# THE POTENTIAL AND LIMITS OF MINDFULNESS FOR TEACHERS

A Mixed-Methods Investigation of a Mindfulness-Based Intervention in the School Setting

### Inaugural-Dissertation

zur

Erlangung der Doktorwürde der Wirtschafts- und Verhaltenswissenschaftlichen Fakultät der Albert-Ludwigs-Universität Freiburg. i. Br.

> vorgelegt von Sarah Gouda aus Göttingen

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# THE POTENTIAL AND LIMITS OF MINDFULNESS FOR TEACHERS A Mixed-Methods Investigation of a MindfulnessBased Intervention in the School Setting

Inaugural Dissertation

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submitted by
Sarah Gouda
born in Göttingen

### Everything is Waiting for You

Your great mistake is to act the drama as if you were alone. As if life were a progressive and cunning crime with no witness to the tiny hidden transgressions. To feel abandoned is to deny the intimacy of your surroundings. Surely, even you, at times, have felt the grand array; the swelling presence, and the chorus, crowding out your solo voice. You must note the way the soap dish enables you, or the window latch grants you freedom. Alertness is the hidden discipline of familiarity. The stairs are your mentor of things to come, the doors have always been there to frighten you and invite you, and the tiny speaker in the phone is your dream-ladder to divinity.

Put down the weight of your aloneness and ease into the conversation. The kettle is singing even as it pours you a drink, the cooking pots have left their arrogant aloofness and seen the good in you at last. All the birds and creatures of the world are unutterably themselves. Everything is waiting for you.

**David Whyte** 

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### **Abstract**

### Background:

A substantial body of evidence suggests that teaching is associated with considerable health risks and stress. In recent years, mindfulness-based approaches that strive to bolster teacher health yielded promising effects, yet in-depth research in this area is in its infancy, and little is known about how mindfulness induces change in this population. As part of a larger initiative investigating  $Mu\beta e$  - i.e. a state of self-determination and fulfillment devoid of any pressure - across various disciplines, the present project introduced a Mindfulness-Based Intervention (MBI) as a way to decelerate, de-stress and enrich the daily lives of teachers.

### Objective:

The present thesis investigates a) possible improvements in mental health and well-being among teachers who engaged in a Mindfulness-Based Stress Reduction Course (MBSR); b) the specific processes and potential mechanisms of change set in motion by participation in an MBSR course from the teachers' point of view; and c) if and how mindfulness and  $Mu\beta e$  are related to one another.

#### Methods:

The study implemented a controlled waitlist design in three different schools. A total of 90 teachers (n = 46 in the intervention and n = 44 in the waitlist group) participated in this study. Assessment relied on a mixed-methods approach: psychometric instruments spanning areas of mental health, social-emotional competencies, creativity and openness were completed before and after the intervention as well as at a four-months follow-up, while individual experiences, changes, processes and concepts were explored from a first-person perspective in semi-structured interviews after the intervention.

#### Results:

Compared to the waitlist group, the intervention group showed significantly higher levels of self-reported mindfulness after the intervention. While no other variables changed significantly in the overall population, effects in the individual schools indicate relative benefits with respect to stress and social-emotional competencies. Qualitative results confirm these benefits and reveal awareness processes, distancing, presence as well as acceptance, nonjudgement and self-compassion as central mechanisms of change.

### Conclusion:

While the present results generally support the benefit of mindfulness practice for teachers, they also suggest that MBIs have limited transformative impact on teacher health. Rather, this dissertation concludes that mindfulness enables teachers to engage in subtle yet wholesome processes that can support their coping efforts, individual life satisfaction and social-emotional competencies.

*Keywords:* mindfulness, teacher health, schools, stress, coping, interpersonal, social-emotional competencies, mechanisms of change, awareness, distancing, presence, acceptance, waitlist design, *Muβe* 

### Zusammenfassung

### Einleitung:

Zahlreiche empirische Befunde weisen darauf hin, dass Lehrkräfte beachtlichem Stress und ernsthaften Gesundheitsrisiken ausgesetzt sind. In den letzten Jahren erwiesen sich achtsamkeitsbasierte Interventionen als vielversprechende Gegenmaßnahme, jedoch mangelt es an detaillierten Studien über die spezifischen Effekte und Wirkmechanismen von Achtsamkeit in dieser Population. Im vorliegenden Projekt sollte über eine achtsamkeitsbasierte Intervention der Alltag von Lehrer/innen entschleunigt, entzerrt und bereichert werden. Das Projekt ist überdies Teil einer größeren, interdisziplinären Forschungsinitiative zum Thema  $Mu\beta e$  als eine mögliche Antwort auf Zeittaktung, Beschleunigung und Leistungsdruck.

### Fragestellungen:

In der vorliegenden Dissertation wurde untersucht a) inwiefern die Teilnahme an einem achtwöchigen Achtsamkeitsbasierten Stressreduktionskurs (MBSR) eine positive Wirkung auf die Gesundheit und Befindlichkeit von Lehrkräften zeitigen konnte; b) welche Prozesse und Wirkmechanismen aus Perspektive der Teilnehmer/innen an möglichen Auswirkungen beteiligt waren; und c) ob und wie Achtsamkeit und *Muße* als Konzepte und Phänomene aus Sicht und Erfahrung der Teilnehmer/innen zusammenhängen.

### Methode:

In einem kontrollierten Wartegruppendesign wurde die Intervention an drei unterschiedlichen Schulen durchgeführt. Insgesamt nahmen 90 Lehrer/innen am Projekt teil (n=46 in der Interventionsgruppe und n=44 in der Wartegruppe). Im Rahmen eines Mixed-Methods-Ansatzes wurden zum einen psychometrische Verfahren zur Erfassung von Gesundheit, sozial-emotionalen Kompetenzen, Kreativität und Offenheit an drei Zeitpunkten eingesetzt (vor und nach der Intervention sowie nach einem viermonatigen follow-up Zeitraum). Zusätzlich wurden individuelle Erfahrungen, Veränderungen, Prozesse und einschlägige Konzepte aus subjektiver Sicht der Teilnehmer/innen in semi-strukturierten Interviews nach der Intervention ermittelt.

### Ergebnisse:

Im Vergleich zur Wartegruppe zeigte sich in der Interventionsgruppe nach Kursteilnahme ein signifikanter Anstieg in selbstberichteter Achtsamkeit. Obzwar in der Gesamtpopulation kein signifikanter Effekt auf den anderen Variablen erzielt werden konnte, deuten vereinzelte

Effekte in den individuellen Schulen auf relative Veränderungen im Stresserleben und in den sozial-emotionalen Kompetenzen der Teilnehmer/innen hin. Die Ergebnisse der qualitativen Analyse bekräftigen diese Tendenzen und zeigen Bewusstwerdung, Distanzierung, Präsenz sowie Akzeptanz, Nichtwertung und Selbstmitgefühl als zentrale Wirkmechanismen auf.

### Fazit:

Allgemein bestätigen die vorliegenden Ergebnisse den Nutzen von Achtsamkeitspraktiken für Lehrkräfte. Allerdings legen sie auch nahe, dass durch achtsamkeitsbasierte Interventionen keine weitreichende Wirkung auf Lehrergesundheit herbeigeführt werden kann; vielmehr ermöglicht Achtsamkeit subtile Veränderungen auf Prozessebene und kann dadurch die Bewältigungsressourcen, Lebenszufriedenheit und sozial-emotionalen Kompetenzen von Lehrkräften unterstützen.

Stichwörter: Achtsamkeit, MBSR, Lehrergesundheit, Schule, Stress, Bewältigung, interpersonal, sozial-emotionale Kompetenzen, Wirkmechanismen, Bewusstwerdung, Distanzierung, Präsenz, Akzeptanz, Wartegruppendesign, Muβe

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### 1 Introduction and Background

### 1.1 Introduction

The rather commonplace exclamation at the racing pace of life, it seems, has never been more plausible: ours are times of rapid change and baffling transformation. In light of exponential technological advancement and a blatantly postmodern international community, most all structures of our society are either undergoing radical adjustments or revealing profound deficiencies in the absence of urgently needed change. In a world where performance, acceleration, achievement, adaptation and - by extension - conformity to an array of often contradictory and always challenging social norms and pressures are more demanded than ever, human beings in all walks of life are increasingly confronted with their inability to rise to the expectations posed to them while simultaneously striving for a happy, healthy existence. The Collaborative Research Centre (CRC) within which the project at hand is situated is hard evidence of a pressing need to reflect on the position of human beings in today's global community. Titled 'Muße<sup>1</sup> Concepts, Spaces, Figures', the CRC broaches the lack of fulfilled, meaningful leisure and self-determined use of one's time in contemporary life. The search for antidotes to the more poisonous backlashes of modernity is however also manifest in the increasingly – and often suspiciously – fashionable interest in mindfulness, a far-eastern tradition that is hailed by a growing number of western voices as a wondrous resort, the golden road to immutable equanimity and peace of mind. Beyond the banality of facile live-in-the-moment paroles and the fetishist exoticization of Buddhist doctrine, what can mindfulness offer individuals plagued by relentless calls for improvement and optimization, and how may a junction of Muße and mindfulness imbue both concepts with fresh implications and tangible relevance? This question sets the background for the present dissertation, which explores possible answers in a group of particularly hassled individuals: teachers.

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<sup>&</sup>lt;sup>1</sup> While  $Mu\beta e$  is difficult to translate concisely into English, it roughly denotes a state of being in which individuals feel liberated of pressures of all kind. In  $Mu\beta e$ , one is free to engage in whatever activity one chooses with immersion, satisfaction and gratuitous dedication.  $Mu\beta e$  in this respect can take place in activity and work as well as in leisure, idleness and recreation, in all cases unlocking a potential of creativity and self-actualization. Notably,  $Mu\beta e$  is inherently autotelic, serving no functional purpose beyond itself.

### 1.2 CRC/SFB 1015 'Muße, Concepts, Spaces, Figures'<sup>2</sup>

A plethora of voices are noting, critiquing and often downright lamenting what they consider paradigmatic characteristics of modern society. Amidst acceleration processes in most domains of life and mounting demands of performance and efficiency, the tangible longing for an alternate lifestyle that does not force individuals to busily and mindlessly crisis-manage their lives so as to meet an endless stream of expectations has prompted the CRC ' $Mu\beta e$ . Concepts, Spaces, Figures.' Whereas most dictionaries translate the German term ' $Mu\beta e$ ' as leisure, German-speaking academics and laymen are equally unanimous:  $Mu\beta e$  is by far more than leisure. German dictionaries define  $Mu\beta e$  as "free time and [inner] calm to do something that is in accordance with one's own interests" ("Duden | Mu-\u03be | Rechtschreibung, Bedeutung, Definition, Synonyme, Herkunft," n.d.). However, while somewhat richer in information than 'leisure', this definition likewise fails to capture  $Mu\beta e$  in all its dimensions and individual manifestations.

The CRC and its researchers tend to concede that  $Mu\beta e$ , an ancient notion dating back to the Greek concept of scholé ( $\sigma\chi o\lambda \dot{\eta}$ ), is rather difficult to define. It is repeatedly argued that the concept has no clear demarcations, neither on the conceptual nor the phenomenological level (Gimmel et al., 2016). Moreover, definitions, ascriptions and valences of  $Mu\beta e$  significantly vary depending on the historical and cultural context on one hand, and the methodological approach to its conceptualizations on the other (Gimmel et al., 2016; " $Mu\beta e$ . Konzepte, Räume, Figuren - otium.pdf," n.d.; Sonderforschungsbereich  $Mu\beta e$ , 2012). Thus,  $Mu\beta e$  defies attempts to strictly categorize it as a state, an attitude, a modality, an activity, or an external condition. In different contexts, it can be any or several of these categories, leaving sticklers for definitional precision rather exasperated.

While acknowledging this complexity - and indeed considering it the very reason productive interdisciplinary research on the matter is at all possible - the CRC proposes a working definition of  $Mu\beta e$  that lays the foundation for the inquiries of the involved projects.  $Mu\beta e$ , it is postulated, can be most accurately summarized as an enacted freedom, that, while still within the confines of temporal parameters, is not subject to the dictates of time (Sonderforschungsbereich  $Mu\beta e$ , 2012). In other words,  $Mu\beta e$  is primarily described as a state of freedom from time constraints. Furthermore,  $Mu\beta e$  is characterized by the absence of

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<sup>&</sup>lt;sup>2</sup> Homepage of the CRC 1015: https://www.sfb1015.uni-freiburg.de/

<sup>&</sup>lt;sup>3</sup> Partial paraphrase of the German original: "Muße zielt auf ästhetisch und räumlich inszenierte Lebensformen einer Freiheit, die in der Zeit nicht der Herrschaft der Zeit unterliegt." (Sonderforschungsbereich Muße, 2012, p. 3)

demands and expectations of achievement, especially inasmuch as they entail time pressure of any sort.  $Mu\beta e$ , then, is necessarily its own end, serving no goal and obeying no purpose beyond itself. While these tenets constitute explicit determinants of the concept,  $Mu\beta e$  nonetheless remains inherently and necessarily indeterminate since it can assume a countless number of forms. This determinate  $indeterminacy^4$  precipitates the potentiality of  $Mu\beta e$ ; inasmuch as  $Mu\beta e$  is not subordinate to the succession laws of ticking time progression, it unlocks a plane of simultaneous possibilities, arguably lending it a distinctly spatial quality. These possibilities may include productive self-actualization, deep contemplation, content and fulfilled idleness, aimless meandering, absorbed creative activity, and innumerable other materializations.  $Mu\beta e$  thus transcends binary conceptions of productivity and idleness, work and leisure, activity and passivity and essentially marks the prerequisite of self-determined choice.<sup>5</sup>

In 2011, an international colloquium first envisioned the potential of  $Mu\beta e$  as a subject matter that holds valuable keys to understanding the postmodern zeitgeist and that may indeed offer an alternative to its more problematic consequences. From this initiative emerged the CRC 1015 ' $Mu\beta e$ . Concepts, Spaces, Figures'. Funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG), the CRC is a high-profile research association dedicated to an interdisciplinary approach to this elusive concept. Across 17 projects spanning diverse disciplines (philology, philosophy, theology, sociology, psychology, and ethnology), the CRC is as much interested in conceptual, historical and cross-cultural manifestations and semantics of  $Mu\beta e$  as in its contemporary relevance and (normative) implications. From 2013 until the end of 2016, the CRC pursued its far-reaching investigations, and has recently been extended for a second 4-year period of funding.

