an ability to recognize one's emotions and attitudes towards others as a vital quality for living real and meaningful relationships with others. Rogers (1961), therefore, referred to the domain of *mindfulness of self-in-relationship*. He makes a very good example of this domain in the following quote: “*So that I know...what I am feeling at any given moment – to be able to realize I am angry, or that I do feel rejecting toward this person or that I am bored and uninterested in what is going on, or that I am eager to understand this individual or that I am anxious and fearful in my relationship to this person*” (p.17).

Furthermore, he also called for an application of *non-judgmental* attitude in the communication, a principle that in *training in relational mindfulness*: “*Our first reaction to most of the statement which we hear from other people is an immediate evaluation, or judgment, rather than an understanding of it. When someone expresses some feeling or attitude of belief, our tendency is, almost immediately, to feel „That’s right“; or That’s stupid“; That’s abnormal“; „That’s unreasonable“; „That’s incorrect“; „That’s not nice.“ Very rarely do we permit ourselves to understand precisely what the meaning of this statement is to him. I believe this is because understanding is risky. If I let myself really understand another person, I might be changed by that understanding. And well all fear of change*” (Rogers, 1961, p. 18). Although Rogers did not refer the origin of his ideas in a *meditation*, his work clearly represents a great inspiration for the *relational mindfulness practice*.



### 2.4.3 Emerging Evidence of Relational Mindfulness

Several studies have already examined the effects of *relational mindfulness practice*. Three studies included *relational mindfulness* as a secondary practice to the intervention and the two studies focused on the effects of brief *relational mindfulness practice*.

Perhaps the most famous secular intervention that uses the *relational mindfulness practice* is 30-hour long program called the *Cultivating Awareness and Resilience in Education (CARE)*. This intervention was designed for the teachers and showed beneficial effects on *mindfulness*, *well-being*, *efficacy*, *self-awareness* and *burnout* (Jennings et al. 2013; Schussler et al. 2016). The *relational mindfulness practice* in this program is reduced to *formal mindfulness listening*, where participants focus on others while they share thoughts or read poems. In another study, the participation in 8-week clinical program for primary care physicians showed beneficial effects on *burnout*, *caring attitude towards patients*, *emotional management skills* and *well being* (Krasner et al. 2009). However, similarly to the previous study, the *relational mindfulness practice* in this study was reduced to a simple exercise of *formal mindful listening* and took only a small part of the whole intervention.

Two other studies have focused on a comparison of the differences between brief interventions in *intrapersonal mindfulness* and *interpersonal mindfulness* (Kohlenberg et al. 2015; Bowen et al. 2012). In both cases the interpersonal mindfulness practice included an individual practice that was focused on a reflection of other participants in the group which was followed by sharing with others while maintaining *accepting and opened attitude*. In the first study, the *interpersonal group* showed better connectedness with others and a lower experiential avoidance than the *intrapersonal group* (Bowen et al. 2012). In the second study, the *interpersonal group* showed better results in the case of social connectedness and inclusion of others in self (Kohlenberg et al. 2015). Effects on *mindfulness* remained similar for both groups in the base of both studies. These two pioneering studies provide first insights into the differences between an individual and a relational practice, although they have focused on the brief training only. Tan (2012) describes basic relational mindfulness practices, the formal *mindful listening* and *formal mindful conversation* as a part of

Google's training called *Search Inside Yourself*. However, I did not find any evidence for this program.

The above text shows that the field of *relational mindfulness* already possesses some evidence. However, two of the studies have focused on brief interventions only, where the general evidence shows that they provide good opportunities for manipulation of the effects, but the amount of practice is so small that their impact on the life of participants is usually minimal (Creswell 2017). Other two studies have included a *relational mindfulness practice* in the multiple week interventions, but the representation of the relational practice was small, reduced to some aspects of *formal mindful listening* only. The current evidence therefore seems to lack the secularized multiple week intervention that would primarily focus on *relational mindfulness practice*.

#### **2.4.4 Contribution to the Field of Mindfulness**

There are several indicators that suggest how the *relational mindfulness* might enrich the field of *mindfulness*. Firstly, the *relational mindfulness practice* has potential to make the *MBIs* better adapted to the socially dynamic environments such as those that are contemporary organizations. Falb and Pargament (2012) state that certain benefits of an *individual mindfulness practice* might be difficult to maintain in the face of challenges encountered in the inter-relational domain. Any single intervention cannot fully substitute for real life situations, but the practice of *mindfulness* in the person-to-person context may shift *mindfulness training* closer towards real social challenges (Surrey & Kramer, 2013).

Secondly, *relational mindfulness practice* might further support the development of pro-social qualities during *mindfulness training*, as it guides participants to be more socially engaged and aware of both one's and other's condition within the interaction. Communicating with awareness and genuine interest for other's *well-being* also represents a good opportunity for a natural development of understanding and *compassion* (Nhat Hanh, 2014). And finally, a research in *relational mindfulness* may contribute to the regarded, yet unexplored area of *mindfulness* and relationships (Good et al., 2016; Creswell, 2017).

## 2.5 Mindfulness and Leadership

Progress of *mindfulness research and practice* in organizations also inspired discussions about its role in leadership. Although the evidence of *mindfulness* in leadership is very limited, it might be more significant in the future (Good et al., 2016; Hunter & Chaskalson, 2013; Goleman, 2013). The following text focuses firstly on the relationship between *mindfulness* and established leadership theories. And secondly, it discusses the possibilities of the emergence of a *mindful leadership theory*.

### 2.5.1 Mindfulness and Related Leadership Approaches

Researchers suggest that *mindfulness* is related to four established leadership approaches: a transformational leadership, an *authentic leadership*, an ethical leadership and a servant leadership. A transformational leadership is one of the most examined leadership theories (Dinh et al., 2014). It is based on a leader's ability to identify the needs of the organization, to distribute those needs among followers through the vision and idealized influence, and to help the necessary change to come true (Dierendonck et al., 2014). *Mindfulness* is suggested to support the development the aspect of the transformational leadership called the individualized consideration which involves the paying attention to individuals, listening openly, and mentoring (Good et al., 2016). Furthermore, the truly transformational leaders are required to possess moral integrity (Bass & Steidlmeier, 1999) which is a quality that is linked with the development of a morally clear intention in the practice of the *loving-kindness meditation (LKM)* (Gilbert & Choden, 2014). However, despite the potential compatibility between *mindfulness* or the *LKM* and transformational leadership, I have not found any study that would examine this relationship.

*Authentic leadership* is a newer leadership theory whose creation was dominantly inspired by the transformational leadership (Alimo-Metcalfe, 2013). It is defined as a “*pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development*” (Walumbwa et al., 2008, p. 94). *Mindfulness* is suggested

to be a practical method for the development of two of those qualities, the *self-awareness* and internalized moral perspective. *Self-awareness* in the context of *authentic leadership* is explained as a deeper insight into one's multifaceted nature of self and his/her impact on other people (Kernis, 2003). Therefore, it practically represents an identical quality as the *self-awareness facet of mindfulness* that can be developed by a *mindfulness practice* (Vago & Silbersweig, 2012; Bergomi et al., 2013). Furthermore, another *facet of mindfulness*, the *acting with awareness* might support the development of internalized moral perspective, which is based on the consistency between one's values and actions (Avolio & Gardner, 2005). However, despite these possible similarities, the relationship between *mindfulness* and *authentic leadership* remains unexplored. Only one study has shown a positive correlation between *trait mindfulness* and authentic functioning (Leroy et al., 2013).

Transformational and *authentic leadership* have also inspired development of another leadership theory, the ethical leadership (Alimo-Metcalfe, 2013). Ethical leadership tends to be defined as "*the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making*" (Brown, Treviño & Harrison, 2005, p. 120). Ethical leaders are the main moral actors in organizations. They possess a transformational aspect that helps them to serve as moral role models for others and also a transactional aspect which is used in order to promote an explicit communication about moral standards and to support their compliance (Brown, Treviño & Harrison, 2005). One study showed that the development of follower *trait mindfulness (MAAS)* supported the efficiency of ethical leadership in terms of an increase of follower's extra effort and willingness to help (Eisenbeiss & van Knippenberg, 2015).

Last leadership approach is a servant leadership which has not been derived from the transformational leadership. According to servant leadership, the main role of leader is to follow the needs of followers, to focus on their development and to share the competencies and power with them (Liden et al., 2008; Dierendonck et al., 2014). Servant leaders create a serving identity through their example, and this identity in turn inspires other members of the organizational culture to become a servant leaders (Liden et al., 2014). The servant leadership is rooted in an ability to

feel other's needs and act in accordance with their *well-being*. The development of servant leaders seems to be compatible with the training in mindfulness and the LKM as the interest for other's *well being* is the cornerstone of both approaches. One pioneering study has also shown a positive relationship between *trait mindfulness (FMI)* and servant leadership (especially its component humility) (Verdorfer et al. 2016).

In conclusion, it seems that despite many indicators of positive relationship between *mindfulness* and leadership, there are only two studies that have examined positive correlation between *mindfulness* and leadership (Eisenbeiss & van Knippenberg, 2015; Verdorfer et al. 2016) and none of the studies have examined the effect of *mindfulness* or the *LKM* training on the development of leadership.

### **2.5.2 Mindful Leadership**

Suggestions behind *mindfulness* and leadership are rooted in the fact that *mindfulness* itself may represent a unique way on how to lead others (Hunter & Chaskalson, 2013). In the two studies, Reb et al. (2014) showed that leader's *trait mindfulness (MAAS)* was positively related to a job-satisfaction, work-life balance, job-performance, civic behaviours, and negatively related to exhaustion and the deviance of followers. *Mindfulness training* may help develop several leadership skills. The improvement of attention and awareness can enhance leader's ability to perceive follower's need and thus provides relational support for follower flourishing (Good et al., 2016). An enhanced awareness of the present situations may help leaders to better adapt to the present situation and to navigate others thought the necessary but challenging changes (Hunter & Chaskalson, 2013). Finally, the *mindfulness training* accompanied with the *LKM* represents a practical way on how to help leaders to develop an interest for follower's *well-being* and to maintain an integrity (Vich, 2015).

However, all the mentioned suggestions are far from the establishment of a unique *mindful leadership theory*. Furthermore, the construction of *mindful leadership* might meet several issues due to its similarities with other leadership approaches (Vich, 2015). For example, the possible overlapping between ethical leadership and *authentic leadership* was one of the main challenges of the validation of the ethical

leadership (Brown et al., 2005). Similarly to ethical leadership, the potential *mindful leadership theory* seems to have many similarities with *authentic leadership*, especially its core component *self-awareness*. Therefore, the arguments for a construction of *mindful leadership* are not clear. There is a question whether the new leadership theory is even necessary. Researchers might possibly focus on the examination of the relationship between *mindfulness* and established theories instead. On the other hand, the establishment of the *mindful leadership* theory might push the understanding of *mindfulness* as a method of leading others forward. And there is also a chance that such a step could possibly root the role of *mindfulness* in leadership and organizations in more ethical foundations (Vich, 2015).

## **2.6 Mindfulness Research in the Czech Republic**

A few studies related to *mindfulness* were also conducted in the Czech Republic. The first *Czech-made research* I have found is represented by three neuroscientific studies (all related to one EEG measurement) that were conducted in order to compare *experienced meditation practitioners* (at least 1000 hours of practice) with *non-experienced practitioners* during the *mindfulness* and *calming meditation practice*. Analyses showed different activity in *frontal* and *occipital areas* of the brain, and suggested that *experienced practitioners* experienced less *disturbing signals of the synchronization of the brain* (Vyšata et al., 2014; Kopal et al., 2014; Kopal et al., 2017).

More recent studies have also focused on the examination of the effects of *trait mindfulness (FFMQ)*. The first study showed positive relationship between *trait mindfulness* and *job performance* and a negative relationship between *trait mindfulness* and *neuroticism* (Vaculik et al., 2016). The second study examined the impact of *leader's trait mindfulness* on *follower job performance*. However, the results did not show a significant relationship between those two variables (Zalis et al., 2017). The research in the *field of mindfulness* that was conducted in the Czech Republic is, therefore, very limited. Furthermore, I have not found any study that would examine the effects of *mindfulness-based interventions (MBIs)* so far.

## **2.7 Challenges of Mindfulness Practice and Research**

*Mindfulness* spread to almost all areas of our society, including the clinical environment, consultancy, organizations and education (Good et al., 2016; Creswell, 2017). However, the development of the field is related with several issues that should be addressed by researchers and teachers. The purpose of this chapter is to, therefore, point to the main challenges and suggest a few recommendations for a healthy development of the field.

### **2.7.1 Controversial Aspects of Modern Mindfulness**

Chapter 2.2 has demonstrated that both the *MBIs* and *LKMIs* are related to many beneficial outcomes. However, many authors suggest that a contemporary level of understanding of the purpose and practice of *mindfulness* is still rather superficial (i.e., Olendzki, 2014; Grossman, 2011; Gethin, 2011). Furthermore, the fast development of the field and tight connection to the business area increases the chance that *mindfulness practice* might transform into something that is not beneficial, but rather harmful for our society (Purser & Milillo, 2015; Gelles, 2016; Hülshager, 2015). The following text, therefore, presents the most eye-catching issues of the field.

#### **2.7.1.1 Moral Ambivalence of Mindfulness Training and Research**

Moral ambivalence of the field of *secular mindfulness* is one of the main areas, where the *secular mindfulness training* is suggested to divert from original Buddhist teachings. The previous chapters have shown that *mindfulness research* has been much more focused on the enhancement of the efficiency of the mind and less focused on the development of moral qualities (Olendzki, 2014; Gethin, 2011). Similarly, the two most recognized *MBIs*, the *MBSR* and the *MBCT* perceive the development of moral qualities such as *compassion* as important, but more likely a secondary outcome of a participation in the *mindfulness training* (Kabat-Zinn, 2013; Williams & Penman, 2011). On the other hand, the role of ethics and morality has the foremost importance in Buddhism and the role of mindfulness is not so much to increase the efficiency of the mind, but to help to transform its quality in terms of more ethical wholesomeness and less unwholesomeness (Olendzki, 2014).

### **2.7.1.2 McMindfulness: Oversimplification of Mindfulness Training**

The field of *secular mindfulness* also recognizes the growing offer of oversimplified programs that usually promise miraculously quick results for less effort. This trend of *fast food mindfulness programs* has been labelled as the *McMindfulness* (Purser & Loy, 2013). The *McMindfulness programs* tend to use scientific studies as a marketing tool, but their methods are not backed by any evidence and the whole training is usually too much reduced for bringing any real results (Purser & Milillo, 2015). Furthermore, the teachers that lead those programs usually do not possess enough experience with the practice, nor the ability to discriminate their competence. Nevertheless, the marketing power of some of those programs is significant. By using claims such as *becoming a master of mindfulness in few weeks*, they tend to be desirable for many people (Gelles, 2016). Although they might serve as an initial inspiration for engagement in *mindfulness practice* for some participants, they may also cause obstacles and problems for others, either in the form of creating a disappointment or psychological damage.

### **2.7.1.3 Mindful Consumerism: Over-Commercialization of the Field**

Another concern is based on the assumption that commercialization of *mindfulness training* may twist the whole practice into just another form of consumption (Gelles, 2016). Wieczner (2016) reports findings of the research agency *IBISWorld* which show that the field of *meditation-mindfulness* has generated 984 million dollars in the year 2015 in USA. However not all income is generated by *meditation-mindfulness training*. The business related to *meditation-mindfulness* also recognizes the emergence of various products that actually do not support practice itself, but represent new ways of how to increase an income from the people who are interested in *mindfulness*. Gelles (2016) states that products such as *mindful mints*, *mindful meals* or *mindful t-shirts* are becoming very popular in the USA. Although these products may play a positive role as reminders for *being mindfully* aware in every moment, they may also help to create a false impression that *mindfulness* is not a quality of one's state, but a product to be bought.



#### **2.7.1.4 Exploitation of Mindfulness Training by Corporations**

And finally, there is also a concern that *MBIs* might be misunderstood by organizations and sold as “*panacea to fixed well-being, motivation, and performance-related problems in organizations without changing potentially underlying structural problems*” (Hülshager, 2015, p. 674). Companies that have a tendency to press on the employees and to not give so much emphasis on social support may perceive *MBIs* as efficient method for shifting burden on individuals. Therefore, the application of *MBIs* may further serve as a rationale for framing stress as a personal problem and expecting that employees will cope effectively and calmly in their toxic environment (Purser & Milillo, 2015).

#### **2.7.2 Recommendations for the Healthy Development of the Field**

Hülshager (2015) suggests that it is a responsibility of the researchers to ensure that *MBIs* are implemented and developed correctly. Researchers might promote the correct development of *mindfulness practice* in several ways. Firstly, as it has been already suggested in Chapter 2.3, they might highlight a beneficial relationship between *mindfulness* and *loving-kindness meditation (LKM)* in order to ensure that mindfulness practice will be more explicitly focused on the development of moral and pro-social qualities (Gilbert & Choden, 2014; Ricard, 2015). This recommendation may also include *relational mindfulness*, because its practice is more closely related to relational outcomes (e.g., Kohlenberg et al. 2015; Bowen et al. 2012).

Secondly, the development of *MBIs* might further benefit from traditional instructions for practice (Santideva, 1997; Thera, 1962). These recommendations entail principles such as the application of formal practice on a daily basis; a long-term dedication to the practice; a development of joyful and relaxed attitude towards the practice; an establishment of pure motivation for practice; a development of strong motivation to constantly learn; and not perceiving mindfulness as only a practice, but as a style of life. Although these recommendations are basically followed by the classic *MBIs* such as the *MBSR* (Kabat-Zinn, 2013) or the *MBCT* (Williams & Penman, 2011), the facilitators could give more emphasis on motivating participants to embrace them and researchers could explore their impact empirically.

Finally, the implementation of the *MBIs* in organizations should be met with a healthier scepticism. The idea that engagement of employees in *mindfulness practice* is always a win-win situation does not always correspond with the reality and the possible pitfalls of engagement in *mindfulness training* should be clearly communicated before the start of training (Hülshager, 2015). For example, the experience during *mindfulness training* might not always be pleasant, as it may release negative emotions and tensions that were accumulated in the individuals. Furthermore, the participation in *mindfulness training* may also inspire some individuals to perform life-changing decisions such as leaving the organization. Finally, the *mindfulness training* itself cannot fully address changes that are necessary in some organizations. Therefore in order to help organizations to sober from naive expectations about *miraculous panacea of mindfulness*, the researchers might give more focus to the examination of the conditions under which the *MBIs* are beneficial and under which they are not.

### 3 Methods

Goal of this thesis is to develop and validate the *Relational Mindfulness Training (RMT)* for its impact on the development of characteristics that indicate the *effective handling of daily situations, well-being and healthy relationships*. The *effective handling of daily situations* is represented by *trait mindfulness* and *self-compassion*, the *well-being* entails level of *perceived stress* and *subjective happiness*, and the *healthy relationships* are represented by *empathic accuracy, compassion* and *authentic leadership*. The examination of the effects of *RMT* was conducted in two studies. Both studies included students from the University of Economics in Prague. The first study (*Study 1*) examined the effect of *RMT participation* on *mindfulness, self-compassion, authentic leadership* and *empathic accuracy*. The *Study 1* tested the pilot version of *RMT* and showed that the program is a feasible intervention for management students with main significant impact on the development of *mindfulness* and *self-compassion*. The second study (*Study 2*) extended the findings from *Study 1* in few ways. Firstly, the *Study 2* included two times larger sample and included two facilitators of the *RMT*. Secondly, this study examined new effects of the *RMT participation* on *compassion, perceived stress* and *subjective happiness*. Thirdly, the *Study 2* also focused on the examination of the long-term effects of participation in *RMT*. The following text presents *methods* that were used in order to fulfil the goals of this thesis. The Chapter 3.1 focuses on the description of the *RMT*. The Chapter 3.2 presents hypotheses, sample, measures and data analysis of the *Study 1*. And, the *Chapter 3.3* presents hypotheses, sample, measures and analysis of the *Study 2*.

#### 3.1 Description of the Relational Mindfulness Training (RMT)

*Relational Mindfulness Training (RMT)* is the intervention that combines *relational and individual mindfulness practices* with *loving-kindness meditation (LKM)*, while the main emphasis is given on *relational mindfulness practice*. The program has been created as a part of the research described in this study. The main inspiration for *relational mindfulness practices* comes from the *Insight Dialogue* (Kramer, 2007). However, all practices have been *secularized* and further adapted in order to be more suitable for the dynamic environments such as the University of

Economics in Prague, where the study was conducted. The first pilot version of the *RMT* was designed by myself as the main author. The second and final version of *RMT* was designed in collaboration with Jan Burian, Ph.D., an academic fellow and local experienced *mindfulness* teacher.

Similarly to other *mindfulness-based interventions (MBIs)* such as the *MBSR*, and the *MBCT*, the *RMT* is an *8-week MBI*, where participants attend 8 weekly sessions (2 hours per session; one absence is allowed) and one weekend session (6 hours; no absences allowed). In the final version of the program, the every weekly session was structured in a similar way: 1) introduction talk; 2) a short *individual mindfulness practice*; 3) an individual *recapitulation* of the day and practice during previous week; 4) a short *dyadic mindful dialogue* focused on the sharing of the individual *recapitulation practice* (short version of the main *relational mindfulness practice* of the *RMT*); 5) 10 minute break, 6) an *individual mindfulness practice*, 7) the long *dyadic mindful dialogue* practice; and 8) *sharing in the group*, which gives participants the space to share openly their experience and impressions from the session with all the other participants. Participants are frequently assured that participation in all practices is voluntary.

The *relational mindfulness practice* called *dyadic mindful dialogue* forms the main part of *RMT*. However, the efficiency of collective work is also dependent on the quality of the work carried out at an individual level, as the individual effort accumulates capacity to be aware and psychically detached during the *relational mindfulness practice* (Nhat Hanh, 2014). The *individual mindfulness practice* involves classic *mindfulness techniques* such as *body-scan*, *sitting meditation* (focused on *breathing, body, feelings and thoughts*) and *recapitulation*. Those practices were inspired by classic mindfulness meditations of the *MBSR* (Kabat-Zinn, 2013) and the *MBCT* (Williams & Penman, 2011). However, their form was adapted to the condition of management studies in both studies. In particular, the *individual meditations* have been shortened and more interconnected with the *relational mindfulness practice*. Individual practice of the *RMT* also focuses on the various forms of *LKM*. Two main practices of *LKM* include the *development of friendship towards oneself* and the *development of friendship towards others*. *Development of friendship towards oneself* is inspired by classic *self-compassion meditation* (Neff,

2011). *Development of friendship towards others* is based on *secular form* of classic *LKM practice* (Santideva, 1997; Gilbert & Choden, 2014). *Individual mindfulness and LKM practices* that are part of the *RMT* are described in more detail in the Appendix A.

Main *relational mindfulness practice*, the *dyadic mindful dialogue* occurs in dyads or triads. The participants are invited to randomly choose a partner, make an eye contact and *mindfully communicate* with each other during practice rounds, which are divided by *silent pauses* (Kramer 2007). *Dyadic mindful dialogue* is, therefore, based on the shifting between static (individual) and dynamic (relational) phases. During these pauses, the participants are invited to observe the various aspects of their *present experience* in order to develop the *three levels of relational mindfulness* (*mindfulness of self-in-relationship, mindfulness of other-in-relationship, mindfulness of relationship-in-relationship*), and are given the instructions for the next round. Almost each sharing is accompanied by small *LKM practices* as the participants are frequently invited to give kind attention to one's and other's present condition and feelings.

Every round can take several forms: 1) a *silent eye gazing* during which both participants share their presence in silence, while maintaining eye contact; 2) a *formal mindful listening* during which one participant speaks about his/her present/past experience and his/her partner listens; 3) a *formal mindful conversation* during which both participants speak about their present/past experience and listen to each other; 4) a *caring appreciation* during which one participant expresses understanding or appreciation of his/her partner's topic and the partner listens; 5) a *caring conversation* during which both participants express understanding or appreciation for each other and listen to each other; and 6) a *formal repetition* during which one participant repeats word by word what he/she remembers from the previous sharing of his/her partner. *Relational mindfulness practices* that are part of the *RMT* are described in more detail in the *Appendix A*.

Two-month training is designed to gradually escalate in terms of intensity of both individual and relational practice. Week 1 is dedicated to introducing the participants to the program and group, basic *sitting meditation*, and brief *dyadic mindful dialogue*. Week 2 focuses on a *body-scan, recapitulation, development of*

*gratitude in the group* and *dyadic mindful conversation*. Week 3 focuses on the *sitting meditation, development of friendship towards oneself* and sharing of those practices in *dyadic mindful conversation*. Week 4 is dedicated to the *development of friendship towards others* and sharing in *dyadic mindful conversation*. Week 5 focuses on an analysis of inter-relational tensions inspired by three inter-relational hungers that were described by Kramer (2007) and the more advanced in *dyadic mindful conversation*. Week 6 is dedicated to an analysis of strengths and weaknesses, and sharing in *dyadic mindful conversation*. Week 7 is focused on *development of closeness in dyads*, a more advanced form of *dyadic mindful conversation*. And finally, the Week 8 is dedicated to a *recapitulation* of the whole program and the *dyadic mindful conversation*. During this session, the participants also receive supportive materials and recommendations for the following practice. The weekend seminar that occurs in sixth week focuses on *recapitulation* of all essential practices of the program, the intense and long *dyadic mindful conversation* and the *practice of coping with fear*. From the first week on, the participants were instructed to engage in the home *mindfulness and LKM practices*, as well as to be *mindfully aware* during the social interactions. They were provided with recordings and instructions through the e-mail.