## 1.3 Project A4 - Promoting Muße, Creativity and Psychological Health in Schools

The alarming tendencies and rather urgent questions that gave rise to the CRC hold particularly true for the educational field. It is likely a surprise for many to learn that the etymology of the word 'school' is derived from  $schol\acute{e}$ , the ancient Greek word for  $Mu\beta e$ . Schools, rather than creating a space for creativity, curiosity and impassioned learning, are arguably becoming a source of stress and an insidious permeation of societal demands.

<sup>4</sup> Author's translation of "Bestimmte Unbestimmtheit" (Sonderforschungsbereich *Muβe*, 2012)

<sup>&</sup>lt;sup>5</sup> In the present dissertation, the term  $Mu\beta e$  will be used rather than wanting translations that do not do the subject matter justice

Teachers too, are increasingly forced to participate in a stressful, goal-driven mission to produce functional and productive citizens for an overbearing and merciless society, with little opportunity to relish the fulfilling potential of their profession: joint growth, exploring and unlocking potential, mentoring young minds and learning from their development. These tendencies are particularly fatal when bearing in mind that in today's complex and often unorthodox, opaque society, children and youth exhibit a broad range of social and emotional needs that teachers, ideally, should consider part of their vocation (Bauer, 2009; Flook, Goldberg, Pinger, Bonus, & Davidson, 2013a). While the discourse around society's current values and their impact on our notion of education is vehement and ongoing, many responses have already arisen to counterbalance a perceived tendency among schools to functionalize both students and teachers, fostering efforts to engender a more nurturing educational atmosphere. One conglomerate of such measures, broadly labeled Mindfulness-Based Interventions (MBIs), draws on eastern meditation traditions, specifically the practice of mindfulness. Although mindfulness is associated with different practices and concepts, it is most commonly defined as consistently directing one's attention to the present experience in a deliberate and nonjudgmental manner (Kabat-Zinn, 1984). The religious and spiritual roots of mindfulness notwithstanding, physicians and psychologists have been reaping the benefits of this concept by means of a secular adaptation titled Mindfulness-Based Stress Reduction (MBSR) since 1979.

The foregoing deliberations on schools,  $Mu\beta e$ , and mindfulness initiated the Project A4 of the CRC: ,Promoting Leisure ( $Mu\beta e$ ), Creativity and Psychological Health: Applying Elements of Mindfulness-Based Stress Reduction in a Grammar School Context'. This project hopes to contribute to a more wholesome educational experience for students and teachers by means of an MBSR-based intervention. Conceptualized and managed by Joachim Bauer and Stefan Schmidt, the project targeted secondary schools in and around Freiburg, Germany. As the title suggests, it explicitly strove to impact schools on an integrative level. Hitherto, most initiatives endorsing mindfulness in schools - and they are scarce, scarcer still in Germany - have focused on either students or, in fewer cases, teachers. The researchers involved in this project consider it a noteworthy strength that both populations were addressed, since this approach holds promise for the educational space over and above the benefits possibly gained by individual participants. The dissertation at hand, however, focuses only on participating teachers, since an exhausting, in-depth analysis of both populations is beyond its scope. The impact on students was investigated at length by another researcher/doctoral student involved

in the project (Minh Tam Luong); findings were and will be integrated and jointly discussed in project publications (Gouda, Luong, Schmidt, & Bauer, 2016).

### 1.4 Mindfulness

Mindfulness is a term that carries a wide range of connotations and meanings. In the modern Western context it is most commonly described as the practice of consistently directing one's attention to the present experience in a deliberate and nonjudgmental manner (Schmidt, 2011). However, the concept of mindfulness draws on a richly complex theoretical and spiritual background that originally stems from Buddhist thought and therefore represents an explicit value system and an overarching "way of being" (Grossman & Van Dam, 2011).

### 1.4.1 Origins and Tenets of Mindfulness

Attempts to formulate an ultimate definition of mindfulness have been fraught with difficulty. Even in its original Buddhist context, the exact meaning of mindfulness has been subject to debate. This is largely due to the fact that mindfulness as originally presented in Buddhist teachings did not refer to a concept with clearly demarcated theoretical tenets, but rather introduced a meditation practice, which induces a particular experience in practicing individuals. The theoretical and definitional underpinnings associated with mindfulness are thus ambiguous in that they a) represent a concept that was derived from a an experiencebased and dynamic practice, and b) cannot fully capture the particularities of said experience from within the confines of abstract and cognitive approaches (S. Schmidt, 2014). Mindfulness is a rough translation of the Pali phrase *sati*. In one line of interpretation, *sati* has been related to the Pali verb sarati (to remember; Stanley, 2015); in that sense, the term refers to remembrance as a mode of pure, non-judging and non-interfering awareness of the present moment, which may generate and facilitate an active recollection of the Buddha's teachings (Schmidt, 2014). While the Western term mindfulness seems to signal a focus on attentional aspects, in its original context, mindfulness entails many other components that transcend attention and cognition by far, since is is part and parcel of other Buddhist doctrines and provisions (such as the Eightfold Path and the Noble Truths). If taken seriously as a philosophical and spiritual mode of being in the world and as a central part of a larger body of teachings, mindfulness practice entails cognitive, emotional, behavioral and ethical imperatives that have real and concrete implications for lifestyle and existential life choices. Indeed, disentangling a distinct and universally consensual concept of mindfulness necessarily relies on a somewhat artificial dissection of Buddhist thought (Grossman & Van Dam, 2011).

As mindfulness grew increasingly and exponentially popular in mainstream western psychology, contemporary definitions became even more versatile, often distilling purely secular, practical applications that are intended to support concentration or enhance stress relief and performance. Not surprisingly, a growing number of voices began to lament the perversion and trivialization of the practice and its 'ontological inquiry' (Puhakka, 2015) as a technique primarily concerned with attention and achievement. Modern approaches that attempt to redirect the focus of mindfulness in the secular world to its ethical and philosophical roots especially highlight the importance of core principles such as generosity, loving kindness, tolerance, patience and empathy as well as the centrality of embodied mindfulness as performed ethics (Grossman, 2014; Grossman & Van Dam, 2011; Kabat-Zinn, 2003a; Schmidt, 2004). Schmidt (2004), for instance, describes central mindfulness attitudes in terms of seven qualities: Non-judging, acceptance, non-attachment, non-striving, beginner's mind, gentleness and kindness. Similarly, Grossman and Van Dam (2011) offer the following summary of mindful elements as a holistic modern understanding that nonetheless attempts to preserve the essence of the practice:

"(1) deliberate, open-hearted awareness of moment-to-moment perceptible experience; (2) a process held and sustained by such qualities as kindness, tolerance, patience and courage (as underpinnings of a stance of nonjudgmentalness and acceptance); (3) a practice of nondiscursive, non-analytic investigation of ongoing experience; (4) an awareness markedly different from everyday modes of attention; and (5) in general, a necessity of systematic practice for its gradual refinement" (p.221).

Scientific and academic approaches to mindfulness that strive to formulate an operationalized definition of the concept have struggled with the abundance of views and the divergence in orientation and emphasis. Even as a psychological construct, no entirely consensual definition exists. Since unambiguous operationalizations are indispensable to psychometric assessment however, many researchers have proposed definitions that often underlay the development of psychometric measures (Schmidt, 2014). One commonly cited, relatively early psychological conceptualization was put forth by Bishop et al. (2004) who outline two main mindfulness components:

"The first component involves the self-regulation of attention so that it is maintained on immediate experience, thereby allowing for increased recognition of mental events in the present moment. The second component involves adopting a particular orientation toward one's experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance." (Bishop et al., 2004, p, 232)

While indeed most psychological operationalizations include some or all of the elements of the foregoing definition, different authors accentuate these dimensions to different degrees, and the underlying constructs cannot be considered identical. To complicate matters further, many researchers and mindfulness experts posit that the typical assessment tools of modern psychology are inherently inadequate in measuring the subjective, experiential and subtle concept of mindfulness (Grossman & Van Dam, 2011).

In light of the above, it is important for the purposes of the present dissertation to bear in mind that mindfulness

- is an umbrella term that subsumes an array of conceptions,
- is originally part of a practice that strives to attain deep insights about human existence, so as to adequately respond to and ultimately alleviate human suffering, and
- is context-dependent operationalized differently even within the scientific boundaries of psychological research and assessment.

### 1.4.2 Muße and Mindfulness

The project from which this dissertation ensued assumes an evident and strong relationship between  $Mu\beta e$  and mindfulness. Nevertheless, the concepts are not identical. Indeed, relating them to each other from a psychological perspective is a novel endeavor, not least because  $Mu\beta e$  has barely been studied or operationalized as a psychological phenomenon prior to this project.

One psychological conceptualization of  $Mu\beta e$  was provided by Bastian Heger, who closely worked with the present project and wrote his M.Sc. thesis on this topic. After thoroughly reviewing the sparse literature on  $Mu\beta e$  from a psychological perspective, Heger (2014) put forth a theoretical operationalization of the concept, defining it along five dimensions: emotion, motivation, meaningfulness, attention/presence and time perception. Specifically, according to Heger, the experience of  $Mu\beta e$  is characterized by a positive emotional valence with low to medium activation as well as intrinsic and self-determined motivation. This contributes to a sense of congruence and meaningfulness that is likewise essential to  $Mu\beta e$ . A positive sense of self is a further  $Mu\beta e$ -requirement. In addition,  $Mu\beta e$  is characterized by focused attention that may later give way to broadly attentive awareness, in all cases leading to an intensified experience of the present. Finally, time constraints and concerns cease to matter in  $Mu\beta e$  as time perception retreats to the background.

In some ways, the hypothesized relationship between mindfulness and  $Mu\beta e$  may be intuitively apparent. Mindfulness, which strives to undo and transcend the effects of stress and coercion, may pave the way into  $Mu\beta e$ . Mindfulness and  $Mu\beta e$  are arguably both marked by a focus on present experience, a sense of self-determination and a rejection of reifying functionality (Gimmel et al., 2016) - though differently so. While presence in mindfulness refers to a deliberate orientation towards whatever negative or positive current experiences occur in the inner and outer world, presence in  $Mu\beta e$  is perhaps better understood as a spontaneous immersion in a state or activity that is necessarily fulfilling and pleasant. Similarly, the sense of self-determination that mindfulness ideally induces springs from reflection, acceptance and awareness, such that constraints and demands aren't removed but rather perceived differently and allowed less sway over one's experience. Lomas, Medina, Ivtzan, Rupprecht and Eiroa-Orosa (2017) elegantly term this attitude "a different relationship with [one's] subjectivity" (p.134). Mindful self-determination is also the byproduct of conscious behavior that overcomes the force of habit and reactivity and thus unveils hidden possibilities within an individual's scope of action. By contrast, self-determination in  $Mu\beta e$  is the result of the actual felt absence of external and internal pressures and demands. By the same token, the rejection of a functional approach to oneself and one's activity assumes different shapes in mindfulness and Muße: mindfulness de-functionalizes through radical acceptance and non-striving, even in otherwise functional constellations, while Muße is essentially non-functional and autotelic, pursuing no goal other than itself.

Rather than claim that the characteristics of  $Mu\beta e$  and mindfulness are identical (as opposed to similar in certain dimensions), the underlying assumption of this project proposes that mindfulness is likely to increase the possibility of  $Mu\beta e$ . Mindfulness can constitute an attitude that resists societal pressures to perform, conform, and consume, instead critiquing commonly posed demands and typically exhibited behaviors. This attitude in turn, may help individuals experience more congruence and, arguably, more  $Mu\beta e$ . It furthermore may induce a sense of equanimity, contentment and calm that is likewise an attribute of  $Mu\beta e$ . The CRC does, in fact, consider equanimity, i.e. allowing things to happen and unfold as they will, a possible precondition for  $Mu\beta e$  (Sonderforschungsbereich  $Mu\beta e$ , 2012). Mindfulness then may contribute to a "transgression of functional constellations" (Gimmel et al., 2016)<sup>6</sup>, through reflection, acceptance, equanimity and conscious, self-determined action, thus enabling  $Mu\beta e$ . In his theoretical conceptualization of  $Mu\beta e$  and its relation to mindfulness, Heger (2014) too concurs that through the orientation towards attention and emotion

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<sup>&</sup>lt;sup>6</sup> Translation by the author

regulation, acceptance, presence, non-reactivity, self-compassion and openness, mindfulness may further the experience of  $Mu\beta e$ .

 $Mu\beta e$  is meaningful and relevant to the practice of mindfulness in yet another respect. As discussed in further detail below, contemporary secular mindfulness practice is often endangered by an approach that reduces it to a mere means to an end and exploits it as a method of self-optimization and performance improvement (Gimmel et al., 2016; Schmidt, 2015). These tendencies are particularly destructive when they serve to obscure structural and systemic deficits or injustices and assign individuals the full responsibility for their well-being (Gimmel et al., 2016). Associating MBIs with the discourse and debate around  $Mu\beta e$  to some extent inoculates the intended impact against these rather fatal misconceptions and highlights mindfulness' capacity to contribute to critical narratives of modern culture that, at least in theory, may play their part in advocating change. Mindfulness, in turn, may be of service to the rhetoric around Muße by way of offering one possible concretization of its implications:

"Considering the pressured societies we live in, where, as never before, consumerist messages seductively incite the pursuit of material goods, the display of wealth and portray the glories of fame, mindfulness is an important asset that can act as a buffer and reduce susceptibility to such extrinsic prompts and values" (Schultz & Brown, 2015, p.90).

### 1.4.3 Mindfulness-Based Stress Reduction

Since the 1980ies of the last century, the Buddhist practice of mindfulness has increasingly gained recognition and relevance in the Western world. Jon Kabat-Zinn's secular and manualized Mindfulness-Based Stress Reduction program (MBSR; Kabat-Zinn, 1984) was undoubtedly a milestone in this development. Finding in his personal mediation practice a tool of considerable impact and value, Kabat-Zinn, a molecular biologist and founder of the Stress Reduction Clinic at the University of Massachusetts Medical School, developed MBSR so as to provide his patients with a simple and effective approach to cope with their ailments. While MBSR is by no means the only application of mindfulness in a modern context, it has enjoyed wide popularity and garnered strong empirical evidence. The overall objective of MBSR is to assist individuals in coping with their suffering through providing physicians and psychologists worldwide with a practicable and effective mindfulness-based tool. Specifically, Kabat-Zinn hoped to

"[offer] an environment within which to experiment with a range of novel and potentially effective methods for facing, exploring, and relieving suffering at the levels of both body and mind, and understanding the potential power inherent in the mind/body connection itself in doing so." (Kabat-Zinn, 2003a, p. 149).

The classical MBSR course usually consists of eight sessions of two and a half hours in addition to one full day of mindfulness practice, spanning a period of eight weeks. The manual incorporates formal meditation exercises as well as informal practices that aim to transfer attained insights and attitudes to day-to-day life (Kabat-Zinn, 1984). In essence, course participants learn to meditate and observe internal and external stimuli in a variety of contexts. Simultaneously, they are invited to cultivate a mindful approach to all aspects of their lives: thoughts, emotions, behavior, activities, surroundings and relationships. Other course contents include simple Hatha Yoga exercises and psycho-educational input about stress and mental health. Since mindfulness is a thoroughly experiential concept, participants are urged to practice on a daily basis in order to refine and develop their practice and properly root mindfulness in their everyday lives. The underlying premise holds that mindfulness

"implies waking up to the full spectrum of our experience in the present moment, which, as we engage in mindfulness practice, we rapidly discover is severely edited and often distorted through the routinized, habitual, and unexamined activity of our thoughts and emotions, often involving significant alienation from direct experience of the sensory world and the body." (Kabat-Zinn, 2003a, p. 148)

As Kabat-Zinn and many others recognize, a main conundrum that MBSR faces in its capacity as a standardized, manualized program with a concrete 'mission statement' - i.e. stress reduction - follows from the Buddhist tenet of non-striving. Indeed, any focus on future outcomes must apparently contradict a stance that radically accepts and inhabits the present, serving no other purpose than its own realization. MBSR acknowledges this paradox as a central challenge that practitioners must embrace, inviting individuals to let go of goals and expectations in favor of the present experience in the immediate moment, thus continuously creating a state where the focus on a desired outcome is temporarily suspended and defused. The functional approach to mindfulness is thus merely the outer contingency that prompts practice, yet is not bound to color the *experience* of said practice. In the same vein, inherently functional activities can be to some extent freed of their abstract purpose whenever mindfulness succeeds in turning one's attention to the present experience of these activities (Gimmel et al., 2016). Conveying these concepts and seeming paradoxes is a difficult task that requires experienced teachers, who can tangibly transport the respective notions as part of their own embodied personal practice.

A second difficult balance that MBSR has been struggling to maintain in its more utilitarian applications is a direct result of the ethical and philosophical origins outlined above. In the effort to reach western audiences, MBSR is typically keen to ward off accusations of backdoor spirituality and esotericism. Attempts to convey mindfulness in an ethically and philosophically neutral manner continue to instigate much debate; on one hand this non-committal approach to mindfulness safeguards it against attacks by vehement secularists who are quick to denounce comprehensive schools of thought as ideology (Schmidt, 2016). On the other hand, practicing scholars and health care professionals have often argued against a denaturation and dilution of central mindfulness tenets in a presumably dogmatic attempt to strip it of its ethical foundations and implications (Grossman & Van Dam, 2011; Kabat-Zinn, 2003b). While there is no quick and facile remedy to this tension, MBSR teachers often find individual strategies, that tend to reflect both the teacher's mindfulness background and the target groups' characteristics.

### 1.4.4 Empirical Evidence of Mindfulness-Based Interventions

The proliferation of Mindfulness-Based Interventions (MBIs) in clinical and non-clinical contexts soon instigated an entire research area devoted to the evaluation of their efficacy and effectiveness. To date, mindfulness researchers have produced evidence of the clinical effectiveness of MBSR and other interventions across a number of disorders and symptoms.

### 1.4.4.1 Meta-Analyses

Reviewing and combining the results of numerous studies that investigate identical or similar premises, meta-analyses are powerful indictors of an intervention's feasibility and the state of research in a respective field. A number of meta-analyses demonstrates promising results across MBIs. Thus, in a meta-analysis of 39 studies exploring mindfulness-based therapy in diverse clinical populations, Hofmann, Sawyer, Witt and Oh (2010) reported moderate pre to post effect sizes on anxiety and mood (Hedges's g = 0.59 and 0.63, respectively), with effect sizes increasing in samples restricted to anxiety and mood disorders (Hedges's g = 0.97 and 0.95, respectively). Khoury et al. (2013) also reported medium effect sizes with regard to mental and physical symptoms across a sample of 209 studies investigating mindfulness-based interventions in clinical and nonclinical populations (with average effect sizes of d = 0.55 for pre-post effects, d = 0.52 for waitlist controlled effects and d = 0.33 for treatment controlled studies). Similarly, Eberth and Sedlmeier (2012) in their meta-analysis of the psychological effects of mindfulness meditation reported large effect sizes for stress, well-

being and anxiety in nonclinical samples (d = 0.78, 0.80 and 0.64, respectively). Notably, the authors described larger effect sizes for MBSR compared to other forms of mindfulness meditation, potentially indicating a conglomerate of mechanisms (as opposed to a more specific effect of "pure" mindfulness) active in MBSR. This study relied on data extracted from a large-scale meta-analysis examining the effects of meditation at large across 163 studies (Sedlmeier et al., 2012), where effect sizes for mindfulness-based studies were comparable to overall meditation effect sizes when possible publication biases were accounted for. Overall effect sizes in the medium range were reported for interpersonal changes (r = .44), reduced state anxiety (r = .37), trait anxiety (r = .32) and negative emotion (r = .34). Effect sizes ranging from small to medium were found with respect to learning and memory (r = .21), negative personality traits (r = .18) and emotion regulation (r = .17). In an earlier meta-analysis by Grossman, Niemann, Schmidt and Walach (2004), even larger effects sizes of MBIs (mostly MBSR) across 13 controlled studies were reported. In both clinical and nonclinical populations, an average effect size of d = .54 for mental variables (e.g. depression, anxiety, well-being) and d = .53 for physical variables (e.g. pain, impairment, quality of life) was found.

### 1.4.4.2 Neurobiological Evidence

In addition to the growing body of meta-analyses, studies increasingly investigate the biological and neuro-structural effects of mindfulness. For instance, Davidson et al. (2003) demonstrated that following an 8-week mindfulness intervention, the experimental group (n = 25) showed higher brain activity (left-sided anterior activation) associated with positive affect than the waiting group (n = 16). Likewise, the authors reported indicators of higher immune functioning (as per a greater rise in antibody titers in response to a vaccine). Another study found that following an MBSR course, participants (n = 17) showed changes in gray matter density in brain areas associated with learning, memory, emotion regulation and perspective taking, relative to a control group (n = 17; Hölzel et al., 2011). Along the same lines, a meta-analysis investigating brain alterations in meditators generally reports that across 21 studies, eight brain regions showed consistently altered brain structures in meditators (Fox et al., 2014). The identified areas (mostly executive cortices) are associated with meta-awareness, introspection memory, body awareness, emotion regulation and self-regulation, with an average effect size of Cohen's d = .46. However, research on neuronal effects and mechanisms of mindfulness is in its early stages and needs further inquiry to elucidate the

often methodologically flawed findings, rendering it especially problematic to draw causal inferences (Fox et al., 2014; Tang, Hölzel, & Posner, 2015).

In sum, MBIs have rather consistently yielded medium effect sizes on a considerable range of psychological and physiological variables. Most importantly, MBIs have shown promise in areas of anxiety, depression, stress, emotion regulation, interpersonal dimensions and overall well-being. Neurobiological and physiological studies indicate that these changes may possibly be related to sustainably altered brain structures and neurobiological functioning, pointing to a potentially far-reaching impact of MBIs.

### 1.4.5 Theory of Change

Explanations of how mindfulness may work remain relatively scarce (Hölzel, Lazar, et al., 2011; Kuyken et al., 2010). Although increasingly the focus of evaluations and often recommended by authors as a future area of investigation (e.g. Feagans Gould, Dariotis, Greenberg, & Mendelson, 2015), theories of change are often tentative in their findings and limited in their scope. The most solid theories and evidence of potential mechanisms active in MBIs are presented in the following.

### 1.4.5.1 Integrative Reviews and Theoretical Frameworks

In an attempt to consolidate much of the literature and evidence on the theory of mindfulness-induced changes, Hölzel, Lazar, et al. (2011) proposed a model that assumes the following components as constituents of mindfulness-based interventions:

- a) Attention Regulation. Attention regulation in the form of sustained concentration on a specific object is a component that has been widely received in western academic literature on mindfulness. In renewing the mental focus whenever it drifts away, attention regulation is part of executive function. The authors review behavioral and neurological literature that supports the role of mindfulness in enhancing top-down regulation of interfering influences and distractions, also referred to as 'conflict monitoring'.
- b) Body Awareness. The authors also report the self-reported and neurobiological evidence of body awareness as an active component in mindfulness meditation, which typically targets bodily sensations or internal stimuli as objects. Body awareness encompasses interoception and sensual acuity, and can be regarded as the bottom-up complement of increased attention regulation, since it provides sensorial and emotional information input. The authors therefore argue its relevance for emotion regulation and empathy.

- c) Emotion Regulation. Drawing on evidence from behavioral, physiological, neurobiological and self-report studies, the authors identify emotion regulation as another central component of mindfulness and describe it as a process of altering emotional reactivity. They discuss two key processes in this respect: reappraisal and exposure. Reappraising emotional stressors in a more positive manner seems to constitute a central emotion regulation process in much of the literature, yet some evidence has also been generated in support of 'non-appraisal' i.e. decreased reactivity to emotional stimuli. Exposure is relevant to mindfulness meditation inasmuch as the meditator is encouraged to actively attend to negative stimuli rather than engage in avoidance behavior, which may contribute to an extinction of the emotional reaction.
- d) Change to the Perspective on the Self. Hölzel et al. argue that while the dissolution of a solid self as prescribed in Buddhist teaching is seldom reported after MBIs, recurrent descriptions of a dis-identification with the specific contents of consciousness and internal events may be related to changes in self-concepts and self-representation, and are yet another component of mindfulness practice. Often referred to as de-centering and reperceiving, this detachment from one's own subjective experience remains to be more rigorously explored, however.

Notably, the authors emphasize that these components are closely intertwined, interacting differently depending on the situation, person and specific mindfulness practice. Attention regulation is afforded particular importance as the basis for many of the other mechanisms. The authors also propose the incorporation of the concept of self-compassion as a complement both to emotion regulation and changes in the perspective on the self, and suggest a number of further future directions, including an investigation of determinants of benefit from mindfulness. Finally, they recommend further inquiry into the identified components, in order to validate and expand the understanding of mindfulness mechanisms.

Vago and Silbersweig (2012) build on the work of Hölzel et al. in an attempt to integrate modern and Buddhist mindfulness concepts and practice into a comprehensive neurobiologically founded framework. They depart from the notion that a biased or distorted sense of self is the common basis of most mindfulness narratives and indeed central to both "normal" and pathological experiences. This bias results from and is continuously cemented by unconscious schemas, habituation and automatization processes, attentional distortions, etc. The authors review and illustrate the evidence for neurobiological involvement in various modes of self-processing and conclude that mindfulness works through neural networks that

modulate these processes, leading to increased self- awareness, self-regulation and self-transcendence (S-ART). Self-awareness contributes to a meta-view on own biases and distortions, while self-regulation corrects such erroneous processing and its behavioral expressions. In parallel, self-transcendence re-shifts the focus from the self to other-orientedness and prosocial behavior. According to the authors, the involved neurobiological processes constitute the overarching mindfulness mechanisms and are aided by a number of psychological processes and mechanisms, namely: intention and motivation (to practice this mindfulness-related skillset), attention regulation, emotion regulation, extinction and reconsolidation, prosociality, non-attachment, and decentering.

A more recent review paper on the neural mechanisms of meditation and mindfulness (Esch, 2014) mirrors many of the components identified by Hölzel et al. (2011) and Vago and Silbersweig (2012). In this investigation, the author concludes that the neurological evidence supports four areas implicated in these practices: attention regulation, emotion regulation, body awareness and self-perception. Along similar lines, a theoretical treatise of the mechanisms of mindfulness psychotherapy argues that the mechanisms active in mindfulness are a meta-awareness that is able to discern and relativize automatic responses and schemas; acceptance; exposure and non-reactivity to difficult emotions; and a re-organization of emotional and cognitive processes through the aforementioned mechanisms (Bohus & Huppertz, 2006). Self-awareness and regulation have also been stressed by Jankowski and Holas (2014), who propose that mindfulness is essentially a meta-awareness that supersedes regular awareness of the present experience in that it consciously observes this awareness, which generates a new range of possibilities in thought and action.

Many of these theories were strongly influenced by Shapiro, Carlson, Astin and Freedman (2006) who postulated one of the first theoretical models of mindfulness mechanisms. Considering mindfulness a continuous cyclic process, Shapiro et al. assume three main mindfulness 'axioms': intention, attention and attitude. Intention refers to the practitioner's personal vision and goal in pursuing mindfulness. The authors note that these intentions are in flux rather than static, and may directly determine the outcome of the practice. Attention in this context denotes a sustained focus on present experience, which the authors relate to attention regulation. Attitude, meanwhile, specifies the qualities of intention and attention, instilling a deliberate orientation towards kindness, patience, openness and acceptance. These axioms underlie the 'meta-mechanism' of mindfulness, which the authors term 'reperceiving': a change in one's perspective such that the self becomes the object of awareness.

Once this shift is accomplished, other mechanisms, that are also simultaneously positive outcomes in their own right, are able to take toot; self-regulation, a clearer sense of values, flexibility and exposure constitute a set of auxiliary mechanisms that are fostered by a tendency to reperceive. Specifically, re-perceiving helps individuals recognize automatic behavioral patterns and avoidance tendencies (self-regulation) and conditioned value systems that are ultimately imposed and extrinsic (value clarification). It may likewise enable practitioners to respond more adaptively on an emotional, cognitive and behavioral level (flexibility) and face their own emotions and fears safe in the knowledge that they do not necessarily have to overwhelm them and that they shall eventually pass (exposure). The authors emphasize that the ways in which mindfulness components, re-perceiving and the proposed secondary mechanisms interact is not a linear process, but rather a mutually reinforcing constellation.