## 3.2 Study 1: The Pilot Study

The first version of *RMT* was examined in the *Study 1*, the pilot study. Aim of this study was to examine whether *RMT* can be suitably facilitated in management education and whether it can match with established *MBIs* such as the *MBSR* and the *MBCT*. The *RMT group* (experimental group) was divided on two training groups, and both of them were facilitated by me. *Study 1* focused on the examination of the short-term effects of the participation in *RMT*. Therefore, the data were obtained one week prior to start of the intervention (*T1*) and one week after the end of the intervention (*T2*). The following text focuses on a presentation of the hypotheses, sample, measures and data analysis.

### 3.2.1 Hypotheses

*RMT* was created in order to be suitable *MBI* for the development of *mindfulness* and caring in management education. It has already been mentioned in the Chapter 2.2 that the most common way to examine *mindfulness* as an outcome of intervention is through the measurement of *trait mindfulness* (Brown & Ryan, 2003). *MBIs* that are based on the *individual mindfulness practice* such as the *MBSR* and the *MBCT* repeatedly showed a positive impact on *trait mindfulness* (e.g. Shapiro et al., 2007; Jensen et al., 2012, De Raedt et al. 2012; Perich et al., 2013). However, none of the studies examined the effects of the *MBI* that is based on a *relational mindfulness practice* so far. The development of *relational mindfulness* follows similar principles and faces similar challenges as the *individual mindfulness practice* (Falb & Pargament, 2012; Surrey & Kramer, 2013). While practicing with others, participants need to overcome their rumination, such as thinking about the future or past, or clinging to prejudices about their training partner, in order to give their training partners a proper *non-judgmental* attention (Kramer, 2007; Tan, 2012). Therefore, the first suggestion of this study is that the relational form of mindfulness practice supports the development of *mindfulness* among the participants.

*Hypothesis 1. Relational Mindfulness Training leads to a higher mindfulness.*

Another highly regarded outcome of *MBIs* that has also been presented in the Chapter 2.3 is *self-compassion* (e.g., Shapiro et al., 2011; Frank et al., 2013; Lee & Bang, 2010). *Self-compassion* helps individuals to feel more trust while dealing with others and to better handle challenging situations such as dealing with failure or uncertainty (Neff, 2011). The development of *relational mindfulness* is based on the gradual opening to the other's as well to one's own condition during social interaction (Kramer, 2007), where the *non-judgmental* attention and mentally-present listening to each other creates a safe and healing environment (Nhat Hanh, 2014). Neff (2011) suggests that giving to and receiving care from the others helps to the development of an ability to give and receive care from oneself. Therefore a *caring social interaction* that is facilitated during the *relational mindfulness practice* may have the potential to develop a self-directed caring attitude represented by the *self-compassion*.

*Hypothesis 2. Relational Mindfulness Training leads to a higher self-compassion.*

Chapter 2.5 has also suggested that relationship between *mindfulness* and leadership might be a fruitful area of a future research (Good et al., 2016). One study has already shown a positive impact of a leader's *trait mindfulness (MAAS)* on a job-satisfaction, work-life balance, job-performance, civic behaviours, exhaustion and the deviance of followers (Reb et al., 2014). Furthermore, two studies pointed to a positive relationship between *mindfulness* and servant leadership (Verdorfer et al. 2016) and ethical leadership (Eisenbeiss & van Knippenberg, 2015). However, the relationship between *mindfulness* and *authentic leadership* has remained unexplored area so far.

*Authentic leadership* is based on four compatible qualities of the leader: *self-awareness*; internalized moral perspective; balanced processing of information; and relational transparency (Walumbwa et al. 2006). It was already suggested in Chapter 2.5 that *individual mindfulness practice* might support the development of *self-awareness* and internalized moral perspective (Bergomi et al., 2013; Vago & Silbersweig, 2012; Dane, 2011). I further suggest that the *relational mindfulness practice* might support the development of relational transparency and balanced processing. The relational process of the open sharing of thoughts and feelings (Surrey & Kramer 2013) seems to be consistent with the establishment of relational transparency, which refers to presenting one's authentic self to others (Walumbwa et



al. 2006). Relational practice further promotes listening deeply to others' opinions, which may support the development of a balanced processing. This refers to the ability to objectively analyse all relevant data (including the opinions of others) before coming to a decision (Avolio and Gardner, 2005). The examination of the effect of *RMT* on *authentic leadership* might further clarify whether those assumptions are correct.

*Hypothesis 3. Relational Mindfulness Training leads to a higher authentic leadership.*

The second level of *relational mindfulness* (*mindfulness of other-in-representation*) is a domain that is related with the development of an awareness of mental, emotional and bodily states of other individuals (Surrey & Kramer, 2013). This domain seems to be closely related with the *theory of mind (TOM)* (Baron-Cohen, 2001). The *TOM* refers to one's ability to attribute the mental states of both oneself and the others (Premack & Woodruff, 1978). Although one study has suggested that *mindfulness* is more significantly related to self-focused mind reading, rather than other-focused mind reading (Nejati et al., 2012), an evidence from already previously mentioned *Loving-Kindness Meditation Intervention (LKMI)* called *Cognitively-Based Compassion Training (CBCT)* showed significant effects on *empathic accuracy* (Mascaro et al. 2013). *Empathic accuracy* is defined as the "ability to accurately infer the specific content of another person's thoughts and feelings (Ickes, 1993, p. 588)" and it is considered to be one of the components of *TOM* (Baron-Cohen et al., 2001). The pioneering study of Mascaro et al. (2013) shows that relationship between *mindfulness* and *TOM* might be a promising research area. To support the evidence in this field I decided to examine the effects of *RMT* on *empathic accuracy*.

*Hypothesis 4. Relational Mindfulness Training leads to a higher empathic accuracy.*

### 3.2.2 Sample

Baseline sample ( $T1$  = one week before the start of intervention) of the *Study 1* included 90 management students, who were recruited through a career advisory centre of the University of Economics in Prague and randomly assigned to the *RMT group (experimental group)*; 43 participants) and the *control group* (22 participants). In order to account for a specific effect on spending time with the facilitator of the *RMT* program (myself), the *control group* was also expanded by 20 students that participated in the career development course which was facilitated by me. Therefore, the *control group* of this study was divided in *active* and *passive* condition.

Analysis of the independent samples t-test showed that the *active control group* and the *passive control group* showed significant differences for *age* ( $p < .01$ ). Chi-square tests did not show any significant differences between the *active control group* and the *passive control group* for any other control variables (*sex, Caucasian, previous experience with meditation, managerial or entrepreneurial experience, occasional use of alcohol or drugs*). The independent sample t-test showed significant differences between both groups for *mindfulness* ( $p < 0.5$ ). Differences in *self-compassion, authentic leadership* and *empathic accuracy* were not significant.

Thirty-three *RMT group participants* have successfully completed training and participated in the second  $T2$  measurement (one week after the end of *RMT*). Seven participants left *RMT* and two participants were not allowed to complete the training because they did not fulfil the attendance quotas. The *control group* had 15 participants who dropped out of the program, which left 33 participants who attended the  $T2$  measurement. Both groups in  $T2$  thus contained 66 participants. That is 37 % less than in the first measurement time of  $T1$ . The participants who dropped out of the study did not significantly differ from others in any of the demographic and control variables, or in the baseline measures. The *RMT group* participants ( $M$  age = 23.73,  $SD = 2.27$ ) were 63.6 % *female* and 93.9 % *Caucasian*; 33.3 % reported having *previous meditative experience*; 45.2 % reported *previous managerial or entrepreneurial experience*, while 21.2 % reported *occasional alcohol or drug use* (see Table 1).

Independent sample t-test for *age* and chi-square tests for (1) *sex*, (2) *Caucasian*, (3) *previous experience with meditation*, (4) *managerial or entrepreneurial experience* and (5) *occasional alcohol or drug use*, were used to identify any significant differences between the *RMT group* and the *control group* (see Table 1). The only notable difference in *managerial or entrepreneurial experience* was insignificant on  $p < .05$  level. It might be expected that differences in this variables would be significant in the case of the higher sample. However, I did not included *managerial or entrepreneurial experience* as a covariate to the following analysis because the difference was not significant. Differences between other variables were notably insignificant.

### 3.2.3 Measures

Measures used in the *Study 1* were translated from an original English version to Czech, and translated back to English by an independent translator. The author, in a cooperation with his supervisor and one independent translator, then created the final Czech version of the measures that are described below.

***Mindfulness.*** Participants evaluated their level of mindfulness by using the 15-item *Mindful Attention Awareness Scale (MAAS)* (Brown & Ryan, 2003), which is an appropriate measure for the examination of *mindfulness* primarily in terms of living in the present moment (Sutcliffe et al., 2016). Participants indicated on the 6-point Likert scale from 1[almost always] to 6[almost never] how frequently they had an experience like the one described in each statement. The *MAAS* contains statements, which are focused on daily situations, for example: “*I forget a person’s name almost as soon as I’ve been told it for the first time*”.

***Self-Compassion.*** The level of *self-compassion* was examined by the *Self-Compassion Scale (SCS)* (Neff, 2003), which contains 26 items and was successfully used in the previous studies (e.g., Shapiro et al., 2007; Neff & Germer, 2013). Participants indicated how they treat themselves in difficult situations by using the 1-5 Likert scale from 1[almost never] to 5[almost always]. The item example of the *SCS* is: “*When something painful happens I try to take a balanced view of the situation.*”

***Authentic Leadership.*** The 16-item pedagogical scale called *Authentic Leadership Self-Assessment Questionnaire (ALSAQ)* (Northouse, 2013) was chosen to

examine whether the *RMT participation* might have a significant effect on the development of the basic qualities of the *authentic leader*. Data from this scale have, therefore, rather an illustrational purpose than fully empirical. Participants responded by choosing 1-5 options on the Likert Scale from 1[strongly disagree] to 5[strongly agree]. The scale contains statements which focus on the aspects of an authentic leader, e.g.: „*I look for feedback to understand what a person I really am.*“

***Empathic Accuracy.*** Similarly to the study of Mascaro et al. (2013), an *empathic accuracy* was measured through the *Reading Mind in the Eyes Test (RMET)* (Baron-Cohen et al., 2001), a method based on the *theory of mind (TOM)*. Participants were instructed to recognize emotional and mental states (by choosing one of four options) from the different pictures of the eye area of different men or women on the screen. The full version of the *Reading Mind in the Eyes Test* contains 36 pictures. However, according to Baron-Cohen et al. (2001), the only eligible items are those that have at least 50 % successful answers and have only 25 % alternative of the foils. In accordance with this criteria, the final version of the test used in our study contained 23 items.

All the measures proved to be reliable with Cronbach alphas ranging from .71 for the *ALSAQ* to .89 for the *SCS* (see Table 2 for scale reliabilities and correlations). For the *RMET*, Cronbach alpha cannot be counted due to the specific format of the scale (see Baron-Cohen et al. 2001 for details).

#### **3.2.4 Data Analysis**

It has already been mentioned that *Study 1* examined the short-term effects of the intervention through the analysis of the data in two times. Therefore, the 2 (Group) x 2 (Time) analysis of variance was used to assess the differences between the experimental and control group between *T1* and *T2*. Furthermore, paired sample t-test was used to examine the effects within both groups between *T1* and *T2*.

The combination of analysis of variance and paired sample t-test is a common procedure to validate the effect of the *MBIs* (e.g., Neff & Germer, 2013; Shonin et al., 2014). The effect sizes were calculated by examining gain scores with Cohen's *d* (see Table 3). All analyses were performed in SPSS Statistics ver. 21.

**TABLE 1**  
**Baseline Demographic and Control Variables for Each Allocation Condition in the Study 1.**

Characteristic	RMT (N = 33)	Control (N = 33)	p
Age, mean (SD)	23.73 (2.27)	22.91 (3.64)	0.11
Female (%)	63.6 %	60.6 %	0.50
Caucasian (%)	93.9 %	90.1 %	0.50
Previous meditative experience (%)	33.3 %	33.3 %	0.60
Managerial or entrepreneurship experience (%)	45.5 %	24.2 %	0.06
Drug or alcohol use (%)	21.2 %	27.3 %	0.39

*Note.* p-values indicate significance of differences between RMT and control group;  
RMT = Relational Mindfulness Training

**TABLE 2**  
**Means, Standard Deviations, Bivariate Correlations and Scale Reliabilities in the Study 1 (N = 66).**

	M	SD	1	2	3
MAAS	3.9	.61	(.81)		
SCS	2.94	.61	.41**	(.89)	
ALSAS	14.45	1.68	.06	.19	(.71)
RMET	14.47	2.16	.02	-.07	-.08

Note. MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; ALSAS = Authentic Leadership Self-Assessment Scale; RMET = Reading Mind in the Eyes Test; M = mean; SD = standard deviation.

\*p<0.05. \*\*p<0.01. †p<0.1

### 3.3 Study 2: The Main Study

Goal of the *Study 2* was to extend findings from the *Study 1* in several ways. Firstly, the *Study 2* included two times larger sample. Two facilitators of the *Relational Mindfulness Training (RMT)* were also engaged in the second study (Myself and Jan Burian, Ph.D.) in order to alleviate the personal influence of the facilitator on results of the training. Secondly, this study examined new effects of the *RMT* participation on *compassion, perceived stress* and *subjective happiness*. Thirdly, the *Study 2* also focused on the examination of the *RMT participation* in the long run. This study, therefore, analysed data from the baseline period (*T1*; one week before the start of the *RMT*), the post-intervention period (*T2*; one week after the end of *RMT*) and the follow-up period (*T3*; six months after the end of *RMT*). And finally, this study examined the effects of an individual practice on the sustainability of the results in the follow-up period. Similarly to the *Study 1*, the following text focuses on a presentation of the hypotheses, sample, measures and data analysis.

#### 3.3.1 Hypotheses

*Study 2* is divided into three parts. The first part examined the effects of *RMT participation* in the short run. The second part focused on the effects of *RMT participation* in the long run. And the third part examined the impact of an individual home practice on sustainability of effects in the follow-up period.

##### 3.3.1.1 Part 1: Effects of RMT participation in the short run

Effects of *RMT* on *trait mindfulness* and *self-compassion* are one of the most regarded general effects of *MBIs*. The first aim of the *Study 2* was, therefore, to re-examine the effects of *RMT participation* on those variables. More significant effects were expected in the case of *Study 2*, because of its larger sample and enhanced form of the training program.

*Hypothesis 5a. Relational Mindfulness Training leads to a higher trait mindfulness in the short run.*

*Hypothesis 5b. Relational Mindfulness Training leads to a higher self-compassion in the short run.*

Chapter 2.3 has shown that *compassion* (towards others), similarly to *self-compassion*, is not only a closely related concept to the *mindfulness*, but also an interesting potential outcome of *mindfulness training*. *Compassion* is one of the qualities that refer to the pro-social and caring capacities of the individuals (Creswell, 2017). Therefore, the development of *compassion* represents a notable potential for the development of the *healthy relationships* and *well-being* among both university students and members of organizations (Rynes et al., 2012; Crocker et al., 2009). Furthermore, the *compassion* is suggested to be one of the main indicators to report whether *mindfulness-based interventions (MBIs)* actually work (Grossman, 2011).

However, despite extensive suggestions about fruitful relationship between *mindfulness* and *compassion*, the contemporary research in this area is very limited (Creswell, 2017). Creswell states that only a two small studies have shown the significant effects of *MBIs* on a compassionate behaviour so far (Condon et al. 2013, Lim et al. 2015). Furthermore, it seems that the significant effects on *compassion* were examined in the case of two *loving-kindness mediation interventions (LKMI)* so far (Neff & Germer, 2013; Weibel et al., 2016). The effects of training based on *relational mindfulness* might be even more promising, as the second level of *relational mindfulness*, the *mindfulness of other-in-relationship* leads participants to be more aware of the condition of others (Surrey & Kramer, 2013). Such practice may help individuals to be more familiar with suffering of others as well as more motivated to help others to alleviate such suffering. Therefore, the participation in *RMT* may help the individuals to develop the *compassion* towards others.

*Hypothesis 5c. Relational Mindfulness Training leads to a higher compassion in the short run.*

Impact of *mindfulness training* on the *level of stress* is perhaps the most examined area in *mindfulness* research (e.g., Goyal et al., 2014; Chiesa & Serretti, 2009). Development of *stress management* is highly demanded in both clinical and institutional settings for two reasons. Firstly, the growing evidence shows that higher level of *stress* is related to lower function of the immune system and accelerated mortality (Creswell, 2017). Secondly, a high level of *stress* is furthermore linked with higher absenteeism at work and increases the chance of a burnout (Good et al., 2016). Therefore, reduction of *stress* is a key outcome of *MBIs* (Creswell, 2017).



One of the most used methods to access the level of *stress* is the examination of a level of the *perceived stress*. *Perceived stress* entails the degree to which one appraises his/her daily situations as *stressful* (Cohen et al., 1983). It has already been suggested that previous studies showed a significant negative correlation between the level of *mindfulness* and the level of *perceived stress* (e.g., Atanes et al., 2015). More importantly, a significant beneficial effect on the lower level of *perceived stress* was repeatedly confirmed for the *MBSR* (e.g., Shapiro et al. 2005; Oman et al., 2008) and the *LKMIs* (Neff & Germer, 2013; Weytens et al., 2014). Interventions that contain aspects of a *relational mindfulness practice* show support for a lower burnout and a better emotional management (Krasner et al., 2009; Jennings et al. 2013). However, the relationship between the *relational mindfulness practice* and the level of *perceived stress* remains unexplored. Furthermore, none of the studies focused on an examination of the effects of the program that is mainly focused on a *relational mindfulness practice*.

Social interactions are strong *stressful* elements in one's life (Beery & Kaufer, 2015). Training in *relational mindfulness* is highly interactive and intense, as it invites participants to engage in eye contact, listen deeply and share their thoughts and feelings (Surrey & Kramer, 2013). Participants are also guided to be aware of and detached from feelings and tensions that may arise during such interactions (Kramer, 2007). Therefore, the *RMT* might have beneficial effects on *coping with stressful situations* that may have an impact on a lower level of *perceived stress*.

*Hypothesis 5d. Relational Mindfulness Training leads to a lower perceived stress in the short run.*

Another important indication of *well-being* is the *subjective happiness* that refers to the perception of quality of one's life (Lyubomirsky & Lepper, 1999). Several studies showed significant effects of *LKM practice* on *subjective happiness* (i.e., Jazaieri et al., 2014; Neff and Germer, 2013). However, none of the studies has examined the effects on training in *relational mindfulness* on this variable so far. Training in *relational mindfulness* helps participants to be more relaxed in front of the others and to share their life stories with more optimism and detachment. Such training might, therefore, support the increase of *subjective happiness*.

*Hypothesis 1e. Relational Mindfulness Training leads to higher subjective happiness in the short run.*

### **3.3.1.2 Part 2: Effects of RMT participation in the long run**

Examination of the effects of MBIs in the long run usually occurs in three times, that is before the start of program, immediately after the end of program and approximately half year after the end of program. Several studies have focused on examination of the effects in 2-months follow-up period (Shapiro et al., 2011; Oman et al., 2012; Weibel et al., 2016), 3-months follow-up period (Perich et al., 2013), 6-months follow-up period (O'Doherty et al. 2015; Neff & Germer 2013), 9-months follow-up period (Perich et al., 2013) and 12-months follow-up period (Shapiro et al., 2011; Neff & Germer 2013; Perich et al., 2013). Examination of the effects in the long run may provide more robust findings, because they show whether the particular training may have an impact on one's life after the end of intervention, in the real life of the participant. Therefore, the aim of the *Study 2 (Part 2)* is to examine the effects of *RMT participation* on all previously mentioned variables in the long run.

*Hypothesis 6a. Relational Mindfulness Training leads to a higher mindfulness in the long run.*

*Hypothesis 6b. Relational Mindfulness Training leads to a higher self-compassion in the long run.*

*Hypothesis 6c. Relational Mindfulness Training leads to a higher compassion in the long run.*

*Hypothesis 6d. Relational Mindfulness Training leads to a lower perceived stress in the long run.*

*Hypothesis 6e. Relational Mindfulness Training leads to a higher subjective happiness in the long run.*

### 3.3.1.3 Part 3: Effects of Individual Practice

Another less examined area of the *mindfulness and LKM research* is the impact of individual home practice after the end of intervention on the results in the follow-up period (T3). Significant impact of the individual home practice during the participation in the intervention has been repeatedly confirmed by previous studies (see Parsons et al. 2017 and Vetesse et al. 2009 for a review). However, the impact of this practice after the end of intervention is a notably less explored area. I have found one study, which shows that there is a positive impact of an individual home practice on the follow-up results (Neff & Germer, 2013) and two studies that did not prove this relationship to be significant (De Bruin et al., 2017; Morgan et al., 2014). Examination of those effects in the case of *RMT* might bring new insight to this area. Furthermore, *RMT* is not a classic *MBI* or *LKMI*, because its main focus is on the *relational mindfulness practice*. Therefore, it might be possible that individual and relational practices of *RMT* might have a higher impact on different variables. More specifically, I suggest that an individual practice in the follow-up period could contribute to the sustainability of the increased levels (between T1 and T2) of individual-focused variables, that is *mindfulness*, *self-compassion*, *perceived stress* and *subjective happiness*.

*H7a An individual practice in the follow-up period supports a sustainability of the increased levels of mindfulness in the long run.*

*H7b An individual practice in the follow-up period supports a sustainability of the increased levels of self-compassion in the long run.*

*H7c An individual practice in the follow-up period supports a sustainability of the increased levels of compassion in the long run.*

*H7d Individual practice in the follow-up period supports a sustainability of the increased levels of subjective happiness in the long run.*

Furthermore, a different effect might occur in the case of *compassion*, because this quality seems to be developed mostly through a *relational mindfulness practice*. It has been already mentioned in the Chapter 2.4 that the *relational mindfulness practice* invites participants to openly share their thoughts and feelings, and to care

for each other through emotional support and understanding. This environment might inspire participants to be more interested for *well-being* of others. However, the *compassionate* pattern that was obtained during an active participation in the *RMT* group might not endure after the end of intervention and individual practice might not be appropriate substitute for that. Therefore, I suggest that an individual practice in the follow-up period would not contribute to the sustainability of the increased levels (between T1 and T2) of a *relationship-focused variable compassion*.

*H7e Individual practice in the follow-up period does not support a sustainability of the increased levels of compassion*

### **3.3.2 Sample**

It has already been mentioned at the beginning of this chapter that *Study 2* was conducted in three steps. The *Study 2 (Part 1)* focused on the effects of *RMT* in the *short run* and included 128 participants. The *Study 2 (Part 2)* focused on the effects of *RMT* in the *long run* and included 110 participants. And finally, the *Study 2 (Part 3)* focused on the effects of individual practice in the follow-up period on the sustainability of the increased levels the outcomes (of the *Study 2*) in the long run. The *Study 2 (Part 3)* was further divided on two analyses which both included part of the sample from the *Study 2 (Part 2)*. The first analysis included 54 participants and the second analysis included 74 participants. Analysis of control variables was conducted for all parts of the *Study 2*.

#### **3.3.2.1 Part 1 (N = 128)**

Baseline sample (*T1*) of the *Study 2* included 160 students. Similarly to the *Study 1*, the participants were recruited through career advisory centre and randomly assigned to the *RMT group* (75 participants) and the *control group* (42 participants of the *passive wish list group*). The *control group* was further expanded for the *active control group* (44 participants), which was represented by an alternative career development course that was also facilitated by the main author of this thesis and other two career development professionals. More participants were included in the *control group*, because the higher dropout during the following measurement periods was expected there.

Analysis of the independent sample t-test showed that the *active control group* and the *passive control group* showed significant differences for *age* ( $p < .01$ ). Chi-square test did not show any significant differences between the *active control group* and the *passive control group* for any other control variables (*sex, previous experience with meditation, managerial or entrepreneurial experience, occasional use of alcohol or drugs*). Furthermore, the independent sample t-test did not show significant differences for any main variables (*mindfulness, self-compassion, compassion, perceived stress, subjective happiness*). More participants were included in the *control group*, because the higher dropout during the following measurement was expected there.

In the case of the *RMT group*, 65 participants successfully completed training and participated in the second measurement (*T2*). In the case of the *control group*, the 63 participants successfully participated in *T2* measurement. Therefore, a 13.3% drop of participants was recognized in the *RMT group*, while the *control group* decreased for 26.7 %. A non-participation check showed no significant differences on  $p < 0.05$  between participants who participated in *T2* and dropped from the study for any of the baseline variables. In *T2*, the *RMT group* participants ( $M$  age = 24.18,  $SD$  = 3.23) were 58.5 % *female* and 93.8 % *Caucasian*; 23.1 % reported having a *previous meditative experience*; 27.7 % reported having a *previous managerial or entrepreneurial experience*, while 4.6 % reported an *occasional use of alcohol or drugs* (see Table 3). The *RMT group* was further divided on four groups that contained approximately 20 participants. The program was facilitated by two instructors (author of this thesis and *RMT* and co-author of *RMT*), each leading two training groups. I have not found any significant differences on  $p < 0.05$  between the mean results of the main variables for the groups of each instructor.