### 1.4.5.2 Empirical (Mediational) Studies of Mechanisms

In a quantitative non-controlled assessment of the aforementioned model put forth by Shapiro et al., Carmody, Baer, Lykins and Olendzki, (2009) reported mixed results. After an MBSR intervention, participants (n=309) significantly improved on measures that assess all constructs proposed by Shapiro et al. (mindfulness, re-perceiving, self-regulation, value clarification, flexibility and exposure) as well as measures of stress. However, mediation analyses could not confirm a mediating role of re-perceiving. A composite variable that merged mindfulness and re-perceiving predicted much of the variance, with two of the second-level mediators, value clarification and flexibility, partially mediating the relationship to stress outcome. While this empirical validation of the theory provides only partial support of the model, the authors note significant limitations with respect to the used instruments, since it is doubtful that they flawlessly capture the theorized constructs.

More recently, Kadziolka, Di Pierdomenico and Miller (2016) specifically investigated the role of emotion regulation in bringing about the commonly reported mindfulness effects on stress. The authors consider trait mindfulness a helpful factor in coping with stressors inasmuch as a focus on the present prevents ruminations and anticipations and thus diminishes the threatening character of the stressor. They examine the correlation between self-reported trait mindfulness and heart rate variability as well as skin conductance response during an emotional interview recall measure. While sympathetic activation (skin conductance) tended to decrease with increasing mindfulness, parasympathetic recovery after the stressful situation (heart rate variability) did not respond as hypothesized, i.e. recovery was not quicker among

more mindful individuals. The authors nonetheless argue that heightened parasympathetic activity among mindful people may be indicative of flexible emotion regulation and overall conclude that their results confirm the differential physiological reaction to stress among more "natively mindful" individuals.

In another investigation of possible mechanisms at play in Mindfulness-Based Cognitive Therapy (MBCT; a mindfulness-based therapy primarily used in depression), Kuyken et al. (2010) examine mediators and moderators of an MBCT intervention's effects on depression relapse prevention. MBCT targets negative and dysfunctional thinking patterns through noticing them and meeting them with acceptance and self-compassion rather than the reactivity, blame and guilt that are typical for depressive spirals. The authors point to the relatively sparse information available on the actual mechanisms behind MBCT and explore 1) whether mindfulness and self-compassion mediate the intervention's effect on relapse prevention, 2) whether the intervention altered the relationship between "cognitive reactivation of dysfunctional thinking" and relapse and 3) if so, whether this alteration was related to changes in mindfulness and self-compassion.

This study was part of an RCT comparing the intervention group with an active control of individuals on maintenance antidepressant medication on severity of depressive symptoms and relapse occurrences over a 15 months follow-up period. Mindfulness and self-compassion were measured at baseline and post-intervention (one month after MBCT), while cognitive reactivity was only measured post intervention using a sad-mood-induction, preceded and followed by the completion of a self-rated scale. Severity of symptoms and relapse occurrences were measured 15 months after baseline assessment.

Results indicated gender as a possible moderator (i.e. feature impacting the relation of intervention and outcome that preceded the intervention). In terms of mediators, the authors report main effects on mindfulness and self-compassion, whereby increases on those variables impacted decreases in depression severity at follow-up. Yet this effect was not differential across IG and CG (interactive effect). No similar effects were noted for relapse occurrence. Cognitive reactivity significantly impacted the interaction between intervention and depressive severity differentially for the two groups, while values for the mediation of outcome in terms of relapse were near significant. While the IG showed greater reactivity post-intervention than the CG, reactivity predicted worse outcomes only for the CG. Additional analysis indicates the change in self-compassion due to the intervention as a possible moderator of the latter effect on severity of symptoms, but not on relapse (i.e.

individuals who scored highly on self-compassion showed a stronger robustness to high reactivity than those low on self-compassion).

Whereas the authors rightfully conclude that their study indeed points to the possibly central role of mindfulness and self-compassion as mediators of change in MBIs, they do not emphasize the fact that this mediation was not differential across IG and CG, leaving questions regarding the specificity of MBIs in this respect unanswered. They recommend future investigation of specific mindfulness components, and further concede that this mediation cannot be regarded as a causality or direct mechanism of change. In addressing the lack of mediation of relapse recurrence, the authors posit that mindfulness may impact individuals on too subtle a level to be detected in this outcome.

Since the empirical inquiry into mechanisms active in MBSR in particular and MBIs in general often yielded inconsistent results or findings that do not fully echo the theoretical paradigms proposed for these interventions, Gu, Strauss, Bond and Cavanagh (2015) systematically reviewed, evaluated and synthesized the findings of 20 controlled MBSR and MBCT studies that specifically investigate mechanisms of change through mediation analyses. The outcome areas for those studies spanned mental health indicators of depression, anxiety, stress, negative affect and distress. Depending on the number, quality and methodological adequacy of the studies supporting any one proposed mechanism, the evidence for each mechanisms was considered either strong (consistent across more than one high quality study), moderate (consistent across one high quality and several medium quality studies) or insufficient (either inconsistent or strongly limited by methodological flaws). Perhaps most importantly, increases in self-reported mindfulness were found to be a moderate, consistent mediator of change in outcome variables following the MBI in the vast majority of studies. Emotional and cognitive reactivity were reported as a strong mediator (albeit only in two high quality MBCT studies), while repetitive negative thinking (i.e. rumination and worries) was assessed as moderate. Explorations of self-compassion however yielded only insufficient preliminary evidence. The authors conclude that these findings confirm the main premises of MBIs, namely that non-reactivity, acceptance and insight are main trajectories whereby mindfulness can achieve positive results and indeed view them in line with several of the theoretical frameworks reported above (specifically those outlined by Hölzel, Lazar et al. (2011) and Shapiro et al. (2006). Nonetheless, this review ends with recommendations of further inquiry into mechanisms active in MBIs.

To summarize, most of the existing theory and evidence with respect to mechanisms of mindfulness can broadly be classified in terms of two large components: regulation processes (flexibility, reactivity, repetitive negative thinking) and awareness processes (mindfulness, reperceiving). However, the sequence and trajectory of effects and the respective weight and importance of sub-components appears far from settled, as is evident in authors' consistent recommendation of future research into mechanisms, and the diverging models either described or implied in the different studies. Notably, few current or recent investigation into the mechanisms of mindfulness relied on qualitative reports by recipients of an MBI; we argue that this may well be one of the most fruitful approaches to understanding the subtler dimensions of this issue.

### 1.5 Mindfulness and MBSR in schools

While the previous section summarized the concepts and empirical findings of mindfulness and MBIs at large, the following pages hope to illustrate the relevance and evidence of MBIs for schools and teachers specifically. To this effect, the mental health situation of teachers and the particularities of this profession will initially be discussed. Subsequently, the state of research investigating mindfulness interventions targeting teachers will be reviewed, followed by an illustration of the exact rationale of the at-hand project and dissertation.

### 1.5.1 Risk Factors and Resources in the Teaching Profession

#### 1.5.1.1 Risk Factors

Teaching has been strongly associated with stress and health risks worldwide (Benn, Akiva, Arel, & Roeser, 2012; Flook, Goldberg, Pinger, Bonus, & Davidson, 2013b; Lomas et al., 2017; Weare, 2014). In the German context, evidence points in a similar direction. According to several wide-scope studies (Bauer, 2009; Bauer et al., 2006; Hillert, Koch, & Lehr, 2013; Schaarschmidt, 2005), around 20 to 30 percent of German teachers are suffering from serious stress-related health issues, including severe burnout. Similarly, in a sample of over 400 German teachers, an investigation into coping styles with respect to work load and conditions indicated that 50.2% of these teachers are at risk for burnout and severe stress (Bauer et al., 2006). Indeed, teaching ranks among the professions highest in burnout rates (Schaarschmidt, 2005). In a large-sample study investigating specific burnout symptoms, Unterbrink et al. (2007) found that German teachers report high levels of emotional exhaustion, depersonalization and low personal achievement, relative to comparable studies in Germany

and abroad. The authors postulate a significant imbalance between invested effort and obtained reward (measured by the 'Effort-Reward Imbalance Questionnaire'; Siegrist et al., 2004) as a contributing cause due to its association with mental health risks. Effort-reward imbalance and over-commitment have also been linked to reduced immune function in stressful situations in a sample of German teachers (Bellingrath, Rohleder, & Kudielka, 2010), while immune function, in turn, was associated with teacher burnout (Von Känel, Bellingrath, & Kudielka, 2008). Other studies also point to heavy workloads, adverse conditions and mental health risks among German teachers (Bauer et al., 2006; Bauer, Unterbrink, Hack, et al., 2007). Specifically, class size and difficult, hostile behavior on the part of students have been cited as distressing factors shaping the work life of German teachers (Bauer et al., 2006, 2007). Amidst hostile interactions that may mount to actual verbal and physical transgressions (Bauer, 2009; Unterbrink et al., 2008), teachers often lack the opportunity to develop productive and growth-generating relationships to their students or cultivate a creative, trustful climate in their classrooms. This is all the more fatal since it is precisely the relationship to students that constitutes one of the most powerful influences on teacher mental health (Bauer et al., 2007; Hattie, 2009; McCormick & Barnett, 2011; Unterbrink et al., 2007; Unterbrink et al., 2008)

The specific nature of teacher stress has been the subject of much consideration. Schussler, Jennings, Sharp and Frank (2015) argue that teacher stress is unique inasmuch as it combines in-class stressors (challenging students, classroom environment), interpersonal stress (students, colleagues, parents) and academic efficiency and outcome orientation. According to the authors, teachers are required to deal with possibly traumatized students, make ethical choices with little time to reflect and address interpersonal and emotional needs, all of which can increase the likelihood of burnout symptoms: depletion, depersonalization and diminished personal accomplishment.

Keller, Chang, Becker, Goetz, & Frenzel (2014) likewise implicate burnout facets in their discussion of teachers' Emotional Labor (EL). Emotional Labor is defined as the active effort to regulate and express emotion as desired or required by a particular context. This often entails *surface acting*, whereby teachers either suppress emotions that the teaching situation cannot accommodate or simulate emotions they deem important to convey. The authors argue that EL is related to the emotional exhaustion (EE) so central to burnout syndromes and indeed point to evidence to this effect. In their study of these constellations, the authors report a correlation between experienced anger, EL and EE in a sample of German teachers. They

further conclude that reducing angry reactions among teachers (for instance through reappraisal techniques) may contribute to decreased EL and EE. By contrast, according to the authors, experiences of enjoyment may assist teachers in keeping EL and EE at bay.

In short, the often alarming health threats associated with teaching are likely due to a very distinctive pattern of stressors. Rather poignantly, Weare (2014) describes the inherently demanding nature of teaching as follows:

"Teaching is at heart a social activity, and the teacher's day a relentless stream, or sometimes snowstorm, of interactions with colleagues, students and parents, in classrooms, staff rooms, corridors and playgrounds, which must be managed in situ as they arise. These interactions routinely involve uncertainty, and actual or potential conflict. To negotiate them successfully the teacher must constantly shift their attention, make moment by moment decisions, and carefully regulate and manage both their thinking, behaviour and emotions, in the direction of positive states of mind such as motivation, enthusiasm and self-belief, while managing distressing mind states such as frustration, lack of control, anger and fear, and all in socially approved ways." (p.10)

#### 1.5.1.2 Potential Resources

The manifold and complex stressors notwithstanding, teaching can also be considered a particularly resource-rich profession. While students, colleagues and parents may constitute stress sources (e.g. Friedman, 2000), constructive coping and helpful contexts may tap the potential that these apparent stressors harbor. The classroom teaching situation may be experienced either as a draining, emotionally exhausting confrontation, or as a positive space where engaging and often joyful processes and strong relationships are fostered. Similarly, parents can be antagonistic counter-players that are perceived as threatening and demanding, or valuable allies and partners with whom teachers share important goals. Finally, the relationship to colleagues can be part of a hostile, competitive work environment, or contribute to a sense of community and cohesion. Therefore, context and coping may determine whether potential resources are utilized in a manner that can indeed prevent health risks and increase work satisfaction.

The importance of unearthing and utilizing resources has in fact been the subject of many theoretical frameworks. For instance, the Job Demands-Resources Model (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001) describes burnout as a result of mismatched job demands and resources. In a similar vein, the Conservation of Resources Theory (Hobfoll, 2001) holds that stress is experienced as result of threatened, diminished or misinvested

resources and that, consequently, individuals prevent stress and burnout through cultivating and balancing out resources. Indeed, Hobfoll (2001) compiled central cross-cultural resources, including many that are inherent to the educational setting. Specifically, the author lists 'feeling valuable to others', 'positively challenging routine', 'role as a leader', 'sense of commitment', 'companionship', 'feeling that my life has meaning/purpose', 'people I can learn from', and 'providing children's essentials' as valuable resources that can counter job strain.

What then may (co-)determine whether work conditions constitute stressors or resources, or conversely increase individuals' tendency to seek and activate resources? Schaarschmidt, Kieschke and Fischer (1999) attempted to capture teachers' behaviors in and perceptions of their workplace in terms of 11 dimensions: subjective significance of work, professional ambition, tendency to exert, striving for perfection, emotional distancing, resignation tendencies, offensive coping with problems, balance and mental stability, satisfaction with work, satisfaction with life, and experience of social support. From these dimensions, the authors extrapolate four types of coping styles that further our understanding of teachers' well-being and job satisfaction:

- 1. **Type G** (Good Health) is described as the healthiest coping style, since teachers associated with this type show high levels of work dedication and engagement as well as pronounced distancing abilities and resilience. From all the four types, type G scores highest on satisfaction with work/life and perceived social support.
- 2. **Type S** (Sparing) shows low levels of work engagement and dedication and high distancing and resilience. Relatively high work and life satisfaction indicate a healthy coping style that is generally characterized by a sparing and self-preserving approach to work.
- 3. **Type A** (Ambitious) typically demonstrates very high engagement yet little distancing and resilience. These teachers tend to report anxiety and negative emotions. Schaarschmidt and Fischer (2001) interpret this coping style as an effort-reward imbalance, whereby individuals invest intensive commitment and dedication and perceive little reward, support and recognition in return.
- 4. **Type B** (Burnout) shows the most problematic constellation of coping techniques, since teachers of this type exhibit particularly low engagement as well as the poorest resilience, well-being and satisfaction levels of all four types. The authors relate this coping style to burnout syndromes and emotional exhaustion.