The *independent sample t-test* for *age* and *chi-square test* for baseline control variables of (1) *sex*, (2) *Caucasian*, (3) *previous experience with meditation*, (4) *managerial or entrepreneurial experience* and (5) *occasional use of alcohol or drugs*, were used to identify any significant differences between the *RMT group* and the *control group* (see Table 3). Analysis showed significant difference for *age* ( $p < .05$ ). Therefore, the age was included as a covariate to the following analysis of differences between the groups. Differences between other control variables were not significant.

Analysis of the differences between the *active control group* and the *passive control group* showed significant differences for *age* ( $p < .05$ ). Differences for all other control variables were not significant, that is *sex* ( $p = .501$ ); *Caucasian* ( $p = .494$ ); *previous experience with meditation* ( $p = .223$ ), *managerial or entrepreneurial experience* ( $p = .294$ ) and *occasional use of alcohol or drugs* ( $p = .100$ ). Furthermore, there was no significant difference between the *active control group* and the *passive control group* for any of the *main variables* of this study.

### 3.3.2.2 Part 2 (N = 110)

The *Study 2 (Part 2)* focused on the effect of RMT participation in the long run. Therefore, the sample was composed from participants of the previous part that successfully participated in 6-months follow-up measurement (*T3*). Fifty-five participants from both the *RMT group* and the *control group* participated in this measurement, meaning that the sample recognized 15.4% drop of participants in the *RMT group* and 12.7% drop of participants in the *control group*. The final sample, therefore, contained 110 participants, that is 31.7 % less than in the *T1*.

In *T3*, the *RMT group* participants ( $M$  age = 24.13,  $SD = 3.31$ ) were 60.0 % *female* and 94.5 % *Caucasian*; 27.3 % reported having a *previous meditative experience*; 27.3 % reported having a *previous managerial or entrepreneurial experience*, while 5.5 % reported an *occasional use of alcohol or drugs* (see *Table 4*).

Similarly to the previous part, the *independent sample t-test* for age and *chi-square test* for baseline control variables of (1) *sex*, (2) *nationality*, (3) *previous experience with meditation*, (4) *managerial or entrepreneurial experience* and (5) *occasional use of alcohol or drugs*, were used to identify any significant differences between the *RMT group* and the *control group* (see *Table 4*). Again, the analysis showed significant difference for *age* ( $p < .05$ ). Therefore, the *age* was included as a covariate to the following analysis of differences between the groups. Differences between other control variables were not significant.

**TABLE 3**  
**Baseline Demographic and Control Variables for Each Allocation Condition in the Study 2 (Part 1).**

Characteristic	RMT (N = 65)	Control (N = 63)	p
Age, mean (SD)	24.18 (3.23)	22.59 (2.55)	0.002
Female (%)	58.5 %	66.7 %	0.37
Caucasian (%)	93.8 %	96.8 %	0.68
Previous meditative experience (%)	23.1 %	15.9 %	0.36
Managerial or entrepreneurship experience (%)	27.7 %	25.4 %	0.84
Drug or alcohol use (%)	4.6 %	12.7 %	0.12

*Note.* p-values indicate significance of differences between RMT and control group;

RMT = Relational Mindfulness Training

### 3.3.2.3 Part 3 (N1 = 74; N2 = 54)

Finally, the *Study 2 (Part 3)* focused on the examination of the effects of an *individual mindfulness and LKM practice* in the period between *T2* and *T3*. This analysis firstly focused on the comparison between the high-practice and low-practice subgroups of the *RMT group (high-practice RMT group and low-practice RMT group)*. The final sample of this analysis contained 54 participants, because one participant did not respond to the measure of an individual practice. The sample was then divided into the *high-practice RMT group* that included 20 participants and the *low-practice RMT group* that included 34 participants.

Secondly, the analysis also compared the *high-practice RMT group* with the *control group*. The analysis included all three times, that is *T1*, *T2* and *T3* in order to demonstrate the overall effect of an individual practice. Therefore, this part of the study included 20 participants of the *high-practice RMT group* and 54 participants of the *control group* which make an overall sample of 74 participants.

Similarly to the previous parts of the *Study 2*, the analyses of the differences between baseline *control variables* was conducted both between the *high-practice RMT group* and the *low-practice RMT group*, and between the *high-practice RMT group* and the *control group*. Both analyses did not find any significant differences for any of the variables.



**TABLE 4**  
**Baseline Demographic and Control Variables for Each Allocation Condition in the Study 2 (Part 2).**

Characteristic	RMT (N = 55)	Control (N = 55)	p
Age, mean (SD)	24.13 (3.31)	22.60 (2.50)	0.007
Female (%)	60.0 %	69.1 %	0.43
Caucasian (%)	94.5 %	96.4 %	1.00
Previous meditative experience (%)	27.3 %	16.4 %	0.25
Managerial or entrepreneurship experience (%)	27.3%	23.6%	0.83
Drug or alcohol use (%)	5.5 %	10.9 %	0.49

*Note.* p-values indicate singificance of differences between RMT and control group;

RMT = Relational Mindfulness Training

### 3.3.3 Measures

Measures in the *Study 2* were translated in a similar way as in the case of *Study 1*. *Study 2* included *mindfulness* and *self-compassion* as in the *Study 1* and further examined *compassion*, *perceived stress* and *subjective happiness*.

**Compassion.** Participants evaluated the level of *compassion* by using the *Compassion Scale (CS)* (Pommier, 2011) that contains 24 items divided into paired subscales of kindness versus indifference, common humanity versus separation and mindfulness versus disengagement. Similarly to the *Self-Compassion Scale (SCS)*, the most of the previous studies used the *CS* to measure overall score of *compassion* (Neff & Germer, 2013). Neff & Germer (2013) also revealed that the scale has an appropriate factor structure, and that a single higher order factor of *compassion* explains the strong inter-correlations among the subscales (CFI = .96). Participants indicated on the 5-point Likert scale from 1[almost never] to 5[almost always] how frequently they had an experience like the one described in each statement. The *CS* contains items like “*If I see someone going through a difficult time, I try to be caring toward that person.*”

**Perceived Stress.** The level of *perceived stress* was examined by use of the *Perceived Stress Scale (PSS)* (Cohen et al., 1983) that is the far most used scale for measuring the perception of *stress* (Lee, 2012). *PSS* contains 10 items that ask participants to evaluate their thoughts and feeling during the past month. Participants respond by using the 1-5 Likert scale (from 1[never] to 5[very often]). The *PSS* contains items like: “*In the last month, how often have you found that you could not cope with all the things that you had to do?*”

**Subjective Happiness.** The level of *subjective happiness* was accessed by the *Subjective Happiness Scale (SHS)* (Lyubomirsky & Lepper, 1999). *SHS* is a self-report scale, that contains four items which can be answered by 7-point Likert scale, ranging from 1[e.g. not at all] to 7[e.g. a great deal]. Participants responded to the items focused on the happiness in their life, such as “*Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?*”

**Individual practice.** Amount of the individual mindfulness practice among participants was examined by a 4-item measure. Firstly, this measure was used in the T1 and focused on the quantity of practice of the participants before the assignment to the RMT. Secondly, this measure focused on the quantity of the individual practice of participants in the follow-up period (T3). Participants responded on a 4-item Likert scale, that is 1 = *never or very occasionally*, 2 = *once a week*, 3 = *2-3 times a week*, 4 = *four times a week or more*. This measure is similar to the 3-item measure that was used by Morgan et al. (2014). Moreover, based on the T3 measurement, participants were divided to the *high-practice RMT group* and the *low-practice RMT group*. The *high-practice RMT group* contained individuals that responded 3 – 4 on the individual practice measure while the *low-practice RMT group* contained individuals that responded 1 – 2.

For the sample of *Study 2 (Part 1)* (N=128), all the measures proved to be reliable with Cronbach alphas ranging from .80 for the *MAAS* to .90 for the *CS* (see Table 5 for scale reliabilities and correlations). Results were almost identical for the sample of *Study 2 (Part 2)* (N=110), where Cronbach alphas ranged from .81 for the *MAAS* to .90 for the *CS*.

### 3.3.4 Data Analysis

Analysis of variance and paired sample t-test were used in all parts of this study. Similarly to the *Study 1*, the *Study 2 (Part 1)* used 2 (Group) x 2 (Time) analysis of variance in order to analyse the differences between the *RMT group (experimental group)* and the *control group* between T1 and T2 and paired sample t-test was used to assess the effects within both groups between T1 and T2. Again, the *effect sizes* were calculated by examining gain scores with Cohen's *d*. The *Study 2 (Part 2)* used 2 (Group) x 3 (Time) analysis of variance to analyse the differences between the experimental and the control group in T1, T2 and T3. And *paired samples t-test* was used to assess the effects within both groups between T1 and T3.

The *Study 2 (Part 3)* focused on the examination of the effects of an individual practice in time between T2 and T3. Firstly, the 2 (Group) x 2 (Time) analysis of variance and paired sample t-test for the period between T2 and T3 were used to analyse the effects between the *high-practice RMT group* and the *low-practice RMT*

*group*. Furthermore, based on the data that was obtained by the *measure of individual practice* (from the *RMT participants*), the linear regression was used in order to examine whether there was a significant correlation between the *individual mindfulness practice* before the start of *RMT (T1)* and the individual practice in the follow-up period (*T3*). In the other words, this analysis was conducted in order to indicate whether the membership in the *high-practice RMT group* was stimulated by the previous tendency to practice or not. Secondly, the 2 (Group) x 3 (Time) analysis of variance and paired sample t-test for the period between *T1* and *T3* were used to analyse the differences between the *high-practice RMT group* and the *control group*. All analyses were performed in the SPSS Statistics ver. 21.

**TABLE 5**  
**Means, Standard Deviations, Bivariate Correlations and Scale Reliabilities in the Study 2 (N = 128).**

	M	SD	1	2	3	4	5
MAAS	3.93	.61	(.80)				
SCS	2.95	.61	.34**	(.88)			
CS	3.77	.57	.26**	.05	(.90)		
PSS	2.82	.69	-.47**	-.57**	-.08	(.86)	
SHS	4.89	1.27	.38**	.57**	.18*	-.54**	(.85)

*Note.* MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; CS = Compassion Scale; PSS = Perceived Stress Scale; SHS = Subjective Happiness Scale; M = mean; SD = standard deviation.

\* $p < 0.05$ . \*\* $p < 0.01$ . † $p < 0.1$

## 4 Results

Similarly to the previous chapter, the following text firstly focuses on the *Study 1* and then presents results from the *Study 2*.

### 4.1 Study 1: The Pilot study

First of all, the 2 (Group) X 2 (Time) analysis of variance was used in order to determine whether the *RMT group* demonstrated a significantly greater degree of improvement than the *control group*. Results showed a significant interaction effect of group (*RMT group, control group*) and time (baseline and post-intervention) for *mindfulness* (with medium effect size) ( $F(1, 64) = 8.472, p < .01, d = .73$ ), *self-compassion* (with medium effect size) ( $F(1, 64) = 10.258, p < .01, d = .70$ ) and *authentic leadership* (with medium effect size) ( $F(1, 64) = 6.006, p < .05, d = .61$ ). An improvement for *empathic accuracy* (with medium effect size) was significant only at  $p < .10$  ( $F(1, 64) = 3.312, p = .07, d = .45$ ). Furthermore, there was again no significant difference between the *passive control group* and the *active control group* for any of the examined variables. See Table 6 for the overview of all effects and Figure 1 – 4 for the graphical characterization of differences between both groups for each of the examined variables.

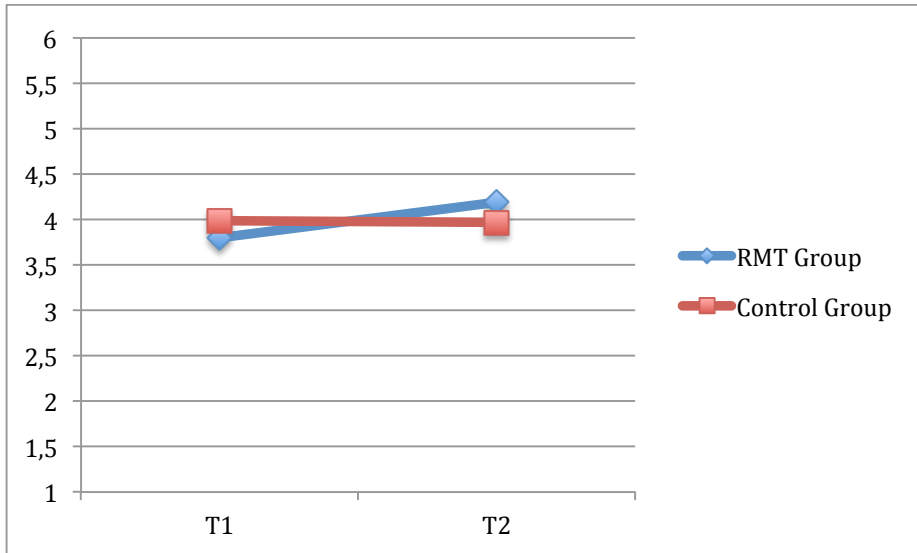
Subsequently, the paired sample t-test was used to examine pre/post changes in study outcomes in both groups. In the case of the *RMT group*, the results demonstrated significant differences between *T1* and *T2* for *mindfulness* ( $t(32) = -3.198, p < .01$ ), *self-compassion* ( $t(32) = -3.016, p < .01$ ), and *authentic leadership* ( $t(32) = -2.991, p < .01$ ). However, the growth of *empathic accuracy* in the *RMT group*, despite the positive result, was not proven as significant ( $t(32) = -1.476, p = .15$ ). In the case of the *control group*, significant differences were not found for any of the variables (*mindfulness* ( $t(32) = .267, p = .79$ ), *self-compassion* ( $t(32) = .095, p = .93$ ), *authentic leadership* ( $t(32) = .000, p = 1.00$ ), and *empathic accuracy* ( $t(32) = 1.130, p = .27$ )).

**TABLE 6**  
**Differences between the RMT Group and the Control Group (Study 1),**  
**Analysed with 2 (Group) X 2 (Time) ANOVA and Effect Sizes Using Cohen's d.**

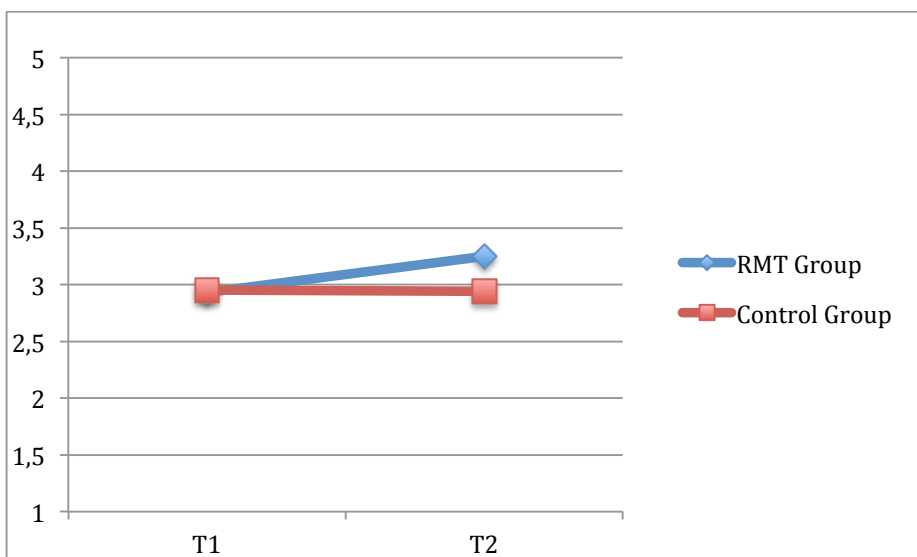
Outcome	RMT Group		Control Group		F Time x Group	Effect size Cohen's d
	T1 M (SD)	T2 M (SD)	T1 M (SD)	T2 M (SD)		
Mindfulness (MAAS)	3.80 (0.66)	4.19 (0.48)	3.99 (0.55)	3.97 (0.53)	8.472**	0.73
Self-Compassion (SCS)	2.93 (0.68)	3.25 (0.59)	2.95 (0.55)	2.94 (0.51)	10.258**	0.70
Authentic Leadership (ALSAQ)	14.09 (1.66)	15.13 (1.61)	14.82 (1.65)	14.82 (1.48)	6.006*	0.61
Empathic accuracy (RMET)	14.39 (1.85)	14.94 (1.97)	14.55 (2.45)	14.06 (3.33)	3.312†	0.45

*Note.* RMT = Relational Mindfulness Training; MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; ALSAS = Authentic Leadership Self-Assessment Scale; RMET = Reading Mind in the Eyes Test; M = mean; SD = standard deviation; T1 = pre-intervention period; T2 = post-intervention period  
 \*p<0.05. \*\*p<0.01. †p<0.1

**FIGURE 1: Differences in Mindfulness Between the RMT Group and the Control Group (Study 1).**

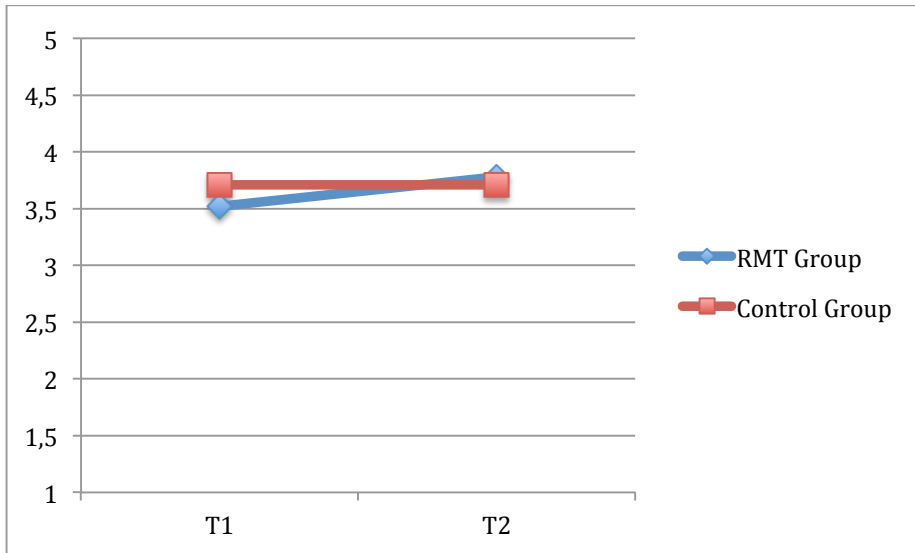


**FIGURE 2: Differences in Self-Compassion Between the RMT Group and the Control Group (Study 1).**

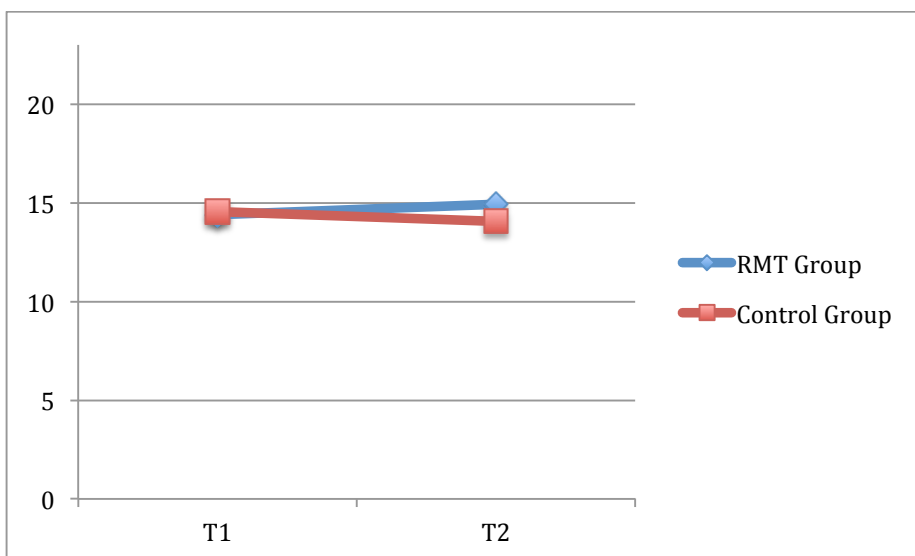




**FIGURE 3: Differences in Authentic Leadership Between the RMT Group and the Control Group (Study 1).**



**FIGURE 4: Differences in Empathic Accuracy Between the RMT Group and the Control Group (Study 1).**



## 4.2 Study 2: The Main study

It has already been demonstrated that the analysis of the Study 2 is divided into three parts. The first part (*Study 2 (Part 1)*) focused on the effects of *RMT participation* in the short run. The second part (*Study 2 (Part 2)*) focused on the effects of *RMT participation* in the long run. And finally, the third part (*Study 2 (Part 3)*) examined on the effects of an individual practice in the follow-up period on the sustainability of the increased levels of the study's outcomes. This part was further divided on two analyses. The *Study 2 (Part 3a)* focused on comparison of the *high-practice RMT group* and the *low-practice RMT group* between *T2* and *T3* and the *Study 2 (Part 3b)* focused on comparison of the *high-practice RMT group* and the *control group* between *T1*, *T2*, and *T3*.

### 4.2.1 Part 1: Analysis of the Effects of RMT Participation in the Short Run

*Study 2 (Part 1)* conducted the same analysis as the *Study 1*. Therefore, the 2 (Group) X 2 (Time) analysis of variance examined the significance of the differences between the *RMT group* and the *control group* between *T1* and *T2*. Results showed significant differences for *mindfulness* (with high effect size) ( $F(1, 128) = 22.465, p < .01, d = .85$ ), *self-compassion* (with high effect size) ( $F(1, 128) = 21.204, p < .01, d = .83$ ), *compassion* (with small effect size) ( $F(1, 128) = 5.040, p < .05, d = .40$ ), *perceived stress* (with high effect size) ( $F(1, 128) = 21.212, p < .01, d = .83$ ) and *subjective happiness* (with small effect size) ( $F(1, 128) = 5.933, p < .05, d = .40$ ). Similarly to the *Study 1*, there was no significant difference between the *passive control group* and the *active control group* for any of the examined variables. See Table 7 for the overview of all effects and Figure 5 – 9 for the graphical characterization of differences between both groups for each of the examined variables.

Furthermore, results from the paired sample t-test showed positive significant differences within *RMT group* for *mindfulness* ( $t(64) = -4.613, p < .01$ ), *self-compassion* ( $t(64) = -5.923, p < .01$ ), *compassion* ( $t(64) = -2.616, p < .05$ ), *subjective happiness* ( $t(64) = -2.938, p < .01$ ) and positive negative differences within *RMT group* for *perceived stress* ( $t(64) = 3.880, p < .01$ ). In the case of the *control group*, the significant differences were not found for any of the examined variables;

that is *mindfulness* ( $t(62) = 2.185, p = .033$ ), *self-compassion* ( $t(62) = .028, p = .978$ ), *compassion* ( $t(62) = 1.292, p = .201$ ), *perceived stress* ( $t(62) = -3.641, p = .001$ ) and *subjective happiness* ( $t(62) = .515, p = .608$ ).

#### 4.2.2 Part 2: Analysis of the Effects of RMT Participation in the Long Run.

The 2 (Group) X 3 (Time) analysis of variance was used to examine the differences between the *RMT group* and the *control group* in a long-term period. Results showed a significant interaction effect of group and time for *mindfulness* (with medium effect size) ( $F(1, 110) = 11.347, p < .01, d = .65$ ), *self-compassion* (with medium effect size) ( $F(1, 110) = 10.979, p < .01, d = .65$ ), and *perceived stress* (with medium effect size) ( $F(1, 110) = 8.028, p < .01, d = .55$ ). However, the improvement was significant only at  $p < .10$  for *compassion* (with small effect size) ( $F(1, 110) = 2.537, p < .10, d = .31$ ), and it is not significant for *subjective happiness* (with small effect size) ( $F(1, 110) = 2.294, p = .105, d = .29$ ). Again, there was no significant difference between the *passive control group* and the *active control group* for any of the examined variables. See Table 8 for the overview of all effects and Figure 9 – 14 for the graphical characterization of differences between both groups for each of the examined variables.

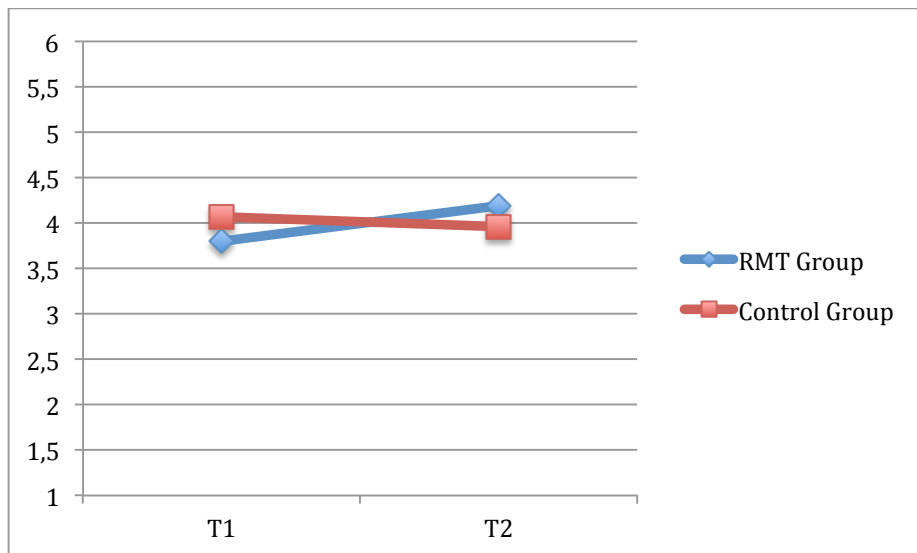
Subsequently, in the case of the *RMT group*, the *paired sample t-test* demonstrated significant differences between *T1* and *T3* for *mindfulness* ( $t(54) = -3.661, p < .01$ ) and *self-compassion* ( $t(54) = -3.841, p < .01$ ). However, the results showed only partial effects at  $p < .10$  for *perceived stress* ( $t(54) = 1.687, p = .097$ ), and *subjective happiness* ( $t(32) = -1.956, p = .056$ ). Furthermore, the growth of *compassion* was not significant ( $t(54) = -.267, p = .791$ ). In the case of the *control group*, positive significant differences were not found for any of variables, that is *mindfulness* ( $t(54) = 1.451, p = .153$ ), *self-compassion* ( $t(54) = 1.073, p = .288$ ), *compassion* ( $t(54) = 1.113, p = .270$ ), and *subjective happiness* ( $t(54) = 0.062, p = .950$ ). The negative significant effects was also not significant for *perceived stress* ( $t(54) = -2.750, p = .008$ ).