The authors consider Type A and B representative of risk patterns, since the former stands for "excessive commitment coupled with inadequate coping resources" (Kieschke & Schaarschmidt, 2008, p. 435), while the latter is generally characterized by emotional exhaustion and a lack of capacities. In a large sample of German teachers (n = 7639), all four types were investigated in relation to other characteristics of well-being and resource utilization by a German working group, and are reported in a number of publications (Kieschke & Schaarschmidt, 2008; Schaarschmidt & Fischer, 1997, 2001; Schaarschmidt et al., 1999; Schaarschmidt, 2005). The respective authors report that Type A and B teachers (risk patterns) predominated in the sample. However, teachers associated with type G consistently yielded the most favorable results on measures of psychological and physical symptoms, preventive health care and regeneration behaviors and relaxation. They were furthermore likeliest to consider exchange with others, relaxation and a positive social climate at school valuable resources, and viewed typical stressors such as difficult students and large class sizes and work load less critically than the other types. Likewise, Type G teachers rated themselves higher on indicators of professional competence, self-realization, joy in teaching and enjoyment of working with young people than the other types, and reported the most advantageous social-communicative behavior (i.e. high levels of communicative activity, selfassertion and consideration of others and low levels of confrontational communication and sensitivity). By contrast, Type B showed the least favorable patterns across these indicators.

These results strongly suggest that high work engagement that is nonetheless accompanied by marked emotional distancing and resilience may constitute a particularly constructive coping style in the school setting, since it is associated with maximal utilization of potential resources and other protective factors. The authors also conclude that it is vital that both the work conditions in the school setting (autonomy, support, class size, recreational time, etc.) as well as the professional training of teachers (self-management skills, coping strategies) be addressed in parallel.

Klusmann, Kunter, Trautwein, Lüdtke, and Baumert (2008) confirmed a condensed version of this typology in a study with 1789 German teachers. In their investigation, the authors focus on engagement and resilience as determinants of different self-regulatory patterns. Having first assessed work engagement and resilience, latent profile analysis of the sample yielded a type H that is high in both engagement and resilience, a type A high in engagement but low in resilience, a type U low in engagement but high and resilience and finally a type R scoring low on both constructs. Further comparisons (n = 318) of the types with respect to emotional

exhaustion revealed that Type H fared best while Type A and R fared worst. The same pattern was found for levels of job satisfaction across types. Moreover, the authors tested whether the types differed in teaching quality and student performance. Results in this regard indicate superior instruction performance among teachers classified as type H (as per student ratings of tempo, cognitive activation and support), whereas the other types did not differ significantly. Similarly, students of teachers associated with type H reported higher self-rated competence and autonomy; however performance (in math) did not differ. The authors conclude that emotionally distancing oneself from professional goings-on and constructively coping with failures, i.e. resilience, are essential self-regulatory mechanisms and resources for teacher health. In their opinion, this points to the relevance of training interventions that target coping and regulation skills.

Another conception of teacher stress and burnout was put forth by Friedman (2000), who emphasizes the importance of self-efficacy in understanding and preventing job strain. Arguing that teachers begin their career with idealistic notions of the profession and high expectations of themselves and the workplace, the author describes a burnout trajectory that is largely due to a discrepancy of expected and observed self-efficacy. combination of teacher trainings and an adjustment of expectations as a solution to the frequently resulting downward spiral. While it is likewise the contention of this dissertation that self-efficacy is a valuable resource (Bandura, 1977, 1986; Dicke et al., 2014), in our opinion the postulated "idealism" discussed by Friedman is likely a resource as well. In light of the findings and theories discussed above, dedication, commitment and intrinsically motivated expectations of the teaching process can be considered an asset to teachers if accompanied by constructive and protective regulatory mechanisms. Whenever teachers are forced to compromise their intrinsic dedication in an attempt to self-preserve and function, this resource is squandered. Rather than adjust expectations and goals, teachers should arguably be provided with tools and strategies to preserve these goals throughout their careers. Indeed, Pietarinen, Pyhältö, Soini, and Salmela-Aro (2013) demonstrate that teachers' coping strategies and perceptions can actively influence the fit between teacher and working environment. This in turn directly impacts well-being and teaching skills. The authors discuss one particularly effective proactive coping strategy, co-regulation, which refers to identifying and activating social resources. They find that co-regulation is negatively associated with burnout symptoms and perceived work-environment fit.

In conclusion, the teaching profession offers numerous resources that can serve to shape and modulate the perception and experience of stress. These resources, including the relationships to peers and students, the sense of community and social support that schools may foster and the intrinsic dedication and motivation to teach, are naturally influenced by work conditions, but also seem to be contingent upon individual factors, such as stress resilience and management, self-regulation and self-efficacy.

## 1.5.2 Current State of Research

When the specific situation of teachers and the nature of the teaching profession as outlined above are considered with a view to the possibilities and impact of mindfulness, it becomes evident that MBIs may constitute a powerful tool to counter teacher stress and draw on resources inherent in the educational setting. It should be no surprise then that MBIs are increasingly applied for teachers specifically. Summarizing the notions that prompt most MBIs for teachers (and in fact many of the proposed mechanisms of MBIs generally), Schussler, Jennings, Sharp and Frank (2015) state that

"Attention and self-awareness are likely precursors to physical and emotional well-being. Greater self-awareness may result in improved emotional regulation. Emotional regulation may relate to increased relational capacities. Therefore, mindfulness-based interventions may be ideally suited to support the development of a mental set that is associated with enhanced teacher well-being and a positive classroom climate" (Schussler et al., 2015, p. 3).

The potential of mindfulness for teachers and the school setting at large has been increasingly tended to in recent years, even though equivalent research in Germany is still in its infancy. Very few systematic reviews in this area exist however. Most notably, Lomas et al. (2017) examined the existing empirical evaluations to date and reviewed a total of 19 studies (17 of which were intervention studies while the remaining two were correlational investigations). The included publications assessed the impact of mindfulness and MBIs on a number of outcomes: health-related outcomes, including depression, stress, burnout and overall health; "positive" outcomes, including well-being, satisfaction, compassion and emotion regulation; and job-related outcomes, including job performance. The authors conclude that the evidence clearly points to largely positive results on all investigated areas, but nonetheless note that the effects are not entirely consistent across studies. Indeed, none of the outcome variables - save for emotion regulation - significantly changed in *all* studies investigating them, even though the majority of studies report changes in the hypothesized direction. The authors further highlight the lack in quality exhibited by many of the revised studies as a limitation of the

overall positive evaluation. Two previous reviews of MBIs for teacher echo the findings reported by Lomas et al. Albrecht, Albrecht and Cohen (2012), who reviewed three, small-sample, non-controlled pilot MBIs for teachers conclude that the impact on stress, self-management and classroom experience was promising, yet state that more stringent implementation and evaluation is necessary. Likewise, in her review of 13 studies (five randomized control trials, seven control studies, three non-controlled studies and one qualitative investigation), Weare (2014) concludes that mindfulness has shown positive effects on teachers' mental and physical health, well-being, compassion, and performance.

Since systematic reviews are scarce, a closer inspection of MBIs for teachers and their individual evaluation is called for. In the following, the most thoroughly evaluated mindfulness-based intervention programs for teachers are discussed.

## 1.5.2.1 Cultivating Awareness and Resilience in Education (CARE)

'Cultivating Awareness and Resilience in Education' (CARE; Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013) is an intensive intervention delivered to teachers in four full-day sessions, during which participants are instructed in emotion skills and theory, mindfulness contents such as body awareness and breathing meditations, and compassion exercises. In the authors' overall logic model, the intervention improves teachers' social and emotional competences (SEC), which affects classroom climate and teacher well-being. This in turn impacts student performance and behavior as well as teacher-student relations.

In a first publication that evaluates CARE, the program's developers test its efficacy in improving positive and negative emotions, emotion regulation, depression, physical symptoms, self-efficacy, burn-out, time pressure and mindfulness among 50 teachers randomized to either an intervention or a control group. The results point to partial evidence for the assumptions, with mindfulness and efficacy yielding significant group differences. The authors also report significant differences on a number of subscales of the measures for emotion regulation (reappraisal), burnout (personal accomplishment) and time pressure (hurry). Notably, the total scores of these measures did not vary between the two groups.

In a subsequent study on the same program, the authors address these somewhat mixed results and attempt to shed light on specific mechanisms through a qualitative approach (Schussler et al., 2015). Specifically, the authors inquired into the program's hypothesized effect on teacher awareness as well as into the exact components that teachers perceived as effective/ineffective in improving their well-being. To this end, four Focus Group Discussions each comprising

four to eight members of the original sample were conducted. The resulting transcripts were analyzed using a contextual coding technique; i.e. the question eliciting descriptions of least and most helpful practices was coded with a particular view to the answer's context, since not the actual mention of the practice was of interest, but rather the description of its implementation, which was considered to depict the mechanisms at play. In this way, the authors attempted to gain insight into virulent dimensions of awareness and well-being. In a second step, the coded data was analyzed using content analysis. In this process, the identified codes (contextual descriptions of least and most helpful practices) were matched to the categories measured through quantitative analysis, namely: general well-being, teacher efficacy, teacher burnout and mindfulness. In other words, the qualitative descriptions were contrasted with and related to the categories (subscales) assessed by the quantitative measures, wherever a correspondence was reasonably evident.

This analysis resulted in a) an enumeration of the quantitative categories associated with each code/practice, as well as an overview of the respective frequencies (for instance, the code 'Body Scan' was matched twice with well-being and once with mindfulness); b) a summary of the number of codes under each measure, so as to see how many codes were aligned with each measure (for instance, 31% of Most Helpful Practice Codes and 58% of Awareness Codes were aligned with mindfulness; and c) a total tally of codes associated with each of the measure, so as to view the prevalence of the measure across questions/coded themes. For instance, 48% of all coded material was aligned with mindfulness.

Results pertaining to awareness ("Did CARE change your level of awareness and if so, please describe ways it helped you be more mindful?") indicated that the majority of coded passages was aligned with mindfulness and depicted the mechanisms at work as either an awareness of the physical effects of stress or of the individual response to stress. Specifically, 40% of codes falling under this question narrated awareness of ways in which stress was held in the body. In this respect, teachers reflected on physical stress symptoms as they relate to mental states, acquired skills to counteract physical stress (breathing/body scan) and the need for self-care. Another estimated third of codes described awareness of attitudes and emotions; these codes were largely related to increased non-reactivity. The authors interpret these passages as increased emotion regulation and suggest that this response may address burnout risks by breaking reaction cycles that result from counterproductive reactions in stressful classroom situations, replacing them with "reperceiving"(see above; Shapiro et al., 2006). They note that

many passages described how these tendencies led to more constructive interactions with others and point out the implications this benefit has for student-teacher relationships.

In terms of most helpful practices, the authors report that practices that helped teachers engage in self-care and manage their stress with immediate impact were identified as most helpful. They interpret the significant quantitative effect on the self-reported mindfulness subscale measuring non-reactivity as consistent with this finding, especially since the code "mindfulness – non-reactive" was fairly prevalent in the data. By this logic, stimuli that would normally elicit stress did not evoke a stressful reaction as often. The authors conclude that an increase in self-awareness helped teachers better dis-identify and cope with negative emotions.

Efficacy, which was the most significant outcome measure in the prior quantitative analysis, was barely addressed by participants. The authors argue that teachers may in fact have experienced increased efficacy, as indicated by the quantitative findings and other similar studies, but that their narratives dwell on the positive outcomes of this efficacy rather than efficacy itself.

Themes which were not captured by the aligned measures but which proved salient during the discussion revolved around the sense of community engendered by CARE and its resource-oriented approach. The authors recommend that mindfulness programs involve the entire school to fully capitalize on the potential of this intervention. In addition, they suggest that further research into mechanisms underlying mindfulness intervention is advisable.

In yet another qualitative study investigating the impact of CARE on 12 teachers, Sharp and Jennings (2016) explore how teachers integrated the course contents into their lives and how they experienced the course in individual interviews. Teachers were selected from the original sample based on a criterion sampling process whereby positive quantitative changes constituted a criterion for inclusion. Transcripts of interviews were analyzed using thematic analysis.

Results regarding the applications of mindfulness include a) the use of metaphors inducted by the course in a way suggestive of increased emotional awareness and decreased emotional reactivity; b) a tendency to pause in stressful situations and reappraise, rather than react as usual or in a defensive manner (which the authors label present-centered awareness and reappraisal); and c) a reported ability to shift perspective as an outcome.

When openly reflecting on CARE, the teachers narrated a) an impact on emotional reaction, whereby participants describe how the provided input on reactivity has helped them grow more aware and in control of their reactions (distinction response/reaction) and b) increased compassion and empathy with students which in turn strengthened teacher-student rapport.

These results are discussed in terms of reappraisal, re-perceiving and releasing attention from rumination such that resources are available for decoding present experience. Drawing on literature that poses figural speech as a sign of reflexivity, the authors postulate that the use of metaphors may be a sign and a mechanism of reappraising, especially in light of the general increase in reflexivity that they note. The authors conclude that the results are in line with other research suggesting that mindfulness can foster empathy and compassion. Finally, the authors recommend further research into mindfulness for educators and point to the importance of mixed method approaches in understanding how best to tailor interventions to this target group and the exact changes that educators may experience.

# 1.5.2.2 Stress Management and Relaxation Training (SMART)

Stress Management and Relaxation Training (SMART; Cullen & Wallace, 2010) is a manualized intervention that is largely based on the classical MBSR course, yet specifically targets teachers and incorporates additional input emphasizing emotion regulation, compassion and forgiveness. The course takes place over nine single 2.5-hour sessions as well as two full intensive practice days.

Taylor et al. (2016) implemented and evaluated SMART in a controlled design comprising 56 teachers. The authors argue that mindfulness may improve teachers' health by impacting their emotion regulation (including emotion regulation self-efficacy beliefs) and coping skills through an increased awareness of resources and demands. Similarly they posit that increased awareness may render teachers more compassionate, empathetic and forgiving. The authors suggest that these tendencies are not only beneficial to mental health but arguably essential for effective and harmonious classroom interactions. Accordingly, teachers in the intervention group (IG; n = 26) were hypothesized to a) report less stress and higher emotion regulation efficacy, b) describe stressors less negatively, c) show more adaptive and less maladaptive coping, d) report higher satisfaction with how they handled stressful situations, e) show increased dispositional compassion and forgiveness and f) express more compassion than teachers in the waitlist group (WG; n = 30).

This study employed quantitative surveys that measured program acceptability and usefulness, occupational stress, emotion regulation efficacy, dispositional compassion, and dispositional and situational forgiveness. Many of the surveys were adapted or self-devised. Furthermore interviews were conducted to assess coping and compassion via an exemplary coping situation. The qualitative transcripts were coded for quantitative analysis.