**TABLE 7**  
**Differences Between the RMT group and the Control Group in the Short Run (Study 2 (Part 1)),**  
**Analysed with 2 (Group) X 2 (Time) ANOVA and Effect Sizes Using Cohen's d.**

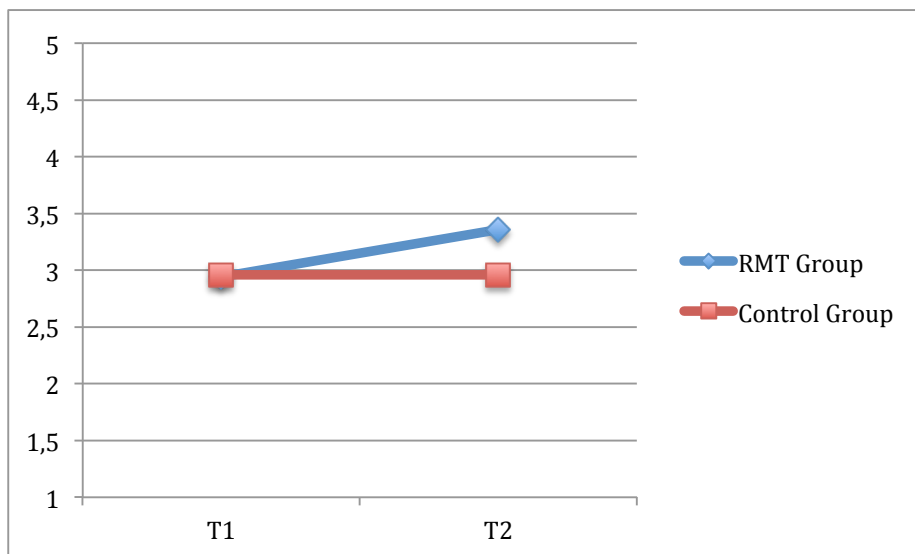
Outcome	RMT Group		Control Group		F Time x Group	Effect size Cohen's d
	T1 M (SD)	T2 M (SD)	T1 M (SD)	T2 M (SD)		
Mindfulness (MAAS)	3.80 (0.65)	4.19 (0.50)	4.07 (0.52)	3.96 (0.56)	22.465**	0.85
Self-Compassion (SCS)	2.94 (0.59)	3.36 (0.58)	2.96 (0.63)	2.96 (0.63)	21.204**	0.83
Compassion (CS)	3.79 (0.56)	3.94 (0.43)	3.74 (0.60)	3.69 (0.65)	5.040*	0.40
Perceived Stress (PSS)	2.90 (0.70)	2.53 (0.57)	2.74 (0.66)	2.99 (0.68)	21.212**	0.83
Subjective Happiness (SHS)	4.88 (1.24)	5.31 (1.06)	4.90 (1.32)	4.85 (1.24)	5.933*	0.40

*Note.* RMT = Relational Mindfulness Training; MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; CS = Compassion Scale; PSS = Perceived Stress Scale; SHS = Subjective Happiness Scale; M = mean; SD = standard deviation; T1 = pre-intervention period; T2 = post-intervention period. \*p<0.05. \*\*p<0.01. †p<0.1

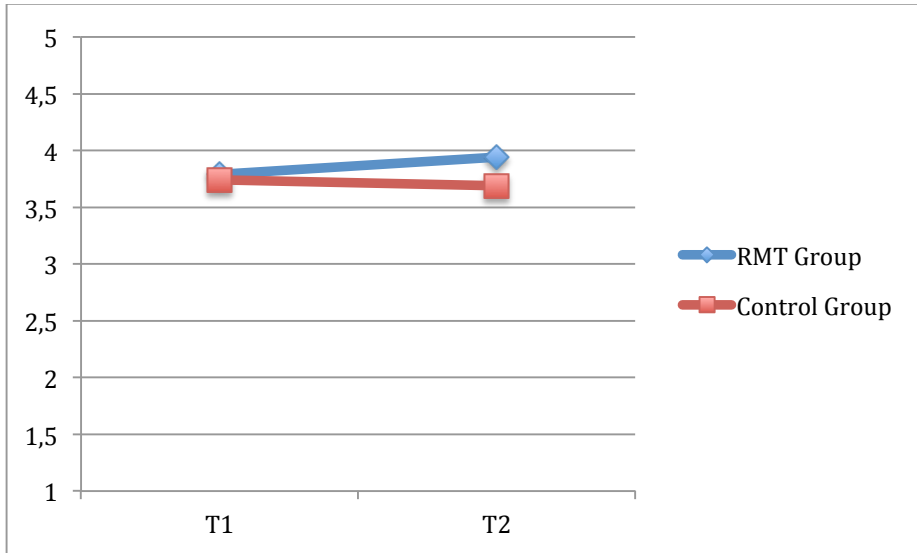
**FIGURE 5: Differences in Mindfulness Between the RMT Group and the Control Group in the Short Run (Study 2 (Part 1)).**



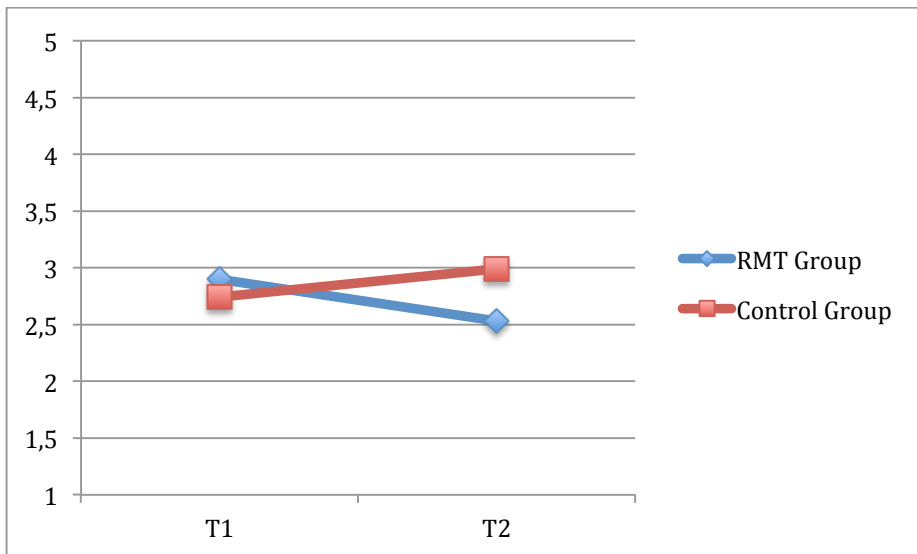
**FIGURE 6: Differences in Self-Compassion Between the RMT Group and the Control Group in the Short Run (Study 2 (Part 1)).**



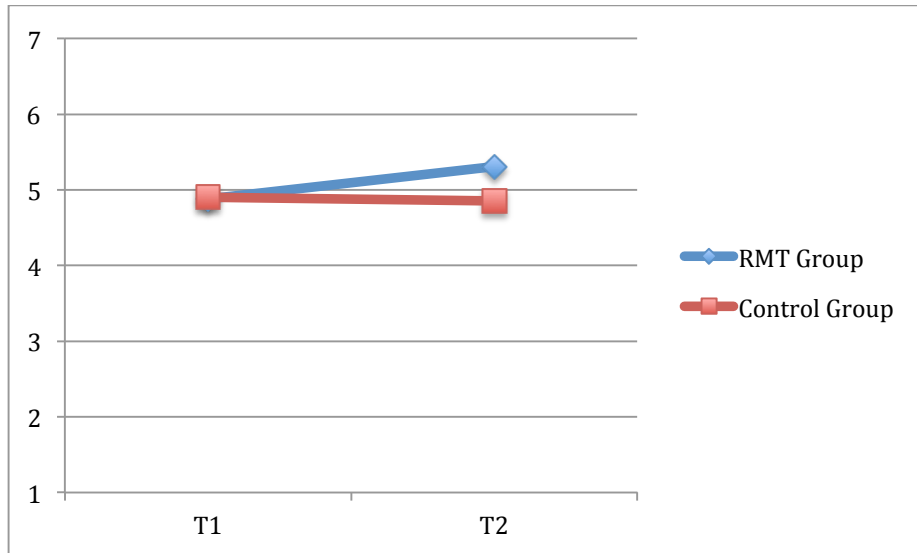
**FIGURE 7: Differences in Compassion Between the RMT Group and the Control Group in the Short Run (Study 2 (Part 1)).**



**FIGURE 8: Differences in Perceived Stress Between the RMT Group and the Control Group in the Short Run (Study 2 (Part 1)).**



**FIGURE 9: Differences in Subjective Happiness Between the RMT Group and the Control Group in the Short Run (Study 2 (Part 1)).**



**TABLE 8**  
**Differences Between the RMT Group and the Control Group (Study 2 (part 2)) in the Long Run,**  
**Analysed with 2 (Group) X 3 (Time) ANOVA, and Effect Sizes Using Cohen's d.**

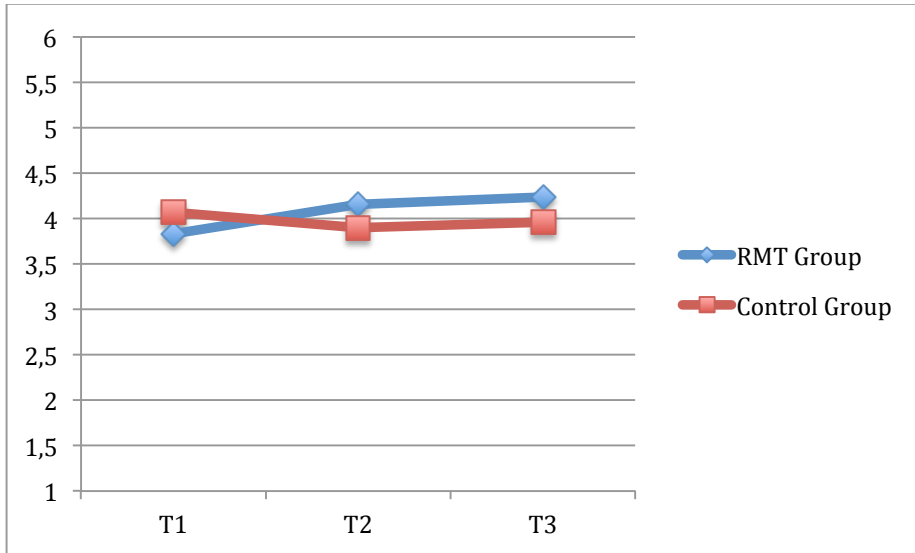
Outcome	RMT Group			Control Group			F Time x Group	Effect size Cohen's d
	T1 M (SD)	T2 M (SD)	T3 M (SD)	T1 M (SD)	T2 M (SD)	T3 M (SD)		
Mindfulness (MAAS)	3.83 (0.68)	4.16 (0.49)	4.24 (0.62)	4.07 (0.56)	3.90 (0.57)	3.96 (0.63)	11.347**	0.65
Self-Compassion (SCS)	2.96 (0.55)	3.34 (0.57)	3.26 (0.64)	2.90 (0.63)	2.91 (0.64)	2.85 (0.64)	10.979**	0.65
Compassion (CS)	3.79 (0.55)	3.96 (0.43)	3.81 (0.43)	3.75 (0.61)	3.72 (0.64)	3.70 (0.63)	2.537†	0.31
Perceived Stress (PSS)	2.87 (0.73)	2.52 (0.60)	2.68 (0.78)	2.79 (0.67)	3.04 (0.69)	3.07 (0.81)	8.028**	0.55
Subjective Happiness (SHS)	4.91 (1.27)	5.35 (1.09)	5.20 (1.09)	4.84 (1.33)	4.77 (1.26)	4.83 (1.28)	2.294	0.29

*Note.* RMT = Relational Mindfulness Training; MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; CS = Compassion Scale; PSS = Perceived Stress Scale; SHS = Subjective Happiness Scale; M = mean; SD = standard deviation; T1 = pre-intervention period; T2 = post-intervention period; T3 = 6-month follow-up period.

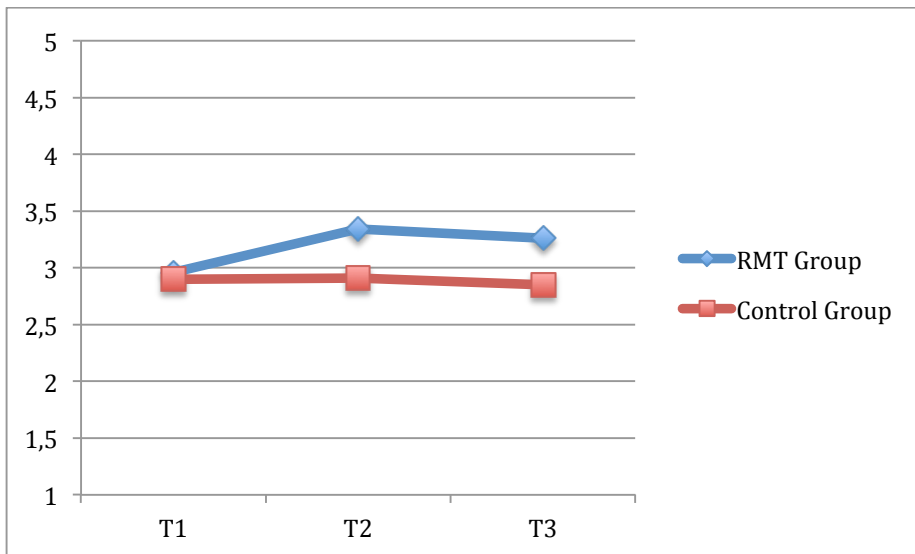
\*p<0.05. \*\*p<0.01. †p<0.1



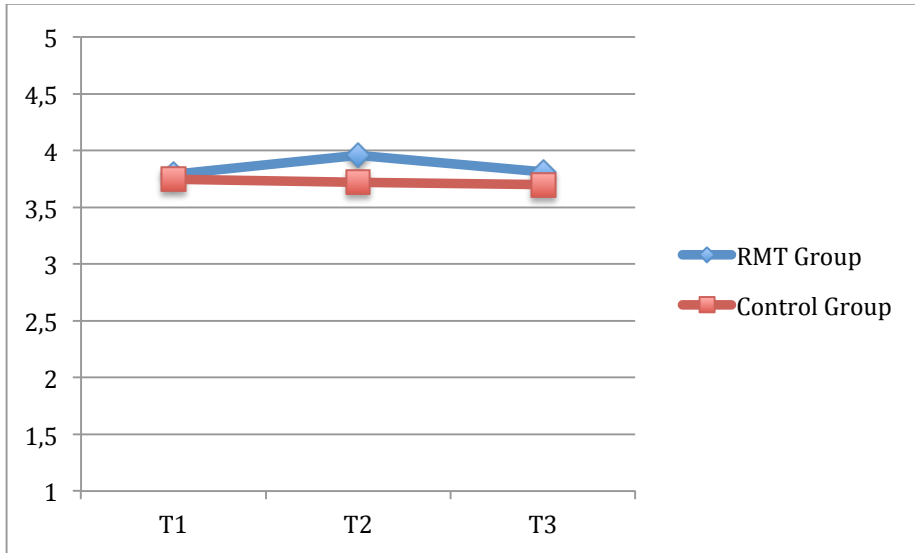
**FIGURE 10: Differences in Mindfulness Between the RMT Group and the Control Group in the Long Run (Study 2 (Part2)).**



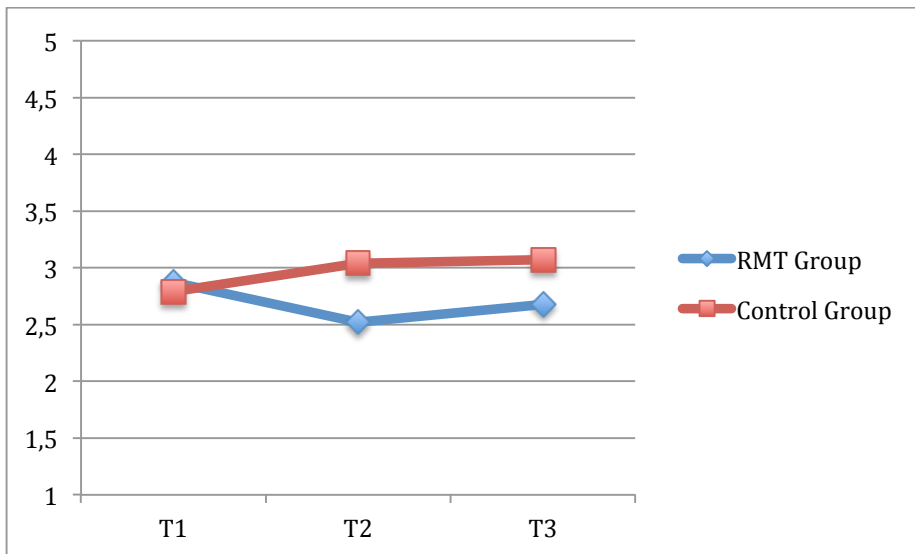
**FIGURE 11: Differences in Self-Compassion Between the RMT Group and the Control Group in the Long Run (Study 2 (Part 2)).**



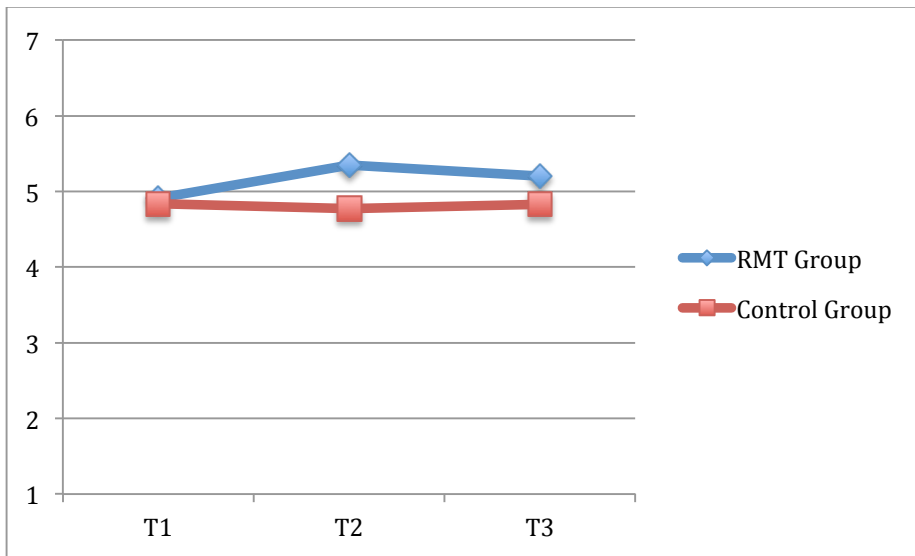
**FIGURE 12: Differences in Compassion Between the RMT Group and the Control Group in the Long Run (Study 2 (Part 2)).**



**FIGURE 13: Differences in Perceived Stress Between the RMT Group and the Control Group in the Long Run (Study 2 (Part 2)).**



**FIGURE 14: Differences in Subjective Happiness Between the RMT Group and the Control Group in the Long Run (Study 2 (Part 2)).**



### 4.2.3 Part 3: Results From the Effects of Individual Practice

The *Study 2 (Part 3)* focused on the examination of the impact of individual practice on the sustainability of the increased effects from *T2*. Firstly, the analysis focused on the differences between the *high-practice RMT group* and the *low-practice RMT group* in order to examine the effects of the individual practice on a sustainability of the outcomes in the period between *T2* and *T3*. Secondly, the analysis examined the differences between the *high-practice RMT group* and the *control group* in order to demonstrate the impact of the individual practice on overall results.

#### 4.2.3.1 Comparison of the High-Practice RMT group and the Low-Practice RMT group

The 2 (Group) X 2 (Time) analysis of variance was used for examination of significant differences between the *high-practice RMT group* and the *low-practice RMT group* for the period between *T2* and *T3*. Although the results indicate notable difference between both groups, there is only a partially significant effect at  $p < .10$  for *self-compassion* (with medium effect size) ( $F(1, 54) = 3.938, p = .052, d = .55$ ). Differences for the other variables are non-significant, that is *mindfulness* (with small effect size) ( $F(1, 54) = 1.808, p = .185, d = .38$ ), *compassion* (with small effect size) ( $F(1, 54) = 1.155, p = .287, d = .30$ ), *perceived stress* (with small effect size) ( $F(1, 54) = 2.476, p = .122, d = .43$ ) and *subjective happiness* (with small effect size) ( $F(1, 54) = 1.799, p = .186, d = .37$ ). See Table 9 for the overview of all effects and Figure 15 – 19 for the graphical characterization of differences between both groups for each of the examined variables.

Subsequently, the paired sample t-test was used to examine the differences between *T2* and *T3* within both groups. Results showed that in the case of the *high-practice RMT group*, there was non-significant increase for *mindfulness* ( $t(19) = -1.441, p = .166$ ), *self-compassion* ( $t(19) = -.689, p = .499$ ) and *subjective happiness* ( $t(19) = -.435, p = .668$ ), and non-significant decrease for *compassion* ( $t(19) = .941, p = .358$ ) and *perceived stress* ( $t(19) = .430, p = .672$ ). For the *low-practice RMT group*, the results showed significant decrease of mean values for *self-compassion* ( $t(33) = 2.460, p < .05$ ) and *compassion* ( $t(33) = 2.616, p < .05$ ), partial positive effect for *perceived stress* ( $t(33) = -1.933, p = .06$ ) and non-significant negative effect for *subjective happiness* ( $t(33) = 1.646, p = .109$ ). Contrary to those results, the mean

values practically did not change for *mindfulness* ( $t(33) = -.000, p = 1.000$ ).

Therefore, these results indicate that high-practitioners showed non-significant, but notable progress in the follow-up period in the case of individual-focused variables.

Finally, in the case of the *RMT group*, the linear regression was conducted in order to show whether the amount of individual practice in the *T1* correlated with the amount of the individual practice in the *T2*. Results showed that this correlation was not significant ( $\beta = .17, p = .22$ )

**TABLE 9**

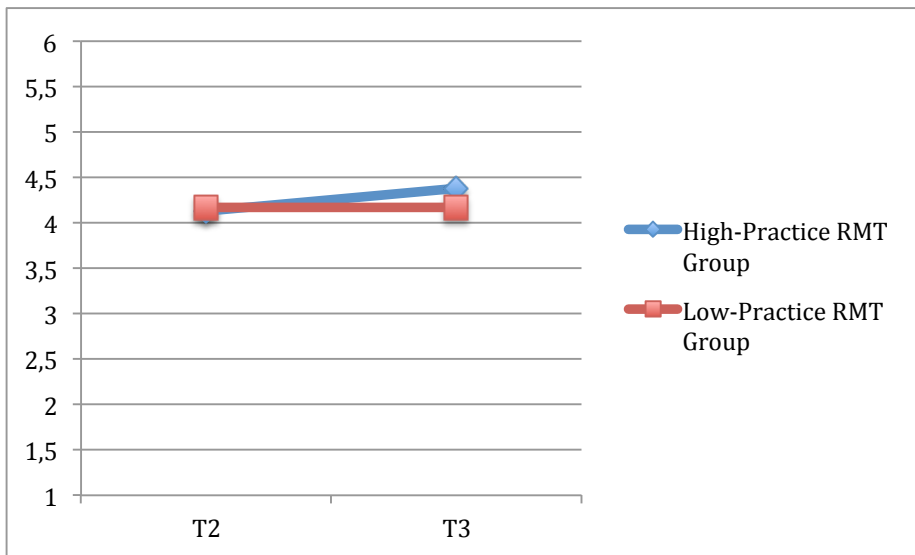
**Differences Between the High-Practice RMT Group and the Low-Practice RMT Group in the Follow-Up Period (Study 2 (Part 3a)),  
Analysed With 2 (Group) X 2 (Time) ANOVA and Effect Sizes Using Cohen's d.**

Outcome	High practice RMT group		Low practice RMT group		F Time x Group	Effect size Cohen's d
	T2 M (SD)	T3 M (SD)	T2 M (SD)	T3 M (SD)		
Mindfulness (MAAS)	4.13 (0.49)	4.38 (0.67)	4.17 (0.51)	4.17 (0.60)	1.808	0.38
Self-Compassion (SCS)	3.46 (0.50)	3.55 (0.61)	3.29 (0.61)	3.10 (0.62)	3.938†	0.55
Compassion (CS)	4.00 (0.44)	3.91 (0.39)	3.95 (0.42)	3.75 (0.45)	1.155	0.30
Perceived Stress (PSS)	2.55 (0.62)	2.49 (0.67)	2.48 (0.59)	2.77 (0.84)	2.476	0.43
Subjective Happiness (SHS)	5.48 (1.11)	5.58 (0.89)	5.29 (1.10)	5.01 (1.16)	1.799	0.37

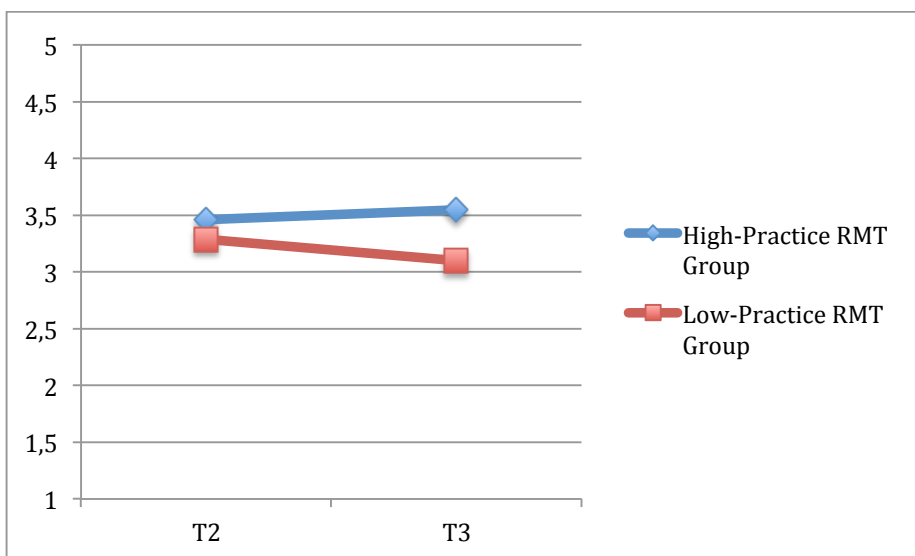
*Note.* RMT = Relational Mindfulness Training; MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; CS = Compassion Scale; PSS = Perceived Stress Scale; SHS = Subjective Happiness Scale; M = mean; SD = standard deviation; T2 = post-intervention period; T3 = 6-month follow-up period.