Results of the group comparisons revealed a significant reduction of occupational stress in the intervention group. Furthermore, significantly fewer negative emotions/words where used in the appraisal of a situation in the coping account. Types of coping (internalizing, externalizing, mastery and problem-solving, delegation and support seeking) did not differ significantly between groups. Post-coping reflection differed with marginal significance, in that the IG described more awareness of the coping strategy but perceived no need for a change due to its favorable outcome. Situational Compassion did not differ. The IG used more positive affect words than the WG to describe most challenging students.

In terms of postulated mediation variables, the IG reported significant changes in emotion regulation efficacy, forgiving students, dispositional forgiveness, and situational forgiveness, relative to the WG. No changes were found for forgiving colleagues and dispositional compassion.

Taylor et al. conclude that 1) emotion regulation efficacy, 2) efficacy for forgiving students, 3) dispositional forgiveness and 4) situational forgiveness are mediators of stress reduction following the administered MBI. Mediational tests confirmed the role of dispositional forgiveness (forgiving students was marginally significant), yet the other mediators could not be confirmed. The authors posit that mindfulness assists teachers in meeting emotional demands in the classroom and reducing negative emotional reactions to stressors, which corresponds to the appraisal phase of the stress cycle according to Lazarus and Folkman (1987). With more caution, they indicate some effect on the other components of the stress reaction cycle as well, noting benefits on coping with the stressor and post-coping reflection.

The authors further interpret the findings on forgiveness as relevant to classroom climate and teachers' relationships to students, while forgiveness towards colleagues was not affected. With respect to compassion, they comment on the mixed results: on one hand, there were no group differences in codings of compassion or expressed compassion towards challenging students, yet the IG more frequently mentioned positive feelings in the description of these students. Pointing to other studies that investigate self-compassion, they hypothesize this construct as a potential prerequisite for compassion towards others.

While this study investigates interesting mediators and employs mixed methods, the qualitative approach to the data is essentially quantitative and less invested in fully understanding subjective experience. Moreover, there is no specific reason to assume that forgiveness is a mediator rather than an outcome, and positing it as the former may obscure our understanding of how forgiveness is impacted.

In an earlier excellent randomized and controlled evaluation of the same program, Roeser et al. (2013) test the acceptability, feasibility and efficacy of SMART for teachers in two schools (n = 113). Describing the project's rationale, this paper outlines the potential effects of improved stress coping through mindfulness on preserving energy and resources that can then be invested in teaching practices and student relationships. Specifically, the authors posit that MBIs may be of particular value to the multifaceted, social-emotional stress that teachers experience. Through mindful awareness, the appraisal of stressors can be influenced inasmuch as stressors and the reactions to them are recognized and regulated. Likewise, awareness, emotion regulation and self-compassion can affect the coping strategies used in the face of stressors. Mindfulness can thus impact bottom-up and top-down processes and executive functions. Three research questions guided this study: 1) Is the training acceptable (perceived as beneficial) and feasible (in terms of program completion and home practice); 2) Does the training reduce occupational stress and burnout?; and 3) Does the training increase mindfulness, "occupational self-compassion" and working memory, and do these increases mediate effects on stress?

Assessment was conducted at three time points via questionnaires measuring stress, anxiety, depression, burnout, mindfulness and self-compassion. In one sample, working memory and cortisol levels were additionally assessed, while blood pressure and heart rate were measured across samples. A self-designed evaluation survey inquired into basic acceptability and feasibility, and practice journals were encouraged and collected for two thirds of the sample. Absenteeism was also assessed as an indicator for stress levels.

Results indicated significant improvements on mindfulness, self-compassion stress, burnout, anxiety, depression and focused attention in the intervention group, with largely similar (though not identical) patterns across the two schools. Acceptability and feasibility were rated highly (as per averaged ratings), and the two thirds of retuned journals suggest a regular daily practice of 15 minutes on average. Physiological measures and absenteeism rates were unresponsive. A mediational test of the assumption that mindfulness and self-compassion accounted for the changes in stress and burnout was confirmed for the changes from post-

assessment to follow up. However, the authors concede that the tested mediational model may depart from misattributed causal relationships.

The study boasts a thoroughly formulated theory of change and considerations of fidelity of implementation. Though the authors conclude from the lack of physiological results that more extensive biological assessments are recommended, it is possible in our opinion that this would constitute further steps down an unyielding path: Rather, qualitative assessments may hold potential for a closer understanding of mediations and mechanisms.

# 1.5.2.3 Mindfulness in Schools Project (.b)

The '.b Foundations Course' is part of a larger initiative dedicated to introducing mindfulness in the educational context ("Mindfulness In Schools - For the flourishing of young minds," n.d.). The course for teachers comprises traditional mindfulness contents as well as teacher-specific inputs. The intervention takes place across nine sessions that lasted 75 minutes each and also enforced individual practice on a near-daily basis.

In a controlled feasibility trial of this intervention, Beshai, McAlpine, Weare and Kuyken (2015) argue that the prevalence and severity of teacher stress is doubly relevant to the school setting, since teachers are the most central agents of school system an one hand and since their health directly affects students and their learning processes on the other hand. Accordingly, and drawing on the literature to this effect, this publication suggests that offering MBIs to teachers is likely to boost their health and improve classroom interactions, relations and teaching. The study hypothesized a decrease in stress and an increase in well-being, mindfulness, and self-compassion in the intervention group (n = 40).

Analyses of group differences confirmed changes in the hypothesized direction on all variables. The authors argue that mindfulness and self-compassion may serve as mediating mechanisms in the classically reported stress reduction effect of MBIs. However, the authors also describe mechanisms within these mechanisms, whereby mindfulness induces recognition of thoughts and emotions and helps individuals meet them with equanimity and interest.

Recommendations based on this paper include methodological improvements and future research into mechanisms at play in MBIs for teachers. While acknowledging many limitations, the authors hold that self-report data are appropriate in light of the subject matter. They also point to potential effects over time, which necessitates follow-up assessment.

# 1.5.2.4 Community Approach to Learning Mindfully (CALM)

The Community Approach to Learning Mindfully (CALM; Harris, Jennings, Katz, Abenavoli, & Greenberg, 2015) is an innovative, customized intervention that focuses on mindfulness and yoga. The authors highlight the fact that social emotional functioning of teachers has not been given due scientific attention and point to the considerable strain this profession entails: constant spotlight position, the lacking space for nonetheless unavoidable emotional reactivity, the risk of burnout and depression. As opposed to most other MBIs, this program entailed brief 20 minute sessions that took place every morning before the start of the school day and at regular points throughout. To further tailor the intervention to the teaching context, weekly practice cards with recommendations and integration strategies were provided. The research group also explicitly targets 'the cultivation' of positive emotions and "a group commitment to self-care and well-being" (p. 145). Fidelity was actively monitored through instructors' self-evaluation and additional adherence evaluation by observers in 20 % of sessions. Furthermore, practice reports and feasibility evaluations were collected from participants. The study followed a controlled randomized design with an intervention school (n = 34) and a waitlist school (n = 30).

Effects were hypothesized for mindfulness, positive and negative affect, emotion regulation, distress tolerance, relational trust among teachers, teachers' sense of teaching efficacy, time urgency, perceived stress, burnout, physical symptoms reports, sleep impairment and physiological parameters (cortisol and blood pressure). Notably, the effects on the respective measures were mostly reported in terms of subscales and significance trends were deemed indicative due to the small sample size.

Results revealed significant changes on the subscales *mindful observation*, *distress tolerance*, *positive affect* and *classroom management*. Significant changes were also found for physical symptoms. 'Trends' were reported for *time urgency* and the *depersonalization* subscale. Adherence and feasibility were confirmed via averaged ratings. No changes were found for the other subscales of the measures for mindfulness, distress tolerance, positive and negative affect, teaching efficacy and burnout, emotion regulation relational trust and sleep impairment.

Physiological measures yielded significant differences for diastolic but not systolic blood pressure, as well as a stable awakening response in cortisol levels among the intervention group as opposed to a "blunted" level among the intervention group, which the authors attribute to initial increases in the waking level in the control group.

While the authors conclude from their results that the intervention was effective in targeting mindfulness and emotional functioning, they reflect relatively little on the meaning of the unresponsive subscales, nor on the questionability of this piecemeal consideration of measures. They do argue that the intervention affected positive emotions and the coping with negative emotions rather than negative emotions themselves, yet fail to address why this does not lead to a total reduction in stress, relational trust, and the other subscales, as hypothesized by their logic model.

The programs and studies described in the preceding section demonstrate that mindfulness for teachers is associated with considerable potential. However, as noted by Lomas et al. (2017) the pattern of specific effects is somewhat inconsistent across studies, leaving questions pertaining to unresponsive variables or surprising findings largely unanswered. Moreover, the authors often postulate different mechanisms at the heart of the reported effects, while mediation analyses tend to be accompanied by cautionary remarks that the assumed direction of mechanisms is a matter of speculation. Arguably, the assignment of constructs to an outcome or mechanism level seems almost arbitrary, since the constellation can often be reversed. It is therefore no surprise that most authors recommend further research investigating mechanisms of MBIs. While a few studies adopted qualitative approaches to explore mechanisms in detail and elucidate our understanding of MBIs, qualitative analyses remain scarce and are often considered a quasi-quantitative research method, which focuses on frequencies and relations to statistical results. This dissertation posits that complementing quantitative assessment with a full-fledged qualitative approach may serve to better explicate the contingencies that render MBIs effective and the mechanisms through which they function.

# 2 Study Rationale

# 2.1 Objectives and Research Questions

Recapitulating our overall rationale, there seems to be a widespread need in modern society to resist the insidious functionalization of individual capacities and time resources and to meet growing trends of perceived stress, acceleration and performance orientation. The mental health of teachers and the increasingly demanding educational context are representative domains in this respect. The previous sections have demonstrated the effectiveness of MBIs in improving well-being and countering stress generally, the need to provide teachers with adequate and helpful tools to perform healthily and happily in their profession, and the evidence pointing to the appropriateness of MBIs for teachers.

Mindfulness for teachers is a young research area that has been gaining momentum internationally, yet remains underrepresented in Germany. As part of the CRC "Muße. Concepts, Spaces, Figures", the larger objective of the project that gave rise to this dissertation was to provide teachers in German schools with a useful tool that may help them maneuver the complications of daily life and, perhaps more importantly, contribute to personal insights about themselves, their realities and their choices. This in turn may prove of particular value to the multidimensional demands and implications of the teaching profession.<sup>7</sup>

Within this framework, the present dissertation hopes to shed light on the feasibility of a mindfulness-based intervention for teachers and explore its concrete impact and benefits. Moreover, this thesis aspires to better recognize limitations of mindfulness for teachers and contribute to a clearer understanding of factors influencing mechanisms and effectiveness. Given the subtle and experiential nature of the phenomenon under study, particular attention is lent to a first-person perspective on course participation, mechanisms of change and outcomes.

Specifically, this dissertation pursues the following research questions:

I. Do teachers who engage in mindfulness practice show improved mental health and well-being?

<sup>&</sup>lt;sup>7</sup> As most authors in this area suggest (e.g. Beshai et al., 2015; Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013; Roeser et al., 2013; Taylor et al., 2016), we strongly believe that mindful teachers may exert a transformative systemic influence on schools at large through their impact on interpersonal relationships and interactions and a generally mindful approach to students and teaching. Though this is not primarily the direct investigative interest of this project, it is nonetheless part of its rationale and is reflected in a quantitative and qualitative inquiry into the impact of mindfulness on interpersonal relations.

- II. From the teachers' point of view, what are specific processes and potential mechanisms of change set in motion by participation in an MBSR course?
- III. How are the concepts of mindfulness and Muße related to one another?

# 2.2 Mixed-Methods Approach

A mixed-method approach is a methodological choice that combines quantitative and qualitative research. In the context of the present dissertation, a mixed-method approach was considered indispensable primarily due to the nature of mindfulness as a subject matter and the posed research questions. On one hand, we were interested in testing a number of hypotheses that arise from current literature and produce results that are both generalizable and comparable to other results in the field. Furthermore, a quantitative assessment of hypothesized variables is more accurate in isolating influences and exploring causalities, which are key factors in determining questions of feasibility and effectiveness. Quantitative data are likewise especially important for variables that bear clinical relevance to teacher mental health.

On the other hand, we were also keen to explore facets of course experience and outcomes that could not be predicted in advance and that may address some of the gaps currently marring mindfulness theory. To that end, explorative approaches that enable the generation of hypotheses and the discovery of relevant themes (as opposed to hypothesis testing) were necessary. Furthermore, mindfulness as a practice takes place on an experiential level and targets processes that are not easily translated into measurable outcomes (such as stress). These may include subtle changes and processes on the emotional, cognitive and attitudinal level. Many mindfulness experts and authors in fact agree that quantitative methods alone fall short of capturing essential mindfulness components and effects, because they are not easily quantifiable (see section 1.4). We share this standpoint and propose that describing how an individual engages with the ideas and practice of mindfulness will necessarily require a nonstandardized account of this process from his or her own point of view. Such an account is moreover of particular value in determining mechanisms and trajectories of mindfulness, an area of investigation recurrently recommended in existing literature (see section 1.5.2). Finally, a qualitative approach was unavoidable in exploring  $Mu\beta e$ , which has not yet been operationalized as a psychological construct and is therefore not quantifiable or psychometrically measurable.

Depending on the exact purpose of the study and the reasons for choosing a mixed-methods approach, an analysis can rely primarily on either approach, using the other as a supplementary and confirmatory tool, or consider both equally important to the research process (Johnson and Onwuegbuzie, 2004). The dissertation at hand considers both its quantitative and qualitative components equal in value and importance. Quantitative and qualitative data presented here are relevant both in and of themselves, i.e. independently, and in their mutual framing of results. Based on the research questions described earlier, it was assumed that a first-person perspective on the intervention and its impact would a) reveal elements and dimensions that are impossible to capture quantitatively, and b) serve to explain and contextualize quantitative findings that may on their own prove less informative. Likewise, quantitative data, as the more widely established and more objective approach is deemed to deliver easily comparable and interpretable indicators of effectiveness that simultaneously constitute a wider framework within which qualitative data should be embedded. According to Greene et al. (1989), the purpose of the mixed-methods approach as used in this study can be understood as triangulation and complementarity, i.e., the mutual corroboration of findings and their elucidation and illustration of different types of data. In this manner, results yielded by either method are less likely to be over- or understated in their significance; rather, the study can "draw from the strengths and minimize the weaknesses" (Johnson and Onwuegbuzie, p.15) of each research paradigm.