\*p<0.05. \*\*p<0.01. †p<0.1

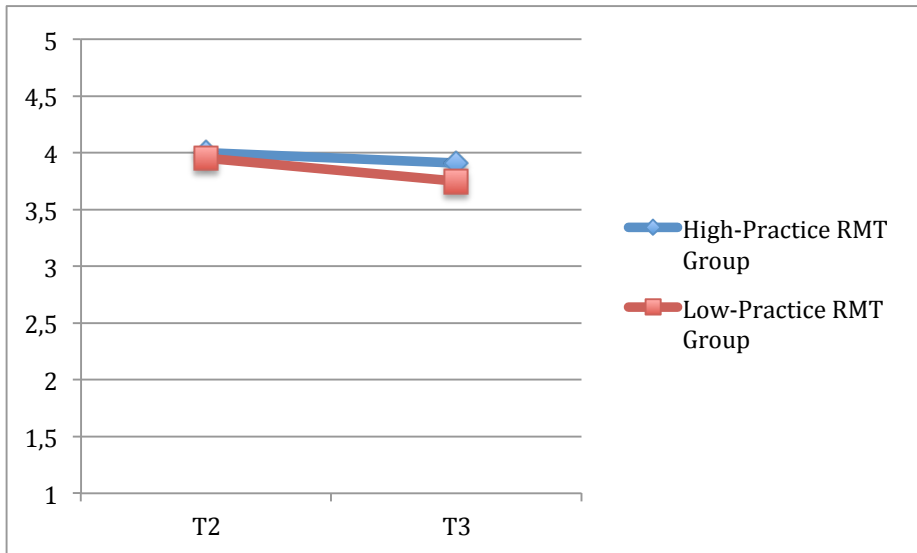
**FIGURE 15: Differences in Mindfulness Between the High-Practice RMT Group and the Low-Practice RMT Group in the Follow-Up Period (Study 2 (Part 3a)).**



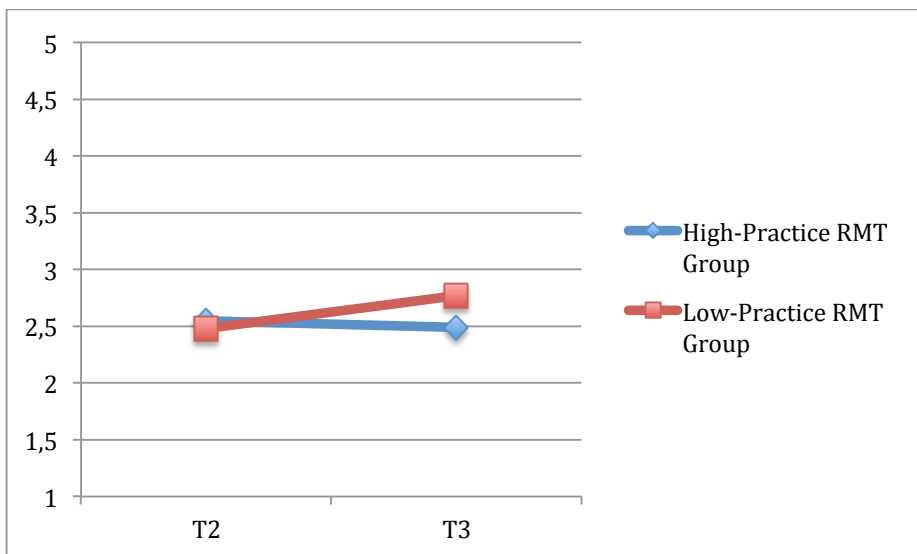
**FIGURE 16: Differences in Self-Compassion Between the High-Practice RMT Group and the Low-Practice RMT Group in the Follow-Up Period (Study 2 (Part 3a)).**



**FIGURE 17: Differences in Compassion Between the High-Practice RMT Group and the Low-Practice RMT Group in the Follow-Up Period (Study 2 (Part 3a)).**

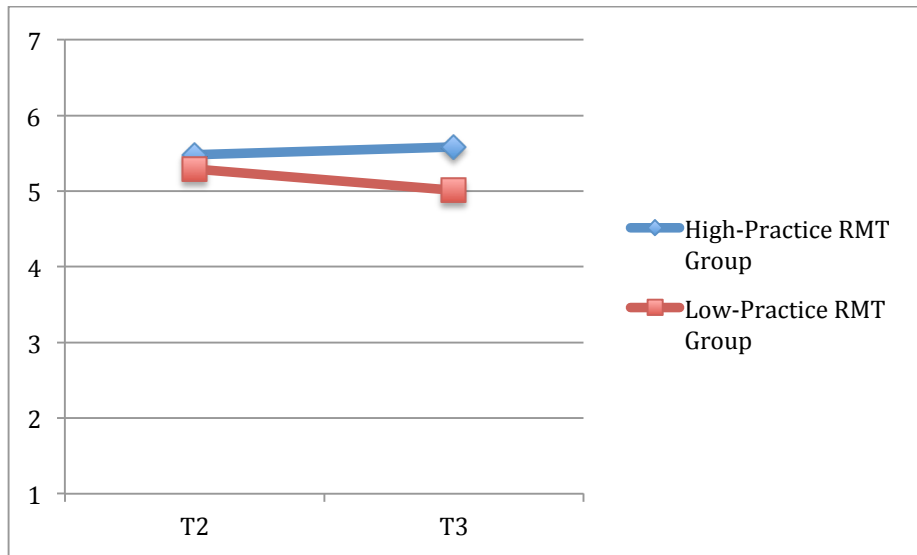


**FIGURE 18: Differences in Perceived Stress Between the High-Practice RMT Group and the Low-Practice RMT Group in the Follow-Up Period (Study 2 (Part 3a)).**





**FIGURE 19: Differences of Subjective Happiness Between the High-Practice RMT Group and the Low-Practice RMT Group in the Follow-Up Period (Study 2 (Part 3a)).**



#### 4.2.3.2 Comparison of the High-Practice RMT Group and the Control Group in the Long Run

The 2 (Group) X 3 (Time) analysis of variance was used in order to determine whether the *high-practice RMT group* would significantly differ from the *control group* for the *T1*, *T2* and *T3* period. Results showed highly significant differences between the groups in the case of *mindfulness* (with high effect size) ( $F(2, 75) = 14.023, p < .01, d = .88$ ), and *self-compassion* (with high effect size) ( $F(2, 75) = 11.889, p < .01, d = .81$ ). Those results are notably higher than results from the analysis of long-term effects of the differences between the *RMT group* and the *control group* (*Study 2 (Part 2)*). The analysis also showed a highly significant difference between the *high-practice RMT group* and the *control group* for *perceived stress* (with medium effect size) ( $F(2, 75) = 5.918, p < .05, d = .57$ ). However, these results remain similar to those obtained in the *Study 2 (Part 2)*. And finally the effects are non-significant for *compassion* (with small effect size) ( $F(2, 75) = 1.692, p = .189, d = .31$ ) and *subjective happiness* (with small effect size) ( $F(2, 75) = 2.171, p = .119, d = .35$ ). See Table 10 for the overview of all effects and Figure 20 – 24 for the graphical characterization of differences between both groups for each of the examined variables.

The paired sample t-test was also used to examine the differences between *T1* and *T3* within *high-practice RMT group*. Results show significant differences for *mindfulness* ( $t(19) = -3.364, p < .01$ ), *self-compassion* ( $t(19) = -3.254, p < .01$ ). Similarly to analysis performed in the *Study 2 (Part 2)*. The results show only partial effects at  $p < .10$  for *perceived stress* ( $t(54) = 1.761, p = .094$ ), and *subjective happiness* ( $t(32) = -1.885, p = .075$ ). Again, the growth of the *compassion* was not significant ( $t(54) = -.721, p = .479$ ). There was no need to run this analysis for the *control group*, because it has already been performed in *Study 2 (Part 2)* and has not shown significant effects for any of the examined variables.

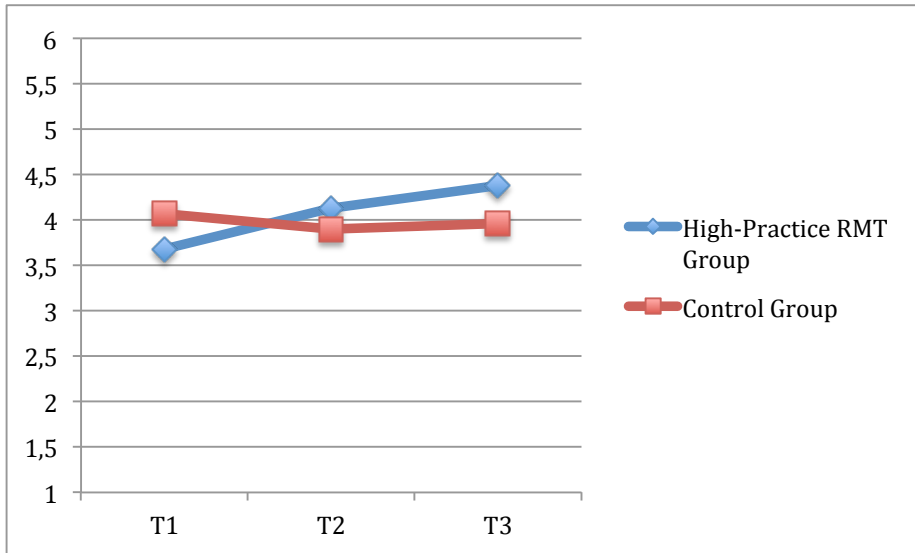
**TABLE 10**  
**Differences Between the High-Practice RMT Group and the Control Group in the Long Run (Study 2 (Part 3b)),**  
**Analysed With 2 (Group) X 3 (Time) ANOVA and Effect Sizes Using Cohen's d.**

Outcome	High practice RMT Group			Control Group			F Time x Group	Effect size Cohen's d
	T1 M (SD)	T2 M (SD)	T3 M (SD)	T1 M (SD)	T2 M (SD)	T3 M (SD)		
Mindfulness (MAAS)	3.68 (0.65)	4.13 (0.49)	4.38 (0.67)	4.07 (0.55)	3.90 (0.57)	3.96 (0.63)	14.023**	0.88
Self-Compassion (SCS)	3.04 (0.60)	3.46 (0.50)	3.55 (0.61)	2.90 (0.63)	2.91 (0.64)	2.85 (0.64)	11.889**	0.81
Compassion (CS)	3.86 (0.38)	4.00 (0.44)	3.91 (0.39)	3.75 (0.61)	3.72 (0.64)	3.70 (0.63)	1.692	0.31
Perceived Stress (PSS)	2.79 (0.65)	2.55 (0.62)	2.49 (0.67)	2.79 (0.67)	3.04 (0.69)	3.07 (0.81)	5.918**	0.57
Subjective Happiness (SHS)	5.08 (1.12)	5.48 (1.11)	5.58 (0.89)	4.84 (1.33)	4.77 (1.25)	4.83 (1.28)	2.171	0.35

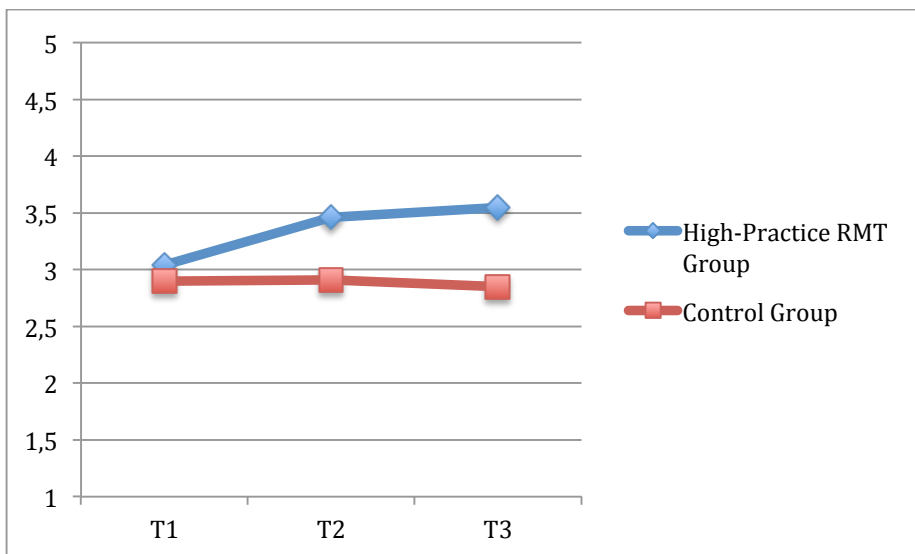
*Note.* RMT = Relational Mindfulness Training; MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; CS = Compassion Scale; PSS = Perceived Stress Scale; SHS = Subjective Happiness Scale; M = mean; SD = standard deviation; T1 = pre-intervention period; T2 = post-intervention period; T3 = 6-month follow-up period.

\*p<0.05. \*\*p<0.01. †p<0.1

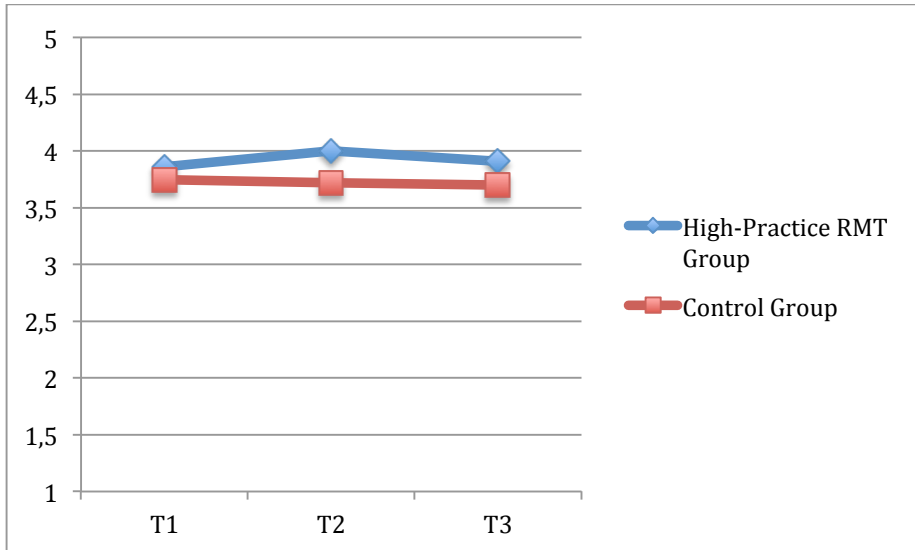
**FIGURE 20: Differences in Mindfulness Between the High-Practice RMT Group and the Control Group in the Long Run (Study 2 (Part 3b)).**



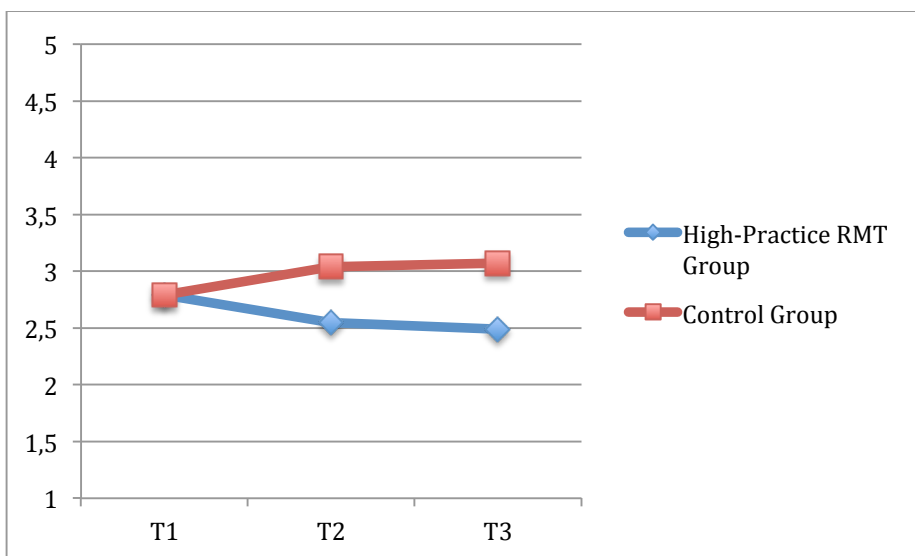
**FIGURE 21: Differences in Self-Compassion Between the High-Practice RMT Group and the Control Group in the Long Run (Study 2 (Part 3b)).**



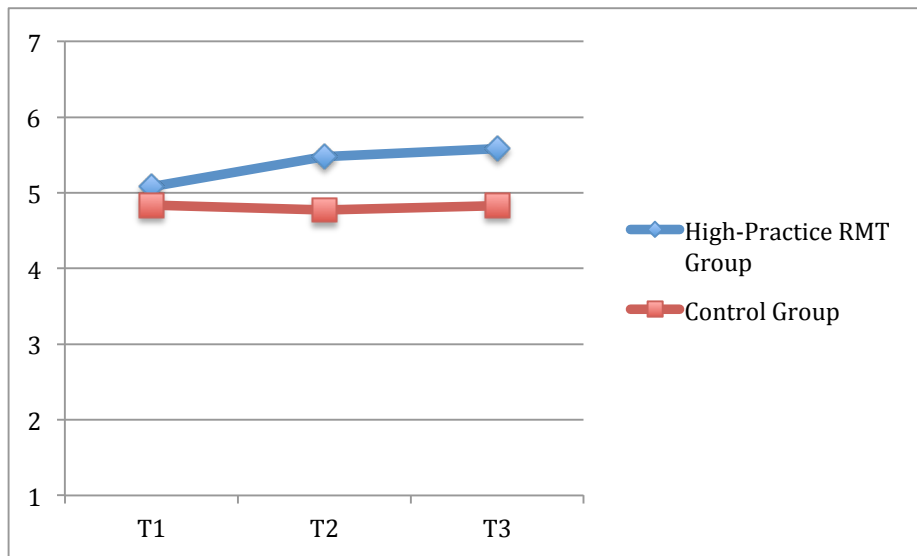
**FIGURE 22: Differences in Compassion Between the High-Practice RMT Group and the Control Group in the Long Run (Study 2 (Part 3b)).**



**FIGURE 23: Differences in Perceived Stress Between the High-Practice RMT Group and the Control Group in the Long Run (Study 2 (Part 3b)).**



**FIGURE 24: Differences of Subjective Happiness Between the High-Practice RMT Group and the Control Group in the Long Run (Study 2 (Part 3b)).**



## 5 Discussion

The previous chapters have introduced *Relational Mindfulness Training (RMT)* and have presented results from the examination of its effects on the sample of management students. Chapters 5.1 and 5.2 interpret the results from the *Study 1* and the *Study 2*. Chapter 5.3 presents the implications of both studies. Chapter 5.4 focuses on the limitations of the *Study 1* and the *Study 2* and *Chapter 5.5* presents recommendations for future research. Finally, Chapters 5.6, 5.7 and 5.8 discuss the implications for *mindfulness practice*, pedagogical practice and organizational practice.

### 5.1 Interpretation and Comparison of the Results of Study 1

*Study 1* was conducted on the sample of 66 management students. This study focused on the examination of the effects of *RMT participation* on *mindfulness (H1)*, *self-compassion (H2)*, *authentic leadership (H3)* and *empathic accuracy (H4)*. Results showed a significant positive effect of participation in *RMT* on *mindfulness*, *authentic leadership* and *self-compassion*. Thus, the support was found for hypotheses *H1*, *H2* and *H3*. Results also showed marginal support on the level of  $p < .10$  for the effects on *empathic accuracy (H4)*.

Results on *mindfulness* and *self-compassion* were repeatedly examined in the previous studies that focused on the examination of the *Mindfulness-Based Stress Reduction (MBSR)* and the *Mindfulness-Based Cognitive Therapy (MBCT)* and used the same measures as the *Study 1*. I provide a comparison of the effects of this study with the previous *randomized control trials (RCTs)* to demonstrate the differences between *RMT*, the *MBSR* and the *MBCT*. Differences on *authentic leadership* and *empathic accuracy* are not demonstrated because they were not examined by studies in the field of *MBIs* (with the exception of Mascaro et al., 2013). Firstly, the participation in *RMT* led to the .39 mean increase of *mindfulness* that was measured by the *Mindful Attention Awareness Scale (MAAS)*. Four *RCTs* carried out on the *MBSR* (see Table 11) yielded an average .45 increase of the *mindfulness* while the four studies on the *MBCT* (see Table 11) showed a .26 increase of the *mindfulness*. These comparisons suggest that *RMT* is similarly effective intervention for the

development of *mindfulness* as classic *MBIs*. Secondly, participation in *RMT* led to a .32 mean increase of the *self-compassion* that was measured by *Self-Compassion Scale (SCS)*. In comparison with the *RMT group*, the four studies which were done on the *MBSR* (see Table 11) showed an average .44 increase of the *self-compassion* while the two studies on the *MBCT* showed a .34 increase of the *self-compassion*. Results show that *RMT* is similarly effective *MBI* for the development of *self-compassion* as the *MBCT*, however it is slightly less effective than the *MBSR*. Those suggestions might be limited to the fact that the studies on *RMT*, the *MBSR* and the *MBCT* were conducted on different types of samples. This limitation is discussed in the Chapter 5.4.

Results also showed significant positive effect of *RMT participation* on the development of basic aspects of the *authentic leadership* that were measured by *Authentic Leadership Self-Assessment Questionnaire (ALSAQ)*. Although this scale has not been validated for the experimental purposes, findings of the analysis suggest that participation in the *RMT* might have positive influence on the development of some qualities of the *authentic leader*.

Finally this study predicted a positive impact of *RMT participation* on the *empathic accuracy* that was measured by the *Reading Mind in the Eyes Test (RMET)*. In comparison with the *control group*, the analysis revealed that effect is marginally significant on the level of  $p < .10$ . The *RMT group* showed the increase in the overall *empathic accuracy* score on .55 (out of 23 items) with a small effect size. Only the study of Mascaro et al. (2013) has examined the effects of *loving-kindness meditation intervention (LKMI)* on *empathic accuracy* that was measured by the *RMET*, showing a 1.50 improvement in the overall score. In accordance with Mascaro et al. (2013), I propose that *mindfulness* training might be beneficial to the development of *empathic accuracy*. This study is the first one to suggest this impact also for *relational mindfulness practice*.