# 2.3 Variables Targeted in the Present Study

Based on the premises and empirical findings described hitherto, the project at hand targeted variables of a) mental health, b) social-emotional competencies and c) creativity and openness among teachers. Notably, this research acknowledges that many of the variables reported in the literature on mindfulness can be placed both at an outcome and a mediation level (Shapiro et al., 2006). Therefore, while taking note of the possible causalities and directions of influence, it is through a qualitative approach (see 3.7) that we expect to shed light on participants' take on mechanisms and trajectories of impact. Meanwhile, quantitative investigation of the theoretically targeted variables is designed to indicate the feasibility and effectiveness of the intervention. In the following, the specific constructs that will be examined in this dissertation as well as the rationale for their selection are briefly reviewed alongside a summarizing presentation of the evidence that supports their investigation.

### 2.3.1 Self-Attributed Mindfulness

In order to investigate whether the implemented intervention indeed fosters mindfulness among participants, self-attributed mindfulness will be assessed (manipulation check). As illustrated in section 1.4.3 to 1.4.5, the efficacy of MBIs has largely been attributed to mindfulness-related changes rather than confounding variables or non-specific mechanisms (e.g. Gu, Strauss, Bond & Cavanagh, 2015).

#### 2.3.2 Mental Health Variables

## Stress, Anxiety and Depression:

MBSR as envisioned by Kabat-Zinn (1984) specifically hopes to help individuals cope with chronic and acute distress through an embodied attitude of accepting presence. Indeed, stress is the most commonly targeted and reported variable with respect to mindfulness. Virtually all meta-analyses consider stress in some way, and the efficacy of mindfulness in this respect has been amply demonstrated (e.g. Burke, 2010; Gold et al., 2010; Paul Grossman et al., 2004; Sedlmeier et al., 2012; see also section 1.4.4). Similarly, anxiety and depression have repeatedly been negatively linked with mindfulness practice (Baer, 2003; Eberth & Sedlmeier, 2012; Hofmann et al., 2010). Among teachers as well, studies to date point to a positive effect of MBIs on stress and anxiety (Gold et al., 2010; Roeser et al., 2013; Taylor et al., 2016). Likewise, depression levels among teachers tend to improve with MBIs (Franco, Mañas, Cangas, Moreno, & Gallego, 2010; Gold et al., 2010; Roeser et al., 2013), though less consistently (Lomas et al., 2017). Stress, anxiety and depression constitute common and powerful outcome-level indicators of mental health and overall functioning and as such are of particular importance with respect to the overall efficacy of MBIs for clinical and nonclinical populations.

As discussed in section 1.5.1, teachers around the world are exposed to pronounced health risks due to the high stress levels and the extensive, complex demands associated with their profession. Providing this group of individuals with an empirically validated tool to counter these risks is therefore a viable endeavor in itself. However, contributing to teacher wellbeing is of consequence even beyond their immediate mental health, due to the pivotal role that teachers play in the lives of young generations and in an institution that lies at the heart of modern societies' structure: education. Thus, in a study involving 113 high school teachers, Yoon (2002) found that teacher stress levels significantly predicted the number of negative relationships they had with students. Researchers have also linked the beneficial impact of MBIs on teachers to positive influences on teaching processes, class interactions and

atmosphere. Similarly, Singh, Lancioni, Winton, Karazsia and Singh (2013) demonstrated decreases in difficult behaviors and negative interactions as well as an increase in compliance among preschool students after their teachers underwent eight weeks of mindfulness training. Jennings (2014) likewise described a correlation between mindfulness-related psychological variables among teachers on one hand and their coping with whom they perceive as the most challenging child in their class on the other, as reported in semi-structured interviews investigating teachers' narratives about their relationships with children. More specifically, the author notes that mindfulness, among other variables, was associated with emotional support, sensitivity of disciplining measures and perspective-taking for the child in question. Depression, which is negatively associated with mindfulness, was moreover conversely related to emotional support, class-room organization, and instructional support (Jennings, 2015). On a similar note, Napoli (2004) observed that during in-depth interviews inquiring into a preceding eight-week mindfulness course combined with in-class mindfulness instruction sessions, teachers reported beneficial impacts of acquired mindfulness skills on classroom interactions as well as coping with situations of conflict and anxiety, among other things. Targeting central mental health variables through an MBI is therefore both empirically founded and logically feasible.

## 2.3.3 Social-Emotional Competencies

#### **Emotion Regulation:**

Taking into account the significant role that emotional competencies play in teachers' stress and in the teaching experience at large (see section 1.5.1), the literature indicating the positive effects of mindfulness on emotion regulation points in yet another promising direction. As was demonstrated in the reviews of theorized mechanisms of actions and empirical findings regarding the effectiveness of MBIs (see section 1.4.4 and 1.4.5), mindfulness has been repeatedly associated with better emotion regulation skills in clinical and nonclinical populations (see also Coffey, Hartman, & Fredrickson, 2010; Deckersbach et al., 2012; Erisman & Roemer, 2010; Goldin & Gross, 2010; Goodall, Trejnowska, & Darling, 2012; Hill & Updegraff, 2012; Howell & Buro, 2011; Hülsheger, Alberts, Feinholdt, & Lang, 2013; Jimenez, Niles, & Park, 2010; Robins, Keng, Ekblad, & Brantley, 2012; Williams, 2010). Teachers, who are constantly required to regulate their reactions and impulses across a wide array of often challenging and complex situations in a remarkable exertion of Emotional Labour (see section 1.5.1), require particularly adaptive and highly effective emotion regulation.

In a summary of relevant studies, Heppner, Spears, Vidrine and Wetter (2015) conclude that mindfulness induces effects on emotion regulation through the following pathways: 1) increased tolerance of exposure to negative emotions; 2) decreased reactivity in the face of stressors; 3) decreased identification with experiences; and 4) increased emotional stability<sup>8</sup>. Indeed, a number of studies evince the mediational role emotion regulation may play in the often reported impact of MBIs. Thus, Garland, Gaylord and Fredrickson (2011) investigated the role of positive reappraisal in the effects of a mindfulness training on stress. The authors found that the significant stress reduction after an eight-week mindfulness training were partially mediated by changes in positive reappraisal among participants, as measured by a cognitive emotion regulation instrument. While the effects on stress remained significant even when controlling for positive reappraisal, and while the study is limited in implication due to the lack of a control group, these results are nonetheless indicators of the specific mediational role emotion regulation may play in MBIs. In a more fine-grained study, Hill and Updegraff (2012) tested and confirmed a mediational model whereby emotion regulation generally and emotion differentiation specifically mediate the relationship between self-reported mindfulness and emotional lability. Emotional lability is operationalized as high variability and fluctuation in experienced emotions and their intensity. The authors link the concept to overall reactivity and a number of dysfunctional cognitive and emotional patterns. Thus, this study likewise confirms emotion regulation as a pathway from mindfulness to improved functioning. Kadziolka et al. (2016) echo this finding in their recently reported indicators of more flexible physiological reactivity among more mindful individuals (see section 1.4.5). An overall mediational role of emotion regulation in the positive effects of MBIs was also described in the empirical review by Gu et al. (2015) who confirm emotional and cognitive reactivity as well as repetitive negative thinking as strong and moderate mediators, respectively (see section 1.4.5).

Emotion regulation is of specific relevance to the potential of mindfulness in influencing the school setting as a whole, as it transcends personal coping skills and ties them into improved interpersonal competences. We posit that awareness of one's emotions combined with acceptance and the crucial notion that these emotions do not define the entirety of the individual experience are powerful mitigating instances. Among teachers, emotion regulation seems to be one of the more equivocal areas of impact, with several studies conforming effects on this variable (Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013; Schussler et al., 2015).

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<sup>&</sup>lt;sup>8</sup> The authors also give account of neurobiological evidence possibly involved in those processes.

## **Interpersonal Competencies:**

Interpersonal competencies are targeted in this dissertation both as a valuable outcome in their own right as well as a potentially powerful tool in impacting the educational space. Over and above the general importance of interpersonal skills for a content, functional existence, they are of particular significance in the teaching profession. If mindfulness leads to reduced stress levels and more effective emotion regulation it can be expected to have a profound effect on the way human beings engage and behave towards one another; heightened sensitivity, self-awareness, mindful communication and empathy are probably only a few of the dimensions at play in this respect. Surprisingly, interpersonal competencies are among the less investigated outcome areas of MBIs, even though effects in the medium range have been reported (Eberth & Sedlmeier, 2012).

MBIs for teachers often indirectly confirm the feasibility of mindfulness for interpersonal purposes. Through proxy variables such as empathy, compassion, supportiveness and forgiveness (Benn et al., 2012; Jennings, 2014; Kemeny et al., 2012; Napoli, Krech, & Holley, 2005), teacher MBIs have arguably proven interpersonal merit. For instance, in a study targeting educators and parents of children with special needs, participants of a randomized, controlled waitlist mindfulness-based intervention (n = 70), among other things showed significantly higher empathic concern and forgiveness (labeled as relational competences) in their interactions (Benn et al., 2012). Along similar lines, in an intricate piece of research by Kemney et al. (2012), findings indicated higher emotion recognition skills and compassion as well as lower hostile behavior (as assessed by a marital interaction task) in the experimental group relative to the control group.

While in Germany little scientific attention has generally been paid to this vital aspect, a teacher coaching model specifically designed to strengthen relational competencies in order to improve teacher health, well-being and job satisfaction/performance has been underway in recent years. The coaching program (which was commissioned by the ministry of culture in Baden-Württemberg) follows a formalized manual (Bauer, Unterbrink, & Zimmermann, 2007) and has yielded promising results on physical and emotional health variables in initial evaluations (Unterbrink et al., 2010).

## Self-Efficacy:

Self-efficacy refers to the relative confidence that one can successfully maintain one's course of action and master even difficult challenges (Bandura, 1986). This disposition has a positive effect on stress perception and may mediate the relationship between stress and burnout for

teachers (section 1.5.1; see also Chwalisz, Altmaier, & Russell, 1992; Klassen et al., 2013; Yu, Wang, Zhai, Dai, & Yang, 2014). Mindfulness may further self-efficacy in that it enables individuals to regard their current emotional and cognitive state with acceptance and openness rather than overwhelmed distress, rendering their evaluation of the situation more realistic and their response more flexible and constructive.

Interestingly, little empirical investigations of the link between mindfulness and self-efficacy exist. One indicator of the relevance of self-efficacy to the effects of mindfulness was provided by Luberto, Cotton, McLeish, Mingione, and O'Bryan (2013), who demonstrated that the association between mindfulness skills and emotion regulation was partially mediated by coping self-efficacy, i.e. one's confidence that challenging situations or stressors will be coped with adequately (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006). In another study, Jimenez et al. (2010) similarly showed that the belief that one is able to tolerate negative mood or instantiate positive states indeed mediated the relationship between dispositional mindfulness and decreased depressive symptoms, together with self-acceptance and positive emotions. While immediate evidence of self-efficacy as an outcome or mechanism of mindfulness remains scarce, the more extensively researched implications of constructs such as emotion regulation and self-regulation indirectly point to this variable's significance. Increased emotion and self-regulation arguably ipso facto entail higher levels of self-efficacy, since they represent vital skills in the mastery of challenges, and involve similar if not identical processes (decreased reactivity, positive reappraisal, decreased rumination, etc.).

In the present research, mindfulness is expected to impact perceived self-efficacy, not least through increased emotion and self-regulation. Previous MBIs with teachers indeed yielded some evidence that mindfulness is related to improved self-efficacy (Jennings et al., 2013; Poulin, Mackenzie, Soloway, & Karayolas, 2008).

## Self-Regulation:

Self-Regulation is yet another interlinked dimension and largely denotes the mental ability to refocus and sustain one's attention and motivation in spite of distracting factors (Schwarzer & Jerusalem, 1999). It is hypothesized that through acquiring the focus on present experience that is inherent in mindfulness, teachers participating in this project will be able to more successfully regulate their attention, motivation and focus. Attention regulation and executive functions, which are closely related to self-regulation, have been linked to mindfulness repeatedly. Jha, Krompinger and Baime (2007) explored the specific impact of mindfulness

on alerting (i.e. readying and sustaining one's attentiveness so as to uphold an alert mental state), orienting (i.e. focusing attention on a specific set of stimuli and information), and conflict monitoring (i.e. lending attention to certain stimuli while actively disregarding others that may interfere with a specific task or goal). Participants of this study were either part of a control group, a mindfulness retreat group, or an MBSR group, and completed a behavioral attention measure before and after the intervention. Since a) the retreat group showed higher conflict monitoring than the control group, b) the MBSR group showed higher alerting than the two other groups, the authors conclude that these results may indicate, though not conclusively prove, the impact of mindfulness training on both focused attention and receptive attention (i.e. attention focused on a specific object and open attentiveness to possible stimuli). Similar findings that support an association of mindfulness and attention/self-regulation were reported by Holas and Jankowski, 2013 and Hölzel, Lazar, et al. (2011).

Self-regulation tends to be targeted as an outcome variable of MBIs rather than a mechanism (Hölzel, Lazar, et al., 2011). However, Hölzel et al. argue that since sustained attention is essential for any meditation practice, it is likely closely related to other mechanisms active in the respective interventions. Though self-regulation has not been studied at length across MBIs for teachers, qualitative findings such as those reported by Schussler et al. (2015; see 1.5.2) suggest that teachers too may benefit in this respect. Notably, self-regulation, emotion regulation and self-efficacy, due to their evident interrelatedness, may be part of a larger underlying formula that in joint action begets change.