**TABLE 11****Change of the Mean Values Between T1 and T2: Comparison of the Results From Study 1 and Study 2 (Part 2) with Other Studies.**

Study	I	N	Sample	$\Delta$ MAAS T1-T2	$\Delta$ SCS T1-T2	$\Delta$ PSS T1-T2	$\Delta$ SHS T1-T2	$\Delta$ CS T1-T2
Study 1	RMT	33	University Students	.39	.32	-	-	-
Study 2	RMT	65	University Students	.39	.42	-.37	.43	.19
Shapiro et al. 2005	MBSR	18	Health care employees	-	.61	-.51	-	-
Shapiro et al. 2007	MBSR	32	University Students	.25	.48	-.63	-	-
Oman et al. 2008	MBSR	15	University Students	-	-	-.24	-	-
Nyklíček & Kuijpers 2008	MBSR	29	Healthy adults	-	-	-.71	-	-
Klatt et al. 2009	MBSR-ld	22	University employees	.36	-	-.31	-	-
Shapiro et al. 2011	MBSR	15	University Students	.47	.11	-.31	-	-
Jensen et al. 2012	MBSR	16	Healthy adults	.73	-	-	-	-
Frank et al. 2013	MBSR	18	High school teachers	-	.56	-	-	-
Shahar et al. 2010	MBCT	26	MDD patients	.32	-	-	-	-
Kuyken et al. 2010	MBCT	49	MDD patients	-	.30	-	-	-
Lee & Bang 2010	MBCT	30	Healthy adults	-	.38	-	-	-
De Raedt et al. 2012	MBCT	44	MDD patients	.25	-	-	-	-

Perich et al. 2013	MBCT	48	BD patients	.55	-	-	-	-
O'Doherty et al. 2015	MBCT	34	CHD patients	-.08	-	-	-	-
Neff & Germer 2013	LKMI	24	Healthy adults	-	1.13	.31	.52	.29
Jazaieri et al. 2014	LKMI	50	Healthy adults	-	-	-	.16	-
Weytens et al. 2014	LKMI	35	University Students	-	-	.34	.51	-
Weibel et al. 2016	LKMI	34	University Students	-	.34	-	-	-

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*Note.* RMT = Relational Mindfulness Training; MAAS = Mindful Attention Awareness Scale;

SCS = Self-Compassion Scale; CS = Compassion Scale;

PSS = Perceived Stress Scale; SHS = Subjective Happiness Scale;

MBSR = Mindfulness-Based Stress Reduction; ld = low dose; MBCT = Mindfulness-Based Cognitive Therapy

MDD = Major Depressive Disorder; CHD = Coronary Heart Disease; BD = Bipolar Disorder

M = mean; SD = standard deviation; LKMI = loving-kindness meditation intervention;

I = Intervention; N = Number of participants;

T1 = pre-intervention period; T2 = post-intervention period.

## 5.2 Interpretation and Comparison of the Results of Study 2

*Study 2* extended findings of the *Study 1* in a few ways. It was conducted on a notably bigger sample, focused on long-term effects of the *RMT* and involved two facilitators in the training program. The first part of this study (*Study 1 (Part 1)*) focused on the examination of the effects of *RMT participation* in the short run. The second part (*Study 2 (Part 2)*) examined in the effects of *RMT participation* in the long run. The third part (*Study 2 (Part 3)*) focused on the examination of the effects of the individual practice in the follow-up period.

### 5.2.1 Interpretation and Comparison of the Effects of RMT in the Short Run

*Study 2 (Part 1)* (N = 128) focused on the examination of the short-term effects of *RMT participation* on *mindfulness* (H2a), *self-compassion* (H2b), *compassion* (H2c), *perceived stress* (H2d) and *subjective happiness* (H2e). Results showed a significant positive effect of participation in *RMT* on all mentioned variables. Thus, the support was found for all hypotheses.

Similarly to *Study 1*, the results showed a .39 increase between baseline (*T1*) and the post-intervention period (*T2*) on *mindfulness*. The results also showed a .42 increase of *self-compassion*, which is a better result than in the *Study 1*. In summary, those results support the suggestions made in *Study 1* that *RMT* is a similarly efficient intervention to the *MBSR* and the *MBCT* in terms of the development of *mindfulness* and *self-compassion*. The new variable of *Study 2* was *perceived stress* which was measured by the *Perceived Stress Scale (PSS)*. *Perceived stress* showed a .37 decrease between *T1* and *T2*. Six *RCTs* carried out on the *MBSR* (see Table 12) yielded an average .45 decrease of the *perceived stress*, while the two studies on *loving-kindness meditation interventions (LKMI)*s (see Table 12) showed a .33 decrease of *perceived stress*. Results show that *RMT* is a slightly more effective intervention for the development of *perceived stress* than *LKMIs*. However, it is slightly less effective than the *MBSR*. Again, those suggestions might be limited to the fact that the studies on *RMT*, the *MBSR*, the *MBCT* and the *LKMIs* were conducted on different types of samples. This limitation is discussed in the Chapter 5.4.

Another new outcome of the Study 2 was *subjective happiness*, which was measured by the *Subjective Happiness Scale (SHS)*. This variable was examined by studies on *LKMIs* that yielded a .40 increase of *subjective happiness*. Participation in the *RMT* showed a slightly better increase of .43 of *subjective happiness*. The last outcome of the Study 2 was *compassion* that was measured by the *Compassion Scale (CS)*. I have found only one *LKMI* that showed a .29 increase of *compassion* between *T1* a *T2*. Participation in *RMT* showed slightly weaker increase of .19.

### **5.2.2 Interpretation and Comparison of the Effects of RMT in the Long Run**

*Study 2 (Part 2)* (N = 110) focused on the examination of *RMT participation* in the long run that included the baseline period (*T1*), the post-intervention period (*T2*) and the six months follow-up period (*T3*). Again, those effects were examined for *mindfulness (H3a)*, *self-compassion (H3b)*, *compassion (H3c)*, *perceived stress (H3d)* and *subjective happiness (H3e)*. Results showed a significant positive effect of the *RMT participation* on *mindfulness*, *self-compassion* and *perceived stress*. Thus, the support was found for hypotheses *H3a*, *H3b* and *H3d*. Results also showed marginal support on the level of  $p < .10$  for *compassion* and non-significant effect for *subjective happiness*.

Similarly to the previous part, I provide comparison of the effects of *RMT* in the long run with *randomized control trials (RCTs)* that were conducted for the *MBSR*, the *MBCT* and the *LKMIs* (see Table 12). I have found only 2 studies for each intervention that included *T3* measurements. Therefore, the comparison is only illustrational. Again, the results in comparison with other studies showed that the effects of *RMT* in the long run are moderate. Again, those suggestions might be limited to the fact that the studies on *RMT*, the *MBSR*, the *MBCT* and the *LKMIs* were conducted on different types of samples. This limitation is discussed in the Chapter 5.4.

### **5.2.3 Interpretation of the Effects of Individual Practice**

*Study 2 (Part 3)* focused on the examination of the effects of individual practice on the outcomes of the study in *T3*. It was hypothesized that individual practice will contribute to a sustainable improvement of *mindfulness (H4a)*, *self-compassion (H4b)*, *perceived stress (H4c)* and *subjective happiness (H4d)*. These

hypotheses were based on the assumption that the individual practice would support a further development of individual-focused variables after the end the intervention. The improvement for the *compassion* was not expected (*H4e*), because this variable is a relationship-focused and thus less likely supported by the individual practice.

The first analysis (N = 54) compared the results between the *high-practice RMT group* and the *low-practice RMT group* in the period between *T2* and *T3*. The results showed marginal support on the level of  $p < .10$  for *self-compassion* and non-significant effects in the case of other variables. However, consistently with the expectations, the results from paired sample t-test showed that there was notable improvement for all individual-focused variables in the *high-practice RMT group*, but the level of *compassion* actually decreased.

Furthermore, in the case of the *low-practice RMT group*, the results from the paired sample t-test show that there was a significant decrease of *self-compassion* and *compassion*, non-significant decrease of *subjective happiness*, non-significant increase of *perceived stress* and practically no change of *mindfulness*. Therefore, although the differences between the *high-practice RMT group* and the *low-practice RMT group* were not significant, the results suggest that participants of the *low-practice RMT group* performed notably worse in the follow-up period. This effect was most notable for the *self-compassion* which is a finding that is consistent with the expectations of the study. However, the effect on *compassion* is more surprising and suggests that individual practice might actually weaken the decrease of *compassion* in the follow-up period. The sample that was included in this analysis was very small. Therefore it is possible that the differences between the *high-practice RMT group* and the *low-practice RMT group* would be significant in the case of a higher sample size.

**TABLE 12**

**Change of the Mean Values Between T2 and T3: Comparison of the Results From Study 2 (part 2) With Other Studies.**

Study	I	N	Sample	T3 N	ΔMAAS		ΔSCS		ΔPSS		ΔSHS		ΔCS	
					T1-T2	T2-T3	T1-T2	T2-T3	T1-T2	T2-T3	T1-T2	T2-T3	T1-T2	T2-T3
Study 2 (part 2)	RMT	55	US	6 m	.33	.08	.38	-.08	-.35	.16	.44	-.15	.17	-.17
Study 2 (HP)	RMT	20	US	6 m	.45	.25	.42	.09	-.24	-.06	.40	.10	.14	-.09
Study 2 (LP)	RMT	34	US	6 m	.26	.00	.37	-.19	-.42	.29	.46	-.28	.19	-.20
Oman et al. 2008	MBSR	15	US	2 m	-	-	-	-	-.24	-.07	-	-	-	-
Shapiro et al. 2011	MBSR	15	US	12 m	.47	.02	.11	.03	-.31	.09	-	-	-	-
Perich et al. 2013	MBCT	48	BD P	6 m	.55	-.07	-	-	-	-	-	-	-	-
O'Doherty et al. 2015	MBCT	34	CHD P	6 m	-.08	1.3	-	-	-	-	-	-	-	-
Weibel et al. 2016	LKMI	34	US	2 m	-	-	.34	-.06	-	-	-	-	-	-

*Note.* RMT = Relational Mindfulness Training; MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; CS = Compassion Scale; PSS = Perceived Stress Scale; SHS = Subjective Happiness Scale; MBSR = Mindfulness-Based Stress Reduction; MBCT = Mindfulness-Based Cognitive Therapy; US = university students; BD P = bipolar disorder patients; CHD = coronary heart disease patients; LKMI = loving-kindness meditation intervention; HP = High practice RMT group; LP = Low Practice RMT group; M = mean; SD = standard deviation; I = Intervention; N = Number of participants; T2 = post-intervention period; T3 = follow-up period; T3 N = number of months between T2 and T3.

Second analysis (N = 74) focused on the examination of the differences between the *high practice RMT group* and the *control group* in order to demonstrate the overall results of high-practitioners. Despite the lower sample that was included in this study, the analysis showed notably better results than in the *Study 2 (Part 2)* (N = 110). More specifically, the results are better for *mindfulness* and *self-compassion* (each of variables showed high effects size). The differences between *compassion*, *perceived stress* and *subjective happiness* remained almost similar.

A comparison of the mean effects of the *high-practice RMT group*, the *low-practice RMT group* and other comparable studies (*MBSR*, *MBCT* and *LKMIs*) is demonstrated in the Table 12. Again the Table 12 indicates that there was no notable difference between the *high-practice RMT group* and the *low-practice RMT group* in the period between *T1* and *T2*, but the difference was notable for the period between *T2* and *T3*. However, this was not the case for the *compassion*. Limitations that might be caused by the different types of samples across those studies are discussed in the Chapter 5.4.

### **5.3 Implications of the Results from Study 1 and Study 2**

This thesis aimed to develop and validate *Relational Mindfulness Training (RMT)* for its impact on the development of characteristics that indicate *effective handling of daily situations*, *well-being* and *healthy relationships*. The *effective handling of daily situations* and the *well-being* represented the individual-focused outcomes of *RMT*, while the *healthy relationships* represented the relationship-focused outcomes of *RMT*. This chapter firstly inquires about *the individual-focused outcomes*. Secondly, it focuses on the relationship-focused outcomes. And thirdly, it inquires about the benefits of *RMT* for management education.

#### **5.3.1 Individual-Focused Outcomes of RMT**

In the case of the individual-focused outcomes, the results from two studies of this thesis showed that *RMT* is a comparably efficient intervention for the development of *mindfulness*, *self-compassion* and the decrease of *perceived stress*. These effects also endured in the long run and their mean effects were similar to those of the *MBSR*, the *MBCT* or the *LKMIs*. Therefore, the significant increase of

*mindfulness* and *self-compassion* indicate that participation in the *RMT* may support the *effective handling of daily situations*. Furthermore, the significant decrease of the *perceived stress* suggests that participation in the *RMT* might have a positive impact on *well-being* of participants. Positive impact of *RMT* participation on *well-being* was also partially supported by significant effect of the *RMT participation* on *subjective happiness* in the short run. However, this effect did not endure in the long run neither in the case of the *RMT group*, nor in the case of the high-practice *RMT* group. Current evidence behind the impact of *RMT participation* on *well-being* is, therefore, more likely limited to the significant decrease of *perceived stress*.

The fact that *RMT* showed similarly strong effects on the increase of *individual-focused outcomes* as the *MBIs* and the *LKMIs* also raises several questions. Contrary to those interventions that are almost exclusively focused on the individual practice, maximally 8 hours from total 22 hours are dedicated to the individual practice in the *RMT* curriculum. Design of the *Study 2* did not allowed to access the pure effects of the *relational mindfulness*. However, the findings suggest that the practice of *relational mindfulness* either increases individual-focused outcomes directly through the relational interaction or indirectly through making the *individual mindfulness* and *LKM practice* more efficient.

Furthermore, 20 participants out of total 54 participants indicated that they engaged 2 – 3 days per week or more in the individual practice during the 6-month follow-up period, while only 5 participants reported to engage in a frequent individual practice before the start of the *RMT*. Result from the linear regression also showed that there was no significant correlation between the individual practice among the *RMT participants* before the start of *RMT (T1)* and the individual practice after the end of *RMT (T3)*. Those findings therefore suggest that participation in the *RMT* may have inspired participants to engage and maintain a regular individual practice in the period between *T2* and *T3*. Although some pioneering studies examined the impact of the follow-up home practice on the results in the follow-up period (Neff & Germer, 2011; Morgan et al., 2014; De Bruin et al., 2017), I have not found any data about the actual number of participants who maintained their home practice. It is therefore not possible in this moment to compare the findings of this study with other studies.



### 5.3.2 Relationship-Focused Outcomes of RMT

Three variables that were examined in this thesis can be considered as relationship-focused outcomes of *RMT*, that is the *authentic leadership*, *empathic accuracy* and *compassion*. These outcomes were not compared with results from other studies, because they are less examined outcomes of the *MBIs* and the *LKMIs*. Therefore, the two studies of this thesis are among the first ones that explored them. The *Study 1* showed the significant effects of *RMT* participation on *authentic leadership* and the results also revealed partial support for the *empathic accuracy*. Those results suggest that *relational mindfulness practice* may help individuals to develop skills that are related to better understanding and coping with others, and thus creating and maintaining the *healthy relationships*.

Subsequently, the results from *Study 2* showed positive effects of the *RMT participation* on *compassion*. This finding supports the suggestion that participation in *RMT* has positive influence on the development of concern and caring for others that is a crucial aspect of creating and maintaining the *healthy relationships*. However, the significant effects on *compassion* did not sustain in the follow-up period neither for the *high-practice RMT group* nor for the *low-practice RMT group*. This finding supports the assumption that *relational practice* in *RMT* has the main role on the development of *compassion*. *RMT* is the intervention where the participants spend much of a time in an opened and warm interaction, where they co-create the environment of mutual caring and learn to care more for others as well as to receive caring from other. Therefore, engaging in the *relational mindfulness practice* in such environment might help participants to express a higher level of *compassion*. However, in the case of the 8-week classic regime, the end of the program also ends the contact with group that kept participants attuned to more *compassionate* patterns. This result implies, that future interventions could be accompanied by a supervised follow-up groups that would support the sustainability of the relationship-focused outcomes such as *compassion*. This suggestion is discussed in the Chapters 5.7. and 5.8.

### 5.3.3 Benefits of RMT for Management Education

The results of this thesis also imply several benefits for the management education. Firstly, the significant effect on *compassion* and partially significant effect on *emphatic accuracy* suggest that RMT might represent another brick to the endeavour of making management education more pro-socially oriented. The application of the *RMT* in management curriculum might contribute to the development of capacity and motivation to care for others that may, in turn, help students to better understand and cope with both professional and personal relationships.

Secondly, the significant impact on the basic aspects of *authentic leadership* suggests that *RMT* may help students to develop some leadership skills prior to performing of their actual leadership role. The experience with leadership cannot be substituted by education, but some qualities such as *self-awareness* or internalized moral perspective could be possibly enhanced during the training in relational mindfulness. Thirdly, a significant effects on *mindfulness*, *self-compassion* and *perceived stress* imply that participation in *RMT* might help students to better handle *stress* and failures during their studies, as well as in the subsequent role in management or leadership.

## 5.4 Limitations of Study 1 and Study 2

Several limitations of the *Study 1* were taken care of in the *Study 2*. Firstly, contrary to the *Study 1* (N = 66), the first part of the *Study 2* was conducted on 128 participants. Size of this sample classifies the second study above the other comparable studies in terms of the sample size (see Table 11). Secondly, the *Study 2* also focused on the examination of the effects of *RMT participation* in the long run that provides stronger evidence about the impact of the intervention to the real life. Finally, the *Study 2* also included two *mindfulness teachers* that did not show any significant differences between any of the examined variables. This finding supports the assumption that effects of the study are the result of the training program and not the personal influence of the particular facilitator.

Limitation of both studies can be observed in the reliance on self-report questionnaires, a tendency that is very common in the *mindfulness research*, but often criticized (Bergomi et al., 2013). This is particularly the case of the *Mindful Attention Awareness Scale (MAAS)* that tends to be criticized for the negative statement of the items and unidimensionality (Grossman, 2011). However, as the Chapter 2.2 showed, the other validated *mindfulness scales* have also several issues and most of them are not appropriate for the non-experienced *mindfulness practitioners* (Bergomi et al., 2013). It was also demonstrated that the *MAAS* is the far most used measure of *mindfulness* in the organizational and educational research (Sutcliffe et al., 2016). Furthermore, unlike the other scales, the *MAAS* shows a good *predictive validity*, because it predicts outcomes that are consistent with the *mindfulness theory* (Michalak et al. 2008; Bergomi et al., 2013). Therefore, the *MAAS* does not provide such a complex examination of *mindfulness* as *other mindfulness scales*, but I assume that it is the best choice for the research that is conducted on students that lack the experience with *meditation*. The limitation of reliance on the self-report questionnaires was also partially compensated by the fact that the *Reading Mind in Eyes Test (RMET)* was included to the *Study 1*.

I assume that the main weak point of using the self-report questionnaires can be observed in the possible non-equivalence of placebo effect between the *RTM group* and the *control group* (Bergomi et al., 2013; Grossman, 2011). This *non-equivalence* might be caused by the fact that design of both studies was not fully randomized, as the participants of the *active control group* were included in the study after the randomization between the *RMT group* and the *passive control group*.

Firstly, the *placebo effect* might be caused by the different rate of an interest in *mindfulness practice*. Participants that were randomized between the *RMT group* and the *passive control group* decided to participate in the research because of their initial interest for *mindfulness practice*. However, the participants that were included in the *active control group* were part of the alternative career development course and did not explicitly show the interest for *mindfulness practice*. This limitation can be partially compensated by the fact that the analysis of the baseline control variable *previous meditation or mindfulness practice* did not show any significant differences neither for the *Study 1* ( $p = .125$ ), nor for the *Study 2* ( $p = .223$ ). These results suggest

that participants of both *control groups* were similarly familiar with the *mindfulness practice*. Furthermore, in the case of both studies, the 2 (Group) x 2 (Time) analysis of the variance and the paired sample t-test did not show significant differences between the *active control group* and the *passive control group* for any of the examined variables.

Secondly, the non-equivalence of placebo effect also could be caused by different motivation (among the groups) to please the experimenter. I suggest that this limitation might be weakened by a possibly similar tendency to be biased among the participants. *RMT group participants* might want to please the experimenter (who was also a facilitator of *RMT*) out of the gratitude for being a part of the *RMT* program. Participants of the *passive control group* might want to please the experimenter out of gratitude for being on a waiting list for the *RMT* program. And the *active control group participants* might want to please the experimenter out of the fact that they were part of the career development course where the experimenter was also one of the main facilitators. Therefore, I assume that if there was the *placebo effect* among the participants of the *Study 1* and *Study 2*, there is a high possibility that it was close to equal among all three conditions.

Significant effects on *authentic leadership* in the *Study 1* are limited by the fact that *authentic leadership* was measured by the *Authentic Leadership Self-Assessment Questionnaire (ALSAQ)* that has not been validated for the experimental purposes yet (Nortonhouse, 2013). This scale was derived from the original peer-report *Authentic Leadership Scale (ALQ)* (Walumbwa et al., 2008). The significant findings from *ALSAQ*, therefore, suggest that there might be a possible significant effect in the case of *ALQ* in the future. However, this peer-report measure is not suitable for the sample of students. The validation of the *ALSAQ* for experimental purposes might be the way, how to examine some aspects of the *authentic leadership* in higher education in the future.

I recognize another limitation in the fact, that design of both studies did not clearly access the effects of *relational mindfulness practice*. The comparison of the *high-practice RMT group* with the *low-practice RMT group* simply suggested that *compassion* was more influenced by the *relational mindfulness practice* and less influenced by the *individual mindfulness practice*.

And finally, the findings of this thesis are also limited to the fact that both studies were conducted on the samples of management students. Although the *RMT* has been constructed in order to be a suitable intervention for contemporary organizations, this initial assumption lacks any evidence in the present moment. The challenges of the application of *RMT* in the organizational settings are discussed in the Chapter 5.8. Furthermore, the comparison between *RMT* and the *MBSR*, the *MBCT* and the *LKMIs* suggested that *RMT* is a similarly efficient intervention for the development of *mindfulness* and *self-compassion* and the decrease of *perceived stress*. These suggestions are limited to the fact that those studies included different types of samples (see Table 11). More specifically, almost all studies on the *MBCT* were conducted on the patients with a clinical diagnosis (mostly with a major depressive disorder). Therefore, it might be possible that examination of those studies on the healthy adults would show better results in the comparison with the *RMT*. On the other hand, half of the studies on *MBSR* and *LKMIs* included healthy adults and teachers and half of them included university students. Therefore, it might be possible that those studies would show worse results in comparison with the *RMT* if they were all conducted on the university students. It would be suitable to examine those suggestions empirically in the future, but more students-focused studies on the *MBSR*, the *MBCT* and the *LKMIs* need to be conducted in order to make it possible.

## **5.5 Recommendations for Future Studies**

First of all, future research should address the fact that most of contemporary studies in the *field of mindfulness* and *LKM* are still based on self-report questionnaires. The *RMET* was successfully applied in the *Study 1*. However, the evidence of this measure in *mindfulness research* is still very limited. Future studies should further explore its effects. Similarly to that, the other *non self-report methods* like the *Attention Network Test (ANT)* (Fan et al., 2002) or the *Zurich Prosocial Game* (Leiberg et al., 2011) might be considered. In the case of the organizational research, the utilization of peer-report methods also might represent great contribution to the field. For example, in the case of *authentic leadership*, the researches might consider using the already mentioned peer-report *Authentic Leadership Questionnaire (ALQ)* (Walumbwa et al., 2008).

Future studies should also attempt to better control the effects of particular interventions. The utilization of an *alternative intervention* as the *active control group* is becoming a necessary trend for quantitative studies in the field of *mindfulness* (Creswell, 2017). However, most of the studies in organizational and educational settings have been so far based on *passive control conditions* only. Furthermore, well-controlled *RCTs* might be particularly beneficial for the studies on *relational mindfulness*. Following the inspiration from the two studies of the brief effects of *relational mindfulness* (Kohlenberg et al. 2015; Bowen et al. 2012), the researchers could focus on a similar examination of the effects of an 8-week training in *relational mindfulness*. One of the possible ways would be to include the *MBSR* or the *MBCT* group as another *active control condition* in the design of the studies.

Researchers might also focus on the examination of the relationship between *relational mindfulness* and *collective mindfulness* that tends to be explained as a collective capability to recognize the details of emerging issues and to act swiftly upon them (Sutcliffe et al., 2016). Previous studies have suggested a possible positive relationship between *individual mindfulness* and *collective mindfulness* (Sutcliffe et al., 2016; Dierynck et al., 2016). Using methods such as the *Safety Organizing Scale (SOS; Vogus & Sutcliffe, 2007a)* might reveal whether the training in *relational mindfulness* can be one of the antecedents of *collective mindfulness*.

And finally, although findings of the present study indicate that *relational mindfulness practice* has several benefits, they do not explain how *relational mindfulness* actually works and how the whole process of its training may be perceived by participants. Few pioneering qualitative studies have already focused on examination of the process of *individual mindfulness practice* in a higher education (i.e., Schussler et al., 2016; Solhaug et al., 2016; Tarrasch, 2015). Researchers that are interested in *relational mindfulness* might consider conducting a qualitative analysis in this field in order to reveal the mechanisms that are behind it. Future qualitative studies might focus on the examination of the motivation to practice, the process and challenges of *relational mindfulness practice* and the outcomes of practice (how the *three levels of relational mindfulness* develop in the life of participants).

## 5.6 Implications for Mindfulness Practice

*RMT* brings new insights to the *secular mindfulness practice*. Firstly, it shows that it is possible to successfully conduct an 8-week training that is dominantly based on the *relational mindfulness practice*. Training in *relational mindfulness* seems to help participants to anchor the *mindfulness* in relational dimension through the development of present awareness in three domains (*mindfulness of self-in-representation, mindfulness of other-in-representation and mindfulness of relationship-in-representation*). *RMT* also represents an attempt to teach this originally therapeutic or counselling skill (Surrey and Kramer, 2013) to management students. Although the *RMT* is by no means substitute for the psychotherapy, the results suggest that *RMT* helps participants to develop *compassion* towards oneself and others as well as the ability to read emotional and mental states of others.

Secondly, the results of this study refer to the compatibility between the *individual* and the *relational mindfulness practice*. This relationship might be explained by the fact that despite the whole program of *RMT* gives notably less focus on the individual practice than classic *MBIs*, the results have shown significant effects of *RMT participation* on the individual focused variables, especially on *mindfulness, self-compassion* and *perceived stress*. The compatibility between individual and relational practice is based on the principle of *sharing the impressions and results* of individual practices in the following *dyadic mindful dialogue*. This approach has two main benefits. Firstly, the participants can better understand and anchor their individual practice, because they receive feedback from their colleagues. Secondly, the effort and time spent with the individual practice creates a platform for the participants' shared experience. By discussing the outcomes and feelings related to the individual practice, the participants learn both to trust others and to talk about intimate parts of their lives. This compatibility between the individual and the collective practice seems to be a unique characteristic of *RMT*.

## 5.7 Implications for Pedagogical Practice

*RMT* was designed with an assumption to be a suitable and eligible intervention for management education. The results suggest that this assumption might be correct. However, a few points should be considered in order to help

management education benefit more from the *RMT*. Results showed that effects on *compassion* did not sustained in the follow-up period. The first point to be considered is, therefore, a creation of the supervised follow-up groups that would help students to stay in touch with the *relational mindfulness practice*, as well as with the caring environment of *RMT*. Universities could, for example, offer the membership in the supervised follow-up groups that would be accessible for the graduates of the program.

Secondly, it was already discussed in the Chapter 5.3 that participation in the *RMT* might have supported participants to maintain the frequent individual practice in the follow-up period. This result indicates that implementation of *RMT* to the management curriculum might motivate students to engage in the practice after the end of intervention. However, this number could be further increased through inclusion of other supportive materials, such as recordings or training books to the program. Implementation in management curriculum should also consider the fact that semester wide courses are usually composed from shorter classes. Contrary to this, the contemporary form of *RMT* contains eight 2-hour weekly sessions and one 6-hour weekend session. Therefore, reorganization of the *RMT* to a higher number of shorter sessions seems to be a crucial step towards its application in higher education. The block courses might, on the other hand, consider implementation of the four or five day intense version of *RMT* program.

And finally, the proper qualification of the facilitators is a crucial point for maintaining the quality and safety of the participation in *RMT*. It is true that results from the *Study 2* did not show significant differences between both *RMT facilitators*. However, both researchers practice mindfulness on a daily basis and participated in several training programs in *mindfulness* and psychotherapy. Therefore, it is advised to recruit new potential teachers from the individuals that successfully participated in training programs for *mindfulness teachers* and psychotherapists.



## 5.8 Implications for Organizational Practice

It has already been suggested in the Chapter 2.7 that *mindfulness practice* should not be perceived as the universal panacea for the organizational issues. However, if applied with the right intention and the healthy degree of scepticism, *mindfulness practice* has the potential to contribute to the enhancement of the quality of professional relationships (Good et al., 2016; Hülshager, 2015).

This thesis showed that training in *relational mindfulness* is eligible for management education and suggests that it might also be suitable for contemporary organizational environment. This potential process should consider several points. Firstly, the organizations have the specific time schedule that sometimes requires implementation of the abbreviated forms of *mindfulness training* only (Good et al., 2016). This point may represent a considerable challenge for application of *RMT*, because it may not provide enough time that participants actually need for co-creating the environment of mutual caring. *RMT* is based primarily on the *relational mindfulness practice* and that is the reason why it cannot rely so much on the *individual homework practices* such as the classic *MBIs* do. Therefore, I suggest that in the case of organizations, the implementation of *RMT* should be accompanied with emphasis on maintaining the default time schedule.

Secondly, similarly to management education, the implementation of *RMT* in organizational settings should be accompanied with the creation of supervised follow-up groups that would help participants to maintain the relationship-focused outcomes such as *compassion*. The advantage of the organizational settings is related to the fact that their members usually co-operate in teams where they spend much time together in one group. Therefore, the sustainability of the relational outcomes might be even more feasible to reach within organizations that in the higher education.

Finally, a recommendation for not seeing *individual mindfulness* as the universal panacea (Hülshager, 2015) is also reasonable for *relational mindfulness*. The results of this thesis are promising and I think that *RMT* might also support the contemporary trend of creating the *teal organizations* that use the flat structures and give full decisional power to the ground employees on one hand, but require a full responsibility and psychological maturity of employees on the other hand (Laloux,

2014). However, more research needs to be conducted in order to show the actual impact of the training in *relational mindfulness* on the organizational members, as well as conditions under which this kind of training is beneficial and under which it is not. Therefore, although the contemporary form of *RMT* seems to be suitable for its actual application in organizations, I suggest to remain sceptical about the extent of its benefits until it evidence shows more.

## 6 Conclusion

This thesis has focused on the examination of *relational mindfulness* in management education. *Relational mindfulness* focuses on the development of awareness and attentiveness in social interactions, and it is suggested to be an appropriate approach for dynamic areas such as management practice and education. This thesis has developed and validated the 8-week *Relational Mindfulness Training (RMT)* for its impact on the development of characteristics that indicate *effective handling of daily situations*, *well-being* and *healthy relationships*. More specifically, this thesis firstly examined the impact of *RMT participation* on *mindfulness* and *self-compassion*, the individual-focused outcomes that can be considered as supportive qualities of the *effective handling of daily situations*. Secondly, this thesis also explored effects on *perceived stress* and *subjective happiness*, the individual-focused outcomes that can be considered as indicators of one's *well-being*. And finally, the impact of *RMT participation* on *empathic accuracy*, *compassion* and *authentic leadership* was explored. Those are *relationship-focused outcomes* that can be considered as supportive qualities of the *healthy relationships*. Two studies of this thesis are among the first ones to validate effects of the *mindfulness-based intervention (MBI)* that focuses primarily on the *relational mindfulness practice* and the first ones to examine the effects of *MBI* in the Czech Republic overall. Both studies were conducted on students of the University of Economics in Prague.

The first pilot study (*Study 1*; N = 66) showed support for the positive effects of *RMT participation* on *mindfulness*, *self-compassion* and *authentic leadership*, as well as partial support for its positive effects on *empathic accuracy*. The effects on *authentic leadership* were significant, but limited by the fact that its measure the *Authentic Leadership Self-Assessment Scale (ALSAQ)* has not been validated for the experimental purposes yet. Results of the *Study 1* were compared with other *MBIs*, the *Mindfulness-Based Stress Reduction (MBSR)* and the *Mindfulness-Based Cognitive Therapy (MBCT)*. Comparison demonstrates that *RMT* is a similarly efficient intervention in terms of the development of *mindfulness* and *self-compassion*. *Study 1* is also among the pioneering studies that examined the relationship between *mindfulness training*, *empathic accuracy* and *authentic leadership*.

The second and main study (*Study 2*) was conducted in three parts. *Study 2 (Part 1)* (N = 128) examined the effects of *RMT participation* in the short run. Results confirmed significant effects of *RMT participation* on *mindfulness* and *self-compassion*, and showed new beneficial effects on *compassion*, *perceived stress* and *subjective happiness*. *Study 2 (Part 2)* (N = 110) focused on the examination of effects in the long run. The results confirmed significant effects of *RMT participation* on *mindfulness*, *self-compassion* and *perceived stress*. Again, in the case of both parts of the *Study 2*, the comparison of the results with other interventions showed that *RMT* is a similarly efficient *MBI* as the *MBSR*, the *MBCT* and the *loving-kindness meditation interventions (LKMI)s*. *Study 2 (Part 3)* focused on examination of the effects of *individual mindfulness practice* and *LKM practice* in the follow-up period. The first analysis (N = 54) compared the *high-practice RMT group* and the *low-practice RMT group* in the *follow-up period*. The results showed non-significant, but notable differences between both groups. Furthermore, the second analysis (N = 74) compared the *high-practice RMT group* with the *control group*. Despite much smaller sample than in the *Study 2 (Part 2)* (N = 110), the results showed notable better results for *mindfulness* and *self-compassion* with high effects sizes. Both analyses also revealed that despite the growth of to individual-focused outcomes such as *mindfulness*, *self-compassion* and *perceived stress*, the individual practice practically did not contribute to the increase of *compassion* in the follow-up period. These results, therefore, suggest that *compassion* is more likely the outcome of the *relational mindfulness practice*.

Goal of this thesis was, therefore, fulfilled. This thesis is, to my knowledge, the first one to validate the effects on an 8-week *MBI* that is dominantly based on the *relational mindfulness practice*. Findings also showed that the *RMT participation* supports the sustainable development of *mindfulness* and *self-compassion*, the characteristics for *effective handling of daily situations*. Sustainable effects on lower the *perceived stress* and effects on higher *subjective happiness* in the short run further suggest that participation in *RMT* contributes to the development of the *well-being* among the participants. And finally, the findings partially supported assumption that participation in the *RMT* supports the development of *healthy relationships* represented by *relationship-focused outcomes* - the *empathic accuracy*, *compassion* and *authentic leadership*.

In conclusion, the findings suggest that participation of management students in the *RMT* helps to cultivate the skills that are becoming an important part of the contemporary managers and leaders. However, more research needs to be conducted in order to show the actual effects of *RMT* on organizational members as well as to reveal under which conditions would the *RMT* be most beneficial. I do believe that *RMT* has potential to support the endeavour for making management education and practice more oriented on *well-being* of individuals as well as on generating healthy outcomes for our society.

## 7 Literature

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## Appendix A: Instructions for RMT practices

Purpose of this section is to present basic instructions and recommendations for the practices of Relational Mindfulness Training (RMT). Those instructions are suitable for researchers or teachers who wish to apply some of those practices in the research or university classes. However, these instructions are not suitable for facilitation of long-term programs such as 8-week training. If you wish to engage in facilitation of RMT more intensely, you can contact me at [marek.vich@mindfulnessclub.cz](mailto:marek.vich@mindfulnessclub.cz)

### GENERAL RECOMMENDATIONS FOR THE FACILITATION OF RMT PRACTICES

- It is very important to frequently remind participants that **engagement in all practices is voluntary**.
- It is also suitable to stress that ideal attitude for the practice is to **not feel any kind of obligation, but rather to develop a joyful and curious attitude**.
- Many participants have a tendency to be very self-critical. They tend to be angry toward themselves when they lose the attention during a *meditation* or feel ashamed when they do not fulfil their formal home practice. It is suitable to remind them that **becoming aware of their limitations is the essential part of practice and that kindness and patience is the best condition** for healthy development of the practice.
- Do not support the tendencies of participants to judge their skills and level of *mindfulness*. It is important to motivate them to practice correctly, either during the session or at home. But do not let participants to compare with others. The inner motivation to practice is what we want to support.
- Do not motivate participants with promising quick and effortless results. **Real progress requires everyday practice**. It is good to mention that if the conditions for a practice are convenient, it is suitable to practice as frequently as possible.
- Ask participant to switch off the phones and to not be distracted with the daily duties during the sessions and breaks (unless it is related to some serious issues).

- It is also recommended to facilitate all sessions in the office or classroom in order to simulate the classic working environment.
- If you are a teacher, do not be authoritative as you may be during the classic classrooms or lectures. **The atmosphere in the group should be relaxed and opened during every session. On the other hand, the facilitator should always keep an eye on participants** and to remind them the basic rules if that is necessary.
- It is also recommended to **do a 10-15 minute break after 60 or 90 minutes of the practice**. Remind participants to try to be as mindful as possible during the break.
- It is suitable to **frequently remind participants that all mentioned practices can be performed in the informal way too**. *For example, instead of the formal basic mindfulness meditation, the participants can just focus on their body, breathing or sensations in any given moment. Or instead of the formal development of the friendship towards others, the participants can observe the feelings that are related to different persons in any given moment and to try to develop a friendly attitude towards those persons. Or instead of the dyadic mindful dialogue, the participants can make and eye contact with others and to try to feel both oneself and others during any given social interaction.*

## INDIVIDUAL PRACTICES

### 1. Development of Motivation for Mindfulness Practice

**Origin of the practice:** Development of strong and right motivation for the *mindfulness meditation* is a crucial part of both traditional and modern *mindfulness training*. Development of motivation for *mindfulness practice* in the RMT has been inspired by instructions that are used the *Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 2013)* and the *Mindfulness-Based Cognitive Therapy (MBCT; Williams & Penman, 2011)*.

**Learning outcomes:**

- This practice helps participants to increase and stabilize the initial motivation for *mindfulness practice*. It helps to **build the motivation for mindfulness practice on a deeper understanding of its potential benefits**.

- Practice may also serve as a reminder that helps participants to revive the motivation in the moments when engagement in the practice decreases.

**Required time:** 5 – 10 minutes

**Description:** Participants are invited to close their eyes and ask themselves the following question: “*What is the most important thing in my life in which the mindfulness can help me?*” Participants are also reminded **not to stick to the first answers that come on their mind, but to wait a few minutes for more genuine answers**. Answers may be written on a sheet of paper.

**Recommendations:**

- Motivate participants to **contemplate on their motivation frequently**: during the *RMT training*, after the end of training or in their free time at home.
- Remind participants that **progress in *mindfulness practice* usually uncovers new insights about the meaning of the practice**.

## 2. Basic Mindfulness Meditation

**Origin of the practice:** This practice has been inspired by a *classic mindfulness meditation* that focuses on the *four foundations of mindfulness*: body, feelings, mind and mind objects (Nyanatiloka 2016 [1906]; Nyanaponika, 1962). Brief and secular form of this practice has been derived from the *basic mindfulness meditation* that is part of the *MBCT* (Williams & Penman, 2011).

**Learning outcomes:**

- This meditation helps participants to become more familiar with the basic principles of *mindfulness practice*.
- Practice is short and not very demanding. It can be easily applied on everyday basis in many situations. It therefore **represents a feasible way for establishing the regular practice**.

**Required time:** 4 - 6 minutes

**Description:** While sitting on a chair or a cushion, the participants are invited to close the eyes and straight the spine. They are guided to gradually examine the four basic domains of the present experience: breath, body, feelings and thoughts. Participants

are firstly invited to **focus on their breathing**, to stay present with that experience and to observe how the breathing feels in the body. Then, the attention is directed more exclusively towards **particular parts of the body**: the head, neck, shoulders, arms, spine, legs, toes, etc. Participants **also focus on their feelings**, especially on recognition of the pleasant, unpleasant or neutral feelings. End of the practice is dedicated to the **observation of thoughts**. Participants are invited to recognize, whether they experience many, few or no thoughts.

***Recommendations:***

- Ensure participants that it is important to feel comfort in the position. If they do not feel well with an eyes closed, they may open them. If the participants fell discomfort with sitting straight, they may relax a bit or lie on a mattress (if that is available).
- Remind participants to **develop an opened and accepting attitude to every experience, either pleasant or unpleasant**. *For example, every disturbing event such as a sudden noise in the environment or an unpleasant feeling can be welcomed as an interesting part of practice.*
- In the case of this basic practice it is also important not to engage in the deeper examination of inner experience. Other following practices are designed for this. The goal of the practice is rather to **briefly become familiar with the basic domains of the present experience, while staying detached from it**.

*Czech recording of the practice is available here:*

<https://www.youtube.com/watch?v=0qNrNdeK8Gk&t=27s>



### 3. Breathing Meditation

**Origin of the practice:** In the case of the Buddhist *meditation training*, the breathing meditation is part of the development of the *mindfulness of body* (Nyanatiloka 2016 [1906]; Nyanaponika, 1962). The form of this practice that is used in *RMT* has been inspired by *sitting meditations* that are used in *MBSR* (Kabat-Zinn, 2013) and *MBCT* (Williams & Penman, 2011).

**Learning outcomes:**

- Some participants prefer to anchor their *mindfulness practice* in the breathing. This practice is suitable for them.
- *Breathing meditation* is generally appropriate for **helping participants to feel more refreshed and relaxed.**

**Required time:** 5 - 10 minutes

**Description:** Participants are invited to take a similar position for the practice as in the *basic mindfulness meditation*. The instructions then focus on the **observation of a process of a breathing-in and breathing-out while being aware of the related feelings in one's body**. For example, the participants may observe how the volume of their abdomen changes or how the flowing air touches their nostrils or lips. They may also label the experience, such as: *Now I am breathing in and now I am breathing out*. Participants may also feel how the new air comes to the body and refreshes them, while the old air leaves the body and released the tensions, stress or fatigue. Finally, the participants are invited **to let their body inhale and exhale and just observe this process without any need to control it.**

**Recommendations:**

- It is important to remind participants not to control their control the breath, but just observe it. **Observing the breath without controlling can be challenging for some participants. It is good to remind them to observe their tendency to control the breath in that case.**

*Czech recording of the practice is available here:*

<https://www.youtube.com/watch?v=1xt4hDKMGGw&t=84s>

#### 4. Meditation on Mental States

**Origin of the practice:** This practice has been originally derived from the classic Buddhist *mindfulness meditation* on the feelings, mind and mind objects (Nyanatiloka 2016 [1906]; Nyanaponika, 1962). The form that is used in the *RMT* has been primarily inspired by the practice that is used in the *MBCT* (Williams & Penman, 2011).

**Learning outcomes:**

- Practice helps to better handle emotions during the daily situations. More specifically, it can help participants to be **more aware of the changes in their mood and to not let this change drive their behaviour.**
- This practice supports the **direct development of decentring, the capability to be familiar with but detached from all mental events.** Feelings and thoughts are then experienced as *just waves that come and go* and less likely to influence one's actions without his/her conscious consent.

**Required time:** 6 - 15 minutes

**Description:**

Participants are invited to take a similar position for the practice as in the *basic mindfulness meditation*. Firstly, the participants are invited to **be aware of all the feelings they experience in the present moment.** Instructions may support this process with questions such as: “*It is happiness? Or sadness? Or anger? Or excitement?*” Instructions may also present less challenging version of the practice during which participants recognize whether they experience overall positive feelings, negative feelings or neutral feelings. Secondly, the **participants are invited to examine thoughts in their mind.** They may observe that thoughts come and go as *waves on the lake surface*. If that is challenging, they may be invited to observe whether they experience many thoughts, few thoughts or no thoughts. At the end of the practice, the participants just **stay in the present moment and try to non-judgmentally observe the present thoughts and feelings.**

### ***Recommendations:***

- Practice is **usually more challenging and less understandable for new practitioners**. It is, therefore, important to frequently remind participant to maintain presence and observe their tendency to fall back into mindless rumination. Remember, observing the tendency to fall back into rumination is also a *mindfulness practice*.
- While shifting attention on observation of thoughts, some participants tend to experience no thoughts in the moment. Giving instruction to loose the attention a bit usually helps the thoughts to emerge. It is therefore **important to have more loose attention, but to maintain present awareness during the whole practice**. Development of this skill usually requires regular application.

*Czech recording of the practice is available here:*

<https://www.youtube.com/watch?v=7pRSNmBqphk&t=2s>

## **5. Body-Scan Meditation**

***Origin of the practice:*** Foundations of the *body-scan* can be found both in Buddhist *meditation* and Hindu-Vedic yoga. Form of the practice that is used in the *RMT* has been primarily derived from the MBSR (Kabat-Zinn, 2013). Contrary to the *MBSR*, the *RMT version* is approximately two times shorter and contains simple visualisations that were created by the authors of *RMT*.

### ***Learning outcomes:***

- *Body-scan meditation* helps participants to be **more grounded in the body and more present during the daily situations**.
- It is also one of the most efficient methods for **getting in a state of a deeper relaxation that is not disrupted by thoughts**.

***Required time:*** 15 - 30 minutes

***Description:*** Participants are guided to **be aware of the particular parts of their body**. Practice can be guided either from head to toes, or the opposite way. While observing the particular part of body, the participants are also invited to **release the tension in such part through the breath** (inhaling and exhaling in it) **and caring**

**attention** (feeling gratitude for this body part, wishing this part to relax a bit, especially when this body part hurts). The practice can be also supported by a visualization of shower waterdrops that fall on the head and body of participants and relaxes the parts that are in tension or pain. At the end, the **participants are invited to just maintain the awareness in their body** and to non-judgmentally observe whatever emerges in their attention.

***Recommendations:***

- It is common that some participants experience pain or unpleasant feelings in some part of the body. It is therefore important to remind them to develop the **non-judgmental attitude - to perceive both pleasant and unpleasant sensations as the equal aspects of present experience.**
- Some individuals may feel a headache while focusing on their head. In that situation is recommended to switch focus on the lower part of the body.
- *Body-scan* can also make some people fall asleep. **Participants can be invited to open their eyes in the moment they start to feel sleepy.**

*Czech recording of the practice is available here:*

<https://www.youtube.com/watch?v=8JAcawDx6bU&t=1s>

## **6. Recapitulation**

***Origin of the practice:*** This practice has not been part of the *classic meditation training*. It has been included in the *mindfulness-based* therapeutic approach called the *Sati Therapy* (Frýba, 1995) where the practice helps participants to integrate the live experiences. The *RMT version of recapitulation* has been freely inspired by the *Sati Therapy*.

***Learning outcomes:***

- *Recapitulation* helps participants to bring **more insight into the past moments** by becoming more aware of both external and internal events that they experienced.
- Practice also works as an **efficient form of mental hygiene**. Participants may observe the past events from a more detached perspective and reconcile themselves with what happened.

- Frequent application of this practice may help participants to **better understand their psychological reactions to the particular situations**. When one repeatedly observes that he/she reacted to a certain situation with anger, he/she can be *more mindful* during the particular situation next time and react in a calmer way.

**Required time:** 2 - 10 minutes

**Description:** Participants are invited to **revive some past period of time, usually the past day**. They may *recapitulate* the past events chronologically, but they may also *recapitulate* spontaneously every moment that just comes into their mind. It is important to remind participants to **be aware of the feelings that they experienced in particular situations and to perceive internal and external events just like a neutral observer**. End of the practice can be dedicated to the brief *recapitulation* of the evolution of one's feelings during a day. It is also suitable to invite participants to **find out at least three things for which they are grateful that day**, no matter whether those things were originally pleasant or unpleasant. This last aspect of the practice helps participant to end the practice in a more positive way.

**Recommendations:**

- Remind participants to **revive as much events as possible, but not for the sake of being in a tension**. Every revived moment counts.
- Practice can be also suitably applied in an informal way – every moment in one's life can be dedicated to the brief review of some past period of time.

## **7. Development of the Friendship Towards Oneself**

**Origin of the practice:** *Development of friendship towards oneself* has been a preliminary practice of the traditional *meditation on the four immeasurables* that has originated in Hindu-Vedic and Buddhist tradition (Sayādaw, 1985; Santideva, 1998). Form of the practice that is used in the RMT has been primarily derived from the secular *self-compassion meditation* that has been developed by Neff (2011).

**Learning outcomes:**

- Practice helps participants to **cope more smoothly with challenging situations and failures by becoming more kind and patient towards oneself**.

- It is also a suitable practice for overcoming social anxiety through stabilizing one's relation with oneself.
- Development of kindness towards oneself also **helps to build ideal psychological conditions for the mindfulness practice.**

*Required time: 10 – 20 minutes*

*Description:* Goal of the *development of friendship towards oneself* is to help participants to become a loving and supporting friend towards oneself. Participants are guided to **recognize the present challenges in their life and to wish themselves to handle those challenges as best as they can.** They are also guided to recapitulate their recent accomplishments and to praise themselves for it. Participants are also invited to **reflect their recent failures and to accept, forgive or even appreciate themselves for that.** At the end of the practice the participants have a moment to give themselves any kind of inner support they may actually need.

*Recommendations:*

- Some participants may find challenging to give themselves kind support at the beginning. It is therefore important to **ensure them that the self-compassion is not an obligation but a possibility.**
- It is also suitable to remind participants to *be mindful* about a tendency to be / to not be compassionate towards oneself at the present moment. **Kind acceptance of the fact that one does not want to be compassionate towards oneself at the present moment is also the practice of self-compassion.**
- It is suitable to remind participants that this practice requires a repetition. That is the way, how the participants can change the habit of being overly self-critical to the habit of being supportive and kind towards oneself. Small steps lead to the real change.

## 8. Development of Friendship Towards Others

**Origin of the practice:** This practice represents a secular and simplified version of the classic *meditation on the four immeasurables* (Sayādaw, 1985; Santideva, 1998). Main inspiration comes from the secular *loving-kindness meditation (LKM)* that was described by Gilbert & Choden (2014).

### **Learning outcomes:**

- *Development of friendship towards others* helps participants to **better recognize the feelings and needs of others, while being able to overcome the possible empathic distress.**
- Practice also guides participants to **discriminate the feelings that are related to particular persons** and helps them to overcome the attachment to those feelings.
- This practice is also a very efficient method for **helping the mind to be more calm and focused.**

**Required time:** 15 – 30 minutes

**Description:** Participants are invited to imagine three kinds of persons. **The first person is the one that is related to pleasant feelings.** It can be someone who is close or more distant to the participant, but definitely the one who is related to the feelings of sympathy, friendliness or love. Participants are guided to attune to the present condition and needs of that person, and to wish him/her to handle the present situation well and to fulfil the needs that he/she needs to fulfil. **Second person is related to neutral feelings.** This is the person who does not look very interesting or attractive to the participant. Practitioners are invited to attune to the situation of this person, to recognize him/her as human being and to send him/her an inner support or a friendly wish. **Third person is related to the unpleasant feelings.** Participants are invited to imagine that similarly to oneself, this person sometimes feels joy and sometimes feels sadness or fear. Furthermore, the participants are invited to imagine that similarly to oneself, this person was born one day; that he/she was shaped by the society; and that similarly to oneself this person will die one day. **The participants are also invited to wish this person to choose a better way in his/her life that is related with less amount of suffering and if possible, they may wish him to be happy.** At the end of

the practice, the participants can focus on other people in their life, either close or more distant, and to wish them to be happy, healthy and to live well.