## Engagement:

Engagement is defined "as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" and was conceptualized as the opposite of burnout (Schaufeli, Salanova, González-romá, & Bakker, 2002, p. 74). While this construct is seldom investigated with regards to MBIs, the hitherto illustrated evidence indicates that mindfulness may promote attitudes that are conducive to this type of engagement. Specifically, mindfulness may increase engagement through a) reducing stress levels, b) improving interpersonal relationships, and c) fostering presence, acceptance and openness. These trajectories could arguably render work processes and activities more rewarding and influence teachers' attitude towards their perceived workload as well as their profession in general, emphasizing more gratifying aspects and intrinsic teaching motivation - in other words, fostering engagement. As was argued in section 1.5.1.2, recognizing and utilizing

available resources is a crucial aspect of improving and maintaining teacher mental health; engagement can constitute one such resource that subsumes and reflects several protective factors. Hobfoll (2001; see section 1.5.1.2) specifically considers commitment, positive challenges and a sense of meaning (among others) as cross-cultural resources that can balance stressors and demands. Indeed, high engagement, when accompanied by resilience and distancing abilities, is a precursor of mental health in the teaching profession and has been associated with life satisfaction and perceived social support (Kieschke & Schaarschmidt, 2008; Klusmann et al., 2008; see section 1.5.1.2).

We propose that the present MBI is likely to increase a sustainable and salutary engagement among participants through positive impact on the foregoing variables. Investigating whether mindfulness can support a solid balance of engagement and resilience is immediately relevant to the pressing issues and findings around teacher mental health.

## 2.3.4 Creativity and Openness

With a view to this project's larger context and its explicit interest in the concept of  $Mu\beta e$  (see sections 1.3. and 1.4.2), two further variables that are not typically investigated or targeted by MBIs are included: creativity and openness. To date, there is no definitive psychological or psychometric operationalization of  $Mu\beta e$ . If, however, mindfulness and  $Mu\beta e$  are indeed related constructs that further each other as postulated above (see section 1.4.2), it stands to reason that a mindfulness intervention may impact the inherently "otiose" domains of creativity and openness, since both can be considered by-products of a self-actualized and self-determined mode.

## Creativity:

The literature on mindfulness offers some indications, though limited, that creativity can be influenced by a more mindful mindset. Thus, Ostafin and Kassman (2012) report improved insight problem solving skills both among participants with higher trait mindfulness as well as after a mindfulness training. Similar effects on creativity have been reported in studies investigating long-term Transcendental Meditation (TM; Jedrczak, Beresford, & Clements, 1985; So & Orme-Johnson, 2001; Travis, 1979). In light of these findings and due to the sparse research on creativity and mindfulness meditation (as opposed to TM), the study at hand considers this aspect a novel and interesting inquiry. Especially in a school setting, where creativity is a highly valued commodity in theory and often the first sacrifice at the altar of efficiency in reality, it is worthwhile to investigate how mindfulness will affect this

variable. The underlying assumption maintains that an open, perceptive, receptive and judgment-free attitude may render individuals more attuned to and aware of creative impulses or needs, and more susceptible to inspiration.

#### Openness:

Openness to perceptions of both one's outer and inner world, a sense of curiosity and a readiness to engage with new and unusual experiences are attitudes linked with mindfulness and, arguably, with  $Mu\beta e$  and creativity. The non-judgmental, open awareness of the present moment as is part and parcel of mindfulness has been regarded as conducive to a more open mindset overall, for instance to perceptions, behaviors, emotions, ideas, contemplations, etc. (Barner & Barner, 2011; Bishop et al., 2004). Barner and Barner (2011) posit that mindfulness may impact openness through helping individuals remain connected to even more difficult facets of their experience, furthering their acceptance of self-threatening information and enhancing their emotion and reactivity regulation. While empirical evidence to this effect is inconclusive, since several studies found only partial or no correlations between the two constructs (Baer, Smith, & Allen, 2004; Lau et al., 2006), and since no extensive investigative interest or intervention-based findings are evident in current literature, correlational evidence linking mindfulness levels to openness does in fact exist (Baer et al., 2008; Brown & Ryan, 2003; Hollis-Walker & Colosimo, 2011).

Since teachers tend to increase on self-reported mindfulness following MBIs (see 1.5.2), we hypothesize that *'Openness to Experience'* will be likewise impacted, which in turn may have considerable effects on interpersonal and social behaviors (McCrae, 1996).<sup>9</sup>

# 2.4 Hypotheses of the Quantitative Inquiry

In order to evaluate whether the present MBI improved the target group's mental health and well-being (research question I), teachers who have participated in a MBSR course were compared to teachers who were in a waitlist group and thus yet to receive the intervention. Comparisons assessed scores on psychometric instruments spanning mental health variables, social-emotional variables and creativity/openness. All comparisons were conducted relative

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<sup>&</sup>lt;sup>9</sup>During data collection at the second and third school, impulsivity was also pursued as a construct of interest due to its hypothesized relation to self-regulation and self-efficacy. However, this aspect was dismissed from the analyses due to the poor psychometric properties of the used instrument (Scale of Impulsive Behavior-8; I-8; Kovaleva, Beierlein, Kemper, & Rammstedt, 2014). The I-8 is a short-version based on the longer German Version of the UPPS-Scale (Keye et al., 2009; Schmidt et al., 2008) and prevented the summation of extremely short subscales. The measures' shortcomings were also evident in the inconsistency of scores across schools and subscales.

to baseline levels. Quantitative assessment comprised self-report questionnaire data and performance tests.

Specifically, it was hypothesized that:

1) Teachers who took part in an eight week MBSR course (Intervention Group; IG) will show improvements after the intervention relative to teachers in the waitlist group (WG) on the following self-reported variables:

1.	Self-Attributed Mindfulness	$(M_{\rm IG} > M_{\rm WG})$
2.	Stress	$(M_{\rm IG} < M_{\rm WG})$
3.	Anxiety	$(M_{\rm IG} < M_{\rm WG})$
4.	Depression	$(M_{\rm IG} < M_{\rm WG})$
5.	Emotion Regulation	$(M_{\rm IG} > M_{\rm WG})$
6.	Self-Efficacy	$(M_{\rm IG} > M_{\rm WG})$
7.	Teacher-Specific Self-Efficacy	$(M_{\rm IG} > M_{\rm WG})$
8.	Self-Regulation	$(M_{\rm IG} > M_{\rm WG})$
9.	Interpersonal Problems	$(M_{\rm IG} < M_{\rm WG})$
10.	Engagement	$(M_{\rm IG} > M_{\rm WG})$
11.	Openness	$(M_{\rm IG} > M_{\rm WG})$

 Teachers who took part in an eight week MBSR course will show improved mean scores after the intervention relative to non-participant teachers on performance tests of

1. Drawing creativity  $(M_{\rm IG} > M_{\rm WG})$ 2. Verbal creativity.  $(M_{\rm IG} > M_{\rm WG})$ 

3) Improvements on the outcome variables will remain stable over time and therefore will not show significant changes when measured four months later at follow-up.

# 2.5 Qualitative Investigative Interest

Based on the assumption that teachers who participated in the offered MBSR course will report processes and changes that cannot be solely captured by quantitative measures and that may further our understanding of the mechanisms, benefits and limits of mindfulness-based interventions for teachers, and in order to investigate the intersection of mindfulness and  $Mu\beta e$  (research questions II and III), qualitative research investigated the following areas:

- 1) How did individuals experience participation in the course? What salient elements and experiences stand out?
- 2) What subjective changes and benefits do teachers report after participation in the course?
- 3) What are possible mechanisms of change behind the reported processes and benefits?
- 4) What difficulties did participants experience?
- 5) What are contextual factors and limitations that influence course experience and benefits?
- 6) What individual concepts of mindfulness did teachers form through their course experiences?
- 7) What individual concepts of  $Mu\beta e$  do teachers have? How do they relate mindfulness and  $Mu\beta e$ , if at all?

# 3 Methods

# 3.1 Overview of Study Design

This intervention study targeted areas of mental health, social-emotional competencies and creativity among teachers in a controlled waitlist design across three schools. The main intervention consisted of an eight-week Mindfulness-Based Stress Reduction course taught by certified teachers. The course was based on the classic manual by Jon Kabat-Zinn, so as to generate internationally comparable results that can be seamlessly incorporated into the rapidly growing field of mindfulness interventions and their evaluations. Voluntarily participating teachers were assigned to either an intervention group (IG) that received the intervention in the first term of the school year or a waitlist group (WG) that participated in the same course during the second term. Randomization was not possible within this context, since the very tight time schedules of teachers necessitated a preference-based assignment to the first or second school term. Otherwise, the study would have incurred considerable non-participation and drop-out rates.

This project relied on a mixed method approach combining quantitative and qualitative data collection and analysis. Qualitative data were deemed a vital complement to classic psychometric assessment in light of the subtly nuanced subject matter and the difficulty in assessing the novel and hitherto non-operationalized concept of  $Mu\beta e$ .

Quantitative data in the form of a questionnaire test package was collected from both groups simultaneously at three time points: at the beginning of the first term (t1, baseline), at the end of the first term (t2, post-test after eight weeks of course participation) and at the end of the second term (t3, follow-up four months after the end of the intervention). Thus, the intervention group delivered pre-test, post-test and follow-up data, while the waitlist group provided baseline, pre-test and post-test data. In this manner, the waitlist group yielded control data at t1 and t2. This design allowed for controlled group comparisons, and follow-up assessments for the intervention group(s) to address our main research questions. In addition, this design permitted secondary explorations of within-group comparisons of pre-tests and post-tests for both groups.

Qualitative data was collected from all participants of the first two schools in the form of semi-structured interviews. A detailed description of data collection and analysis is presented in section 3.7. The basic study design is depicted in figure 1. The evaluation process was

carried out by the research team with no involvement from the mindfulness teachers. This study was submitted to and approved by the ethical commission of the Medical Center – University of Freiburg.

intervention group wait list control group baseline pretest (questionnaires) (questionnaires) MBSR-course waiting period (eight weeks) posttest pretest (questionnaires + interviews) (questionnaires) MBSR-course waiting period (eight weeks) follow up posttest

(questionnaires + interviews)

Figure 1: Controlled waitlist design of the study

### 3.2 Procedures

#### Recruitment of Project Schools and Participants:

(after four months)

The study design described above was implemented in three different schools throughout three successive school years. The selection of the first school resulted from one of the project team leaders' previous professional contact to the St. Ursula Gymnasium. The St. Ursula Gymnasium is an all-girl catholic school in the heart of Freiburg whose overall orientation is compatible with the project's rationale and whose administration articulated keen interest in participation. The school is frequented by 1131 students and staffed by 97 teachers. Since the first school was considered a pilot run of the overall project, a cooperative school administration and a facilitating environment were considered essential. Therefore, after obtaining approval from the responsible body at the Archdiocese Freiburg, the school was invited to participate. Initially, the teaching staff was informed of the project's rationale and contents during a detailed presentation. Subsequent recruitment followed a universal approach, whereby the entire school staff was invited to participate and interested individuals could voluntarily sign up for the course. As mentioned above, due to the inflexible time

schedules of many teachers (which would have prevented participation in one of the courses taking place across the two different school terms), time preferences had to be taken into account in the formation of the intervention and waitlist group. Therefore, random assignment of individual teachers was not possible.

Having established the project's protocol in a pilot run, the research team contacted the city regional board for assistance in the selection of two further schools. The city regional board identified suitable schools and initiated the cooperation. Upon preliminary correspondence and an introductory project presentation, sufficient interest in participation on the part of the school administration and staff determined whether the project could be feasibly implemented. Unlike the pilot school, both subsequent schools (Wentzinger Gymnaisum and Theodor-Heuß-Gymnaisum) are public mixed schools. While the former is a relatively large establishment (approximately 1000 students and 87 teachers) in a non-central, socioeconomically diverse area, the latter is slightly smaller (approximately 760 students and 80 teachers) and located in a somewhat privileged part of Freiburg. Notably, the principals of both schools took part in the course. This detail was the subject of intensive debate; on one hand, a principal who participates in the course and ideally later embodies mindfulness is conducive to a more systemic and sustainable intervention impact. On the other hand, the presence of the principal in the course among his or her employees could very well inhibit the other participants and hamper important processes. Ultimately, the former consideration was considered more substantial; however the actual effects of the principal's presence on the course are described as part of the qualitative results.

## Screening of Participants:

No exclusion criteria were deemed necessary in the context of this project since the sample was considered healthy and functioning. However, prior to the course, the teachers completed a screening questionnaire intended for the MBSR instructor. The screening was a self-devised instrument that the instructors regularly use to check for particular needs among course participants and address potential clinically relevant issues. Questions included individual stress levels and symptoms, prior diagnoses, health issues, etc. It was left to the instructors' judgment to conduct a separate personal screening if any of the questionnaires were alarming, which was not the case. Informed consent was obtained from all participating teachers.

#### Data Collection:

Questionnaire data was collected at the three time points described above. If participants were unable to attend the group data collection appointments, individual appointments were scheduled as swiftly as possible. After each course (intervention and waitlist course) individual interviews were conducted with nearly all participants, accommodating the teachers' availability and time preferences. No interviews were conducted at the third and final project school in order to meet the requirements of the overall time schedule of the project (see section 3.7).

### Intervention Logistics:

The intervention, which is described in further detail below, took place over eight two-hour appointments on school premises. In addition, a full day of mindfulness on a weekend was scheduled towards the end of each course. While at the first school the day of mindfulness was organized at an external location, in the second and third school this proved logistically inconvenient, and the full-day session was therefore also held on school premises.

#### 3.3 Intervention

The intervention consisted of the standard eight-week Mindfulness—Based Stress Reduction (MBSR) group program based on the manual developed by Jon Kabat-Zinn (1984). In line with the manualized MBSR instructions, the course was delivered by certified mindfulness teachers and trained psychiatrists with long-standing experience. Across the three schools, two different teachers instructed the project participants. While it would have been preferable for all courses to be delivered by one and the same instructor, the initial instructor was unexpectedly unavailable after the first year. However, swift cooperation with another instructor who is likewise a certified MBSR-teacher and psychotherapist/MD with solid experience ensured the same level of instruction quality at the second and third school.

Even though the instructors varied, the course contents were largely identical and conveyed the same core components; the two instructors relied on roughly the same manual and remained in dialogue both among each other and with the research team.

The course's objectives are in line with the standard MBSR goals. Through teaching participants a conscious, awareness-oriented approach to their thoughts, sensations, emotions and surroundings, the course aspired to transport attitudes of acceptance, non-judgment, self-compassion and presence. The implications of these attitudes for different interactions,

situations, daily routines and a sense of everyday life were emphasized and combined with psycho-educative elements on stress and cognitive-emotional reaction cycles.

These contents were conveyed through different modalities: a) a variety of exercises spanning breathing meditations, body scans and yoga, b) theoretical input and c) exchange and group discussions. Moreover, all participants received a folder with course materials that were provided successively. The materials consisted of explanatory texts (on mindfulness, stress