***Recommendations:***

- Similarly to the *development of friendship towards oneself*, this practice might be challenging for some participants at the beginning. It is therefore important to remind participants that the ***development of friendship towards others is not an obligation but a possibility.***
- It is also suitable to remind participants to **be mindful about their willingness / unwillingness to develop the friendship** towards particular types of persons.
- In the case of the persons that are related with negative feelings, it is suitable to recommend participants not to choose the most challenging types. **It is rather appropriate to choose the person that is related to less negativity at the beginning.** More experience with the practice can prepare participants for the *development of friendship towards more negative persons.*
- It is also suitable to remind participants that this practice requires repetition. **Frequent application of this practice is the way, how the participants can overcome hatred, attachment and delusion towards other persons.**
- Remind participants to **be familiar with, but stay detached from their feelings during the whole practice.**

## **9. Practice of Coping With Fear**

***Origin of the practice:*** This practice has been created by the authors of RMT. It combines the previously mentioned *meditation on mental states* with simple visualizations.

***Learning outcomes:***

- *Practice of coping with fear* helps participants to discriminate two kinds of fear. The first one is the **fear that is evoked by an immediate experience** (i.e., when climbing on the mountain). The second kind is the **fear is not related to the present experience**, such as a fear of some person, a fear of being expelled from a university or losing a job, etc.



- **This practice gives participants tools that can be feasibly applied in the situations when they feel the second type of fear.** More specifically, the participants learn to be familiar but non-identified with thoughts and feelings that relate to the particular fear.
- Repetition of this practice **helps participants to perceive fear as just another possible subject of attention.**

*Required time: 10 – 25 minutes*

**Description:** Participants are invited to **think about all things, events or people they are afraid of.** They are instructed not to ruminate about things they find out, but rather to just name them. They may even write them on a sheet of paper. Facilitator reminds participants to observe all related feelings as just feelings without any need to react on them. Subsequently, the **participants are invited to accept that the fear exists in their life, but to be aware that the fear is not a part of themselves.** Participants are also invited to visualize that they are in their own house (where they feel comfortable) and that the fear is not in the house, but resides outside the house. So the **fear is real and present, but it is not part of the personal space of participants.** Participants may also visualize tapping a glass of wine (or water) with the fear as a gesture of the acceptance and gratitude. At the end of the practice, the participants are invited to **just non-judgmentally observe their thoughts and feelings without any need react on them or change them.**

**Recommendations:**

- Ensure participants that participation in this practice is voluntary.
- **Participants who do not possess much experience with this practice may consider focusing on less challenging triggers of fear.**
- Remind participants to be familiar with but detached from all the feelings and thoughts, which they may experience during the whole practice.

## RELATIONAL PRACTICES

### 1. Dyadic Mindful Dialogue

**Origin of the practice:** This practice has been inspired by the practice of *Insight Dialogue* (Kramer, 2007). Authors of *RMT* further expanded this practice and interconnected it with *individual mindfulness and LKM practices*.

**Learning outcomes:**

- This practice is the essential and most important practice of *RMT*. It helps participants to **pause and perceive more fully the present experience during social interactions**.
- More specifically, **it helps participants to develop the *three levels of relational mindfulness* (*mindfulness of self-in-relationship, mindfulness of other-in-relationship and mindfulness of relationship-in-relationship*)** in order to be more aware and present during social situations.
- Participants also learn to **relax and to be more caring with regard to others and themselves while interacting with others**.
- This practice can be suitably combined with the individual practices. More specifically, **it can serve as a platform for sharing the experiences and impressions from the individual practice**. It can help participants to learn from each other and to better understand the challenges of particular practice.

**Required time:** 10 - 45 minutes

**Description:** Participants are invited to randomly choose a partner, ideally someone with whom they did not practiced in dyads yet. Participants are invited to **make an eye contact and silently welcome each other, and then to close their eyes and observe how they feel in the presence of their partner**. After this introduction, the main part of the practice starts. The *dyadic mindful dialogue* occurs in **rounds that are divided by silent pauses**. Start and end of rounds is usually signaled by the sound of a bowl or bell. **During these pauses, the participants are invited to observe a various aspects of the present experience** in order to develop the *three levels of relational mindfulness*. They are also given instructions for the next round. This *relational mindfulness practice* is therefore divided on a dialogue phases and a silent insight phases. Every round can take several forms:

- a. **Silent eye gazing:** Participants simply maintain an eye contact without any talking. They are instructed to observe the possible tensions that may arise during this process and try to relax if that is possible.
- b. **Formal mindful listening:** Both members of the dyad are divided on the first and second partner. The first partner is invited to speak while the second participant is invited to just listen while maintaining an eye contract. The first partner usually shares his/her present or past experience from life or practice. Participants are usually instructed to be aware of the one who is speaking or the one who is listening. Participants usually shift the roles of speaker/listener during the whole practice.
- c. **Formal mindful conversation:** Both participants are invited to speak and listen to each other. Participants are also instructed to give each other a similar space to express themselves, to maintain an eye contact and to stick to the topic of a conversation. This type of practice can be also accompanied by an occasional sound of a bowl or bell in order to remind participants to be present. For example, while hearing the sound, the participants may breath-in and breath-out, pause for a moment, check the actual situation and continue the conversation.
- d. **Caring appreciation:** This practice usually builds on the previous practice of the *formal mindful listening*. Again, the only one participant speaks while the other participant listens. Based on the previous sharing of the first partner, the second partner expresses understanding or appreciation of his/her topic. The first participant is instructed not to lecture or indoctrinate the other in any way, but rather to offer the partner his/her personal point of view with an intention to support the other.
- e. **Caring conversation:** Both participants are invited to express an understanding or appreciation for each other and to listen to each other. This form of a practice can be also accompanied by occasional sound of a bowl or bell in order remind participants to stay present.
- f. **Formal repetition:** This practice builds on the *formal mindful listening*. The partner who was listening in the previous round (i.e. the second partner) is invited to repeat word by word what he/she remembers from the sharing of his/her first partner.

**The general topics of the *formal mindful listening* or the *formal mindful conversation* can vary for each practice.** Among the most used topics are: description of the present state of one's body and mind; sharing of the impressions from individual or relational practice that preceded the dialogue; reflection of the past events and inquiry about possible desirable change. **The *caring appreciation* or the *formal repetition* may then build on the previous interaction.** Both practices bring the aspects of caring to the whole interaction, because they invite participants to show the genuine interest for each other's condition. **The end of practice is usually dedicated to the *caring conversation* or the *formal mindful conversation*.** The last round is usually dedicated to the sharing of last thoughts, appreciation of each other for engagement in the dialogue and possible expression of a friendly wish for each other.

Particular rounds can be combined in many ways. Some *dyadic mindful dialogue* can take 10 minutes while the other can last for 45 minutes. **Typical short version of the *dyadic mindful dialogue* is focused on the sharing of the sensations that emerge in the present experience.** This practice can take a following form. *Round 1: The first participant shares what he/she experiences in the present moment, that is what he/she senses in the body or what kind of feelings and thoughts he/she recognises. ROUND 2: The topic is the same, but partners switch their roles. ROUND 3: Both partners engage in the formal mindful conversation in order to continue in the description of what they experience in the present moment. ROUND 4: Both participants express the last thoughts or wishes and say goodbye to each other.*

**The example of the longer version of *dyadic mindful dialogue* is the sharing of the results and impressions from the *development of the friendship towards others*.** This practice may take the following form. *ROUND 1: The first partner shares his experience and impression from the development of friendship towards positive person. ROUND 2: The topic is the same, but partners switch the roles. ROUND 3: The first partner shares his/her experiences and impressions from the development of friendship towards neutral and negative person. ROUND 4: The second partner shows caring appreciation for the previously shared topic of the first partner. ROUND 5: The second partner shares his/her experiences and impressions from the development of friendship towards neutral and negative person. ROUND 6: The first partner shows caring appreciation for the topic that first partner shared in*

*the previous round. ROUND 7: Both partners engage in the formal mindful conversation in order to continue in the sharing of the results of practice. ROUND 8: Both partners engage in the caring conversation in order to support each other. ROUND 9: Both participants express the last thoughts or wishes and say goodbye to each other.*

***Recommendations:***

- It is important to frequently **remind participants to make eye contact and sit opposite each other** in order help them to maintain full attention to each other.
- Furthermore, **during the rounds when only one speaks and other listens is also important to remind participants to keep it that way.** Experience has repeatedly shown that maintaining this rule is very important for helping participants to stay present with each other and to conversate in more aware and caring way. Otherwise, the whole practice may just change in a classic chatting that is not a *mindful dialogue* anymore.
- It is also suitable to frequently **remind participants to keep their eyes closed during the silent pauses.** The purpose of the silent pauses is to draw attention back to one's body, breath, feeling or thoughts. Participants who are not comfortable with have an eyes closed can focus attention on some neutral object such a floor or plain wall.
- Remind participants that whole process of relational practice is confidential. **Everything what is said in the dyad or group should stay in the group for the sake of maintaining trust among all participants.**
- Relational practices can be very challenging for some participants at the beginning. It is therefore a **priority to make a relaxed and warm atmosphere.** They best tool to do this is to make the whole process a bit of fun. There is no need to be so serious from the beginning. **More relaxed atmosphere in the group then spontaneously provides better conditions for a deeper work.**
- Participants are not required to talk all the time when they are invited to share. **If they find that there is nothing meaningful to say, they may remain to be silent while maintaining an eye contact and trying to be as much present as possible.**

## 2. Sharing in the Group

**Origin of the practice:** Practice of sharing in the group exists many variations in both MBIs and Western therapeutic approaches. The basic form of the practice is not very original, but it is combined with instructions to be aware of one's feelings as well as other participants during the whole process.

### **Learning outcomes:**

- **Practice helps participants to better feel the atmosphere in the group and to better attune to others.** In also promotes the feelings of a membership in the group.
- *Sharing in the group* also **helps to overcome the fear from talking and sharing in front of others.**
- It also **helps facilitator to screen the situation in the group** and provides a possibility react to the actual condition of others if that in necessary in the moment.

**Required time:** 15 – 25 minutes

**Description:** At the end of the session, **all participants are invited to sit in the circle or ellipse and share the impressions from session.** Facilitator usually asks who wants to be the first person to share and then the participants are chosen automatically in the clockwise or anticlockwise direction. Sharing is voluntary, the participants who do not want to share may just say their name. **Participants are invited not only to share general feelings such as “it was great” or “ it was challenging”, but to try to be as specific as possible.**

### **Recommendations:**

- It is suitable to **remind participants to observe their feelings during the whole process of the sharing.** I.e., *“How do you feel while waiting on your turn of sharing? Are you nervous or excited?”* or *“How do you feel when you already shared? Do you feel the relieve or you are bored?”*
- It is also suitable to **invite participants not to prepare their speech, but rather to be aware of others, oneself and the group dynamics during the whole process.**

### 3. Development of Gratitude in Group

**Origin of the practice:** Gratitude is one of the wholesome states that support the development of mindfulness in both traditional and modern *mindfulness and LKM training* (i.e., Williams & Penman, 2011; Nyanaponika, 1962; Gilbert & Choden, 2011). This practice has been freely modified by the *RMT authors* to the group practice.

#### **Learning Outcomes.:**

- Gratitude helps participants to **develop more positive and accepting attitude towards their conditions in life**. Being grateful for things in one's life also serves as a reminder to be more present in everyday situations.
- This practice also **supports the development of trust and interconnection in the group**.

**Required time:** 10 – 30 minutes

#### **Description:**

Participants are invited to **sit in the circle and gradually share one thing for which they are grateful in their life**. It can take form such as: "I am grateful for...." It is suitable to make a 10 second pause before another participant shares. **The whole sharing can take 3 – 7 circles.**

#### **Recommendations:**

- Recommend participants not to spend entire time with preparing of their responses. It is suitable to invite them to **listen to others and feel the impact of their sharing**. And then, when the time for sharing comes, **it is better to say something spontaneously**.
- Participants usually have a tendency not to wait a 10 seconds before they share. That may be caused by their insecurity or impatience. It is therefore important to remind them to be aware of this tendency and to maintain a 10 second pause.

#### 4. Development of Mutual Closeness

**Origin of the practice:** *Development of mutual closeness* has been developed by the authors of *RMT*. Nevertheless, this practice uses similar principles as the dyadic practices that are part of the Insight Dialogue (Kramer, 2007).

**Benefits:**

- *Development of mutual closeness* **deepens the experience of belongingness and connection between the partners.**
- Practice also supports the emergence of the feelings of shared human experience among the participants.

**Required time:** 15 – 25 minutes

**Description:** Participants sit or stand opposite to each other. Firstly, they choose one of their hands and observe it. Secondly, they look at the hand of the partner. Then, the participants are invited to observe an eye of their partner and then they make a classic eye contact. **Facilitator invites participants to imagine life of their partner.** To imagine that similarly to oneself, the partner was also born, grew up, came to school, met first friends and foes, experienced first love and disappointments, he/she had some issues with parents, experiences illnesses or injuries. **Participants are also invited to imagine that all those experiences shaped the partner up until the present moment and that from this moment on, both will continue on their path, get old, and die. Practice is concluded with the reminder that despite apparent differences, some things are similar in our life.**

**Recommendations:**

- This practice is **more challenging than classic *dyadic mindful dialogue*, so it is highly recommended to apply it after 4 – 6 sessions of *RMT*.**
- It is also recommended to guide a short *dyadic mindful dialogue* prior to this practice in order to help participants to better attune to each other and feel more comfortable.
- It is also suitable to inform participants, that the **goal of the practice is not to imagine the exact life of the partner. Rather, it is about coming closer to the situation of the other and to find some similarities with him/her.**



- In the case of this practice, **it is also important not to exceed the suggested time limit.** Staying longer time in this interaction might be too challenging for some participants.

## Appendix B: The questionnaire

### Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003)

Níže uvedená tvrzení se týkají **vašich každodenních zkušeností**. Pomocí výběru na škále **1 – 6** prosím vyberte, jak často každou z uvedených zkušeností zažíváte.

**1 = Téměř nikdy nebo nikdy**

**2 = Velmi zřídka**

**3 = Spíše zřídka**

**4 = Spíše často**

**5 = Velmi často**

**6 = Téměř vždy nebo vždy**

1. Mohl/a bych zažívat nějakou emoci a až do určitého pozdějšího okamžiku si jí nebýt vědom/a.
2. Kvůli neopatrnosti, nepozornosti či přemýšlení nad něčím jiným rozbívám nebo vylévám věci.
3. Je pro mě těžké věnovat pozornost tomu, co se odehrává v přítomnosti.
4. Když někam jdu, tak mám tendenci jít rychle a nevěnovat pozornost tomu, co během této cesty zažívám.
5. Mám tendenci nevnímat si pocity fyzického napětí či nepohody, dokud si skutečně nevynutí moji pozornost.
6. Zapomenu jméno člověka téměř ihned poté, co mi bylo poprvé sděleno.
7. Zdá se, že většinu věcí vykonávám automaticky, bez přílišného uvědomění si toho, co dělám.
8. Aktivitu vykonávám ve spěchu, aniž bych jim věnoval/a skutečnou pozornost.
9. Jsem tak moc zaměřený/a na cíl, kterého chci dosáhnout, že ztrácím kontakt s tím, čemu se právě teď věnuji, abych onoho cíle dosáhl/a.
10. Povinnosti nebo úkoly vykonávám automaticky, aniž bych si byl/a vědom/a toho, co právě dělám.
11. Zjišťuji, že druhým naslouchám pouze „jedním uchem“ a současně se věnuji něčemu jinému.
12. Řídím „na autopilota“ a pak se divím, jak jsem se na ono místo dostal/a.
13. Zjišťuji, že se příliš zabývám budoucností nebo minulostí.
14. Zjišťuji, že dělám věci, aniž bych jim věnoval/a pozornost.
15. Během svačení si nejsem vědom/a toho, že jím.

## Self-Compassion Scale (SCS; Neff, 2003a)

Následující tvrzení se zaměřují na to, jak se chováte sám/a k sobě v náročných situacích. U každé položky prostřednictvím následující škály 1 – 5 (což je o jedno rozpětí méně, než v předešlé části) označte, jak často se uvedeným způsobem chováte (či prožíváte uvedenou situaci):

1 = **Téměř Nikdy**

2 = ...

3 = ...

4 = ...

5 = **Téměř Vždy**

1. Odsuzuji se za své vady a nedokonalosti.
2. Když se cítím na dně, tak mám tendenci fixovat se na vše, co je špatné a ulpívat na tom.
3. Když se mi nedaří, tak vnímám těžkosti jako součást života, kterou si prochází každý.
4. Při přemýšlení o svých nedokonalostech mám tendenci cítit se více separovaný/á a odtržený/á od zbytku světa.
5. Když cítím emoční bolest, snažím se sám/sama sebe milovat.
6. Když selžu v něčem, co je pro mě důležité, tak se nechám pohltit pocity méněcennosti.
7. Když jsem na dně, tak si připomínám, že je na světě spousta dalších lidí, kteří se cítí jako já.
8. V opravdu náročných časech mám tendenci být na sebe tvrdý.
9. Když mě něco rozčílí, tak se snažím své emoce udržet v rovnováze.
10. Když se cítím nějakým způsobem nedostačující, snažím se sám/sama sobě připomenout, že pocity nedostatečnosti sdílí většina lidí.
11. Jsem netolerantní a netrpělivý/á vůči těm aspektům mé osobnosti, které nemám rád/a.
12. Když procházím velmi těžkým obdobím, tak dávám sám/sama sobě péči a něhu, kterou potřebuji.
13. Když se cítím na dně, tak mi přijde, že je většina lidí asi šťastnější než já.
14. Když se přihodí něco bolestivého, tak se snažím zaujmout vyvážený pohled na situaci.
15. Snažím se vnímat své neúspěchy jako součást lidských podmínek.
16. Když vidím aspekty sebe sama, které nemám rád/a, začnu sám/sama sebe shazovat.
17. Když selžu v něčem, co je pro mě důležité, tak se snažím zachovat si nadhled.
18. Když s něčím opravdu zápasím, tak mám tendenci se cítit, jako by to ostatní lidé měli snazší.
19. Když zažívám utrpení, jsem k sobě laskavý/á.
20. Když mě něco rozčílí, tak se nechám unést svými pocity.
21. Když zažívám utrpení, dovedu být sám/sama k sobě poněkud bezcitný/á.
22. Když se cítím na dně, tak se snažím ke svým pocitům přistupovat s otevřeností a zvědavostí.
23. Jsem tolerantní vůči svým vadám a nedokonalostem.
24. Když se přihodí něco bolestivého, mám tendenci celou událost velmi zveličovat.

25. Když selžu v něčem, co je pro mě důležité, mám tendenci cítit se ve svém selhání osamocen/a.
26. Snažím se být chápavý/á a trpělivý/á vůči těm aspektům mé osobnosti, které nemám rád/a.

### **Compassion Scale (CS; Pommier, 2011)**

*Následující tvrzení se zaměřují na Vaše typické chování a přístup vůči ostatním lidem. U každé položky prostřednictvím následující škály 1 – 5 označte, jak často se uvedeným způsobem chováte (či prožíváte uvedenou situaci):*

*1 = **Téměř Nikdy***

*2 = ...*

*3 = ...*

*4 = ...*

*5 = **Téměř Vždy***

1. Když přede mnou lidé brečí, většinou vůbec nic necítím.
2. Někdy, když lidé hovoří o svých problémech mívám pocit, jako by mě to vůbec nezajímalo.
3. Necítím se emočně spjatý/á s lidmi, kteří zažívají bolest.
4. Když na mě ostatní lidé mluví, plně se soustředím.
5. Když mi ostatní sdělují své strastiplné příběhy, tak se od nich cítím emočně odpojený.
6. Když vidím někoho procházet těžkým obdobím, tak se vůči němu/ní snažím být pečující.
7. Často přestanu vnímat, když mi lidé vyprávějí o svých starostech.
8. V těžkých časech jsem rád/a, když zde mohu být pro ostatní.
9. Poznám, když jsou lidé rozčilení, a to dokonce, i když nic neříkají.
10. Když vidím, že se někdo cítí být na dně, mám pocit, že se na něj/ní nedokážu naladit.
11. Každý se občas cítí na dně, to je součást lidství.
12. Občas bývám chladný/á vůči lidem, kteří jsou na dně.
13. Mám tendenci trpělivě naslouchat, když mi lidé vypráví o svých problémech.
14. Neznepokojuji se problémy ostatních lidí.
15. Je důležité si uvědomit, že všichni lidé mají své slabé stránky a nikdo není dokonalý.
16. Mé srdce soucítí s lidmi, kteří jsou nešťastní.
17. Navzdory mé odlišnosti od ostatních vím, že každý člověk cítí bolest zrovna tak jako já.
18. Když se ostatní cítí plni starostí, tak obvykle nechám někoho jiného, aby se o ně postaral.
19. Příliš se nezabývám starostmi ostatních lidí.
20. Utrpení je prostě součástí společné lidské zkušenosti.
21. Když mi lidé vyprávějí o svých problémech, tak se snažím zaujmout vyvážený pohled na situaci.
22. Nedovedu se doopravdy propojit s ostatními lidmi, když trpí.
23. Snažím se vyhýbat lidem, kteří zažívají mnoho bolesti.
24. Snažím se utěšit ostatní lidi, když cítí smutek.

## Perceived Stress Scale (PSS; Cohen, 1983)

*Tato část se zaměřuje na Vaše pocity během předchozího měsíce. U každé položky prosím prostřednictvím výběru 1 – 5 označte, jak často jste se uvedeným způsobem cítil/a:*

- 1 = **Nikdy**
- 2 = **Téměř nikdy**
- 3 = **Občas**
- 4 = **Poměrně často**
- 5 = **Velmi často**

1. Jak často jste se během uplynulého měsíce rozčílil/a kvůli něčemu, co se nečekaně přihodilo?
2. Jak často jste během uplynulého měsíce cítil/a, že nemáte pod kontrolou věci, které jsou v životě důležité?
3. Jak často jste se během uplynulého měsíce cítil/a nervózní a vystresovaný/á?
4. Jak často jste se během uplynulého měsíce cítil/a sebevědomý/á ve zvládnání svých osobních problémů?
5. Jak často jste během uplynulého měsíce cítil/a, že se věci vyvíjejí podle vašich představ?
6. Jak často jste během uplynulého měsíce zjistil/a, že nezvládáte plnit všechny věci, které bylo třeba udělat.
7. Jak často jste během uplynulého měsíce dovedl/a kontrolovat podrážděnost ve svém životě?
8. Jak často jste se během uplynulého měsíce cítil/a „nad věci“?
9. Jak často jste se během uplynulého měsíce nechal/a rozčílit věcmi, které nebyly pod Vaší kontrolou?
10. Jak často jste během uplynulého měsíce cítil/a, že se obtíže nakupily do takové míry, že je nebylo možné překonat?

## Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999)

*U každé položky prostřednictvím výběru 1 – 7 (pozor, odlišné rozpětí oproti předchozí části) označte **odpověď, která nejlépe vystihuje Vaši situaci:***

1. Obecně sám sebe považuji za:  
*nepříliš šťastného člověka 1 2 3 4 5 6 7 velmi šťastného člověka.*
2. V porovnání s většinou lidí v mém okolí sám sebe považuji za:  
*méně šťastného 1 2 3 4 5 6 7 více šťastného.*
3. Někteří lidé jsou obecně velmi šťastní. Užívají si život nezávisle na tom, co se odehrává a ze všeho si dokážou odnést, co se dá. Do jaké míry tento popis vystihuje Vás?  
*vůbec ne 1 2 3 4 5 6 7 do značné míry.*
4. Někteří lidé obecně nejsou příliš šťastní. I přesto, že nejsou v depresi, tak se

nikdy nezdaří tak šťastní, jak by mohli být. Do jaké míry tento popis vystihuje Vás?

*vůbec ne 1 2 3 4 5 6 7 do značné míry.*

### **Authentic Leadership Self-Assessment Questionnaire (ALSAQ; Nortonhouse, 2013)**

*Následující položky se zaměřují na Vaše chování v kolektivu. Odpovídejte prosím pomocí výběru na škále 1 – 5.*

*1 = Silně nesouhlasím*

*2 = Nesouhlasím*

*3 = Jsem neutrální*

*4 = Souhlasím*

*5 = Silně souhlasím*

1. Dovedu vyjmenovat své tři nejslabší stránky.
2. V mých činech se odráží mé hlavní hodnoty.
3. Vyhledávám názory ostatních předtím, než si utvořím názor vlastní.
4. Otevřeně sdílím své pocity s ostatními.
5. Dovedu vyjmenovat své tři nejsilnější stránky.
6. Nenechávám se ovládat nátlakem skupiny.
7. Pečlivě naslouchám nápadům těch, kteří se mnou nesouhlasí.
8. Dávám ostatním najevo, jaký člověk skutečně jsem.
9. Vyhledávám zpětnou vazbu, abych pochopil/a jaký člověk skutečně jsem.
10. Ostatní lidé ví, jaké stanovisko zaujímám v kontroverzních otázkách.
11. Neprosazuji svůj pohled na věc na úkor ostatních.
12. Málokdy ostatním nastavuji své falešné já..
13. Přijímám své pocity ohledně sebe sama.
14. Mé morální zásady řídí to, co dělám jako leader.
15. Velmi pečlivě naslouchám nápadům ostatních předtím, než učiním rozhodnutí.
16. Přiznávám ostatním své chyby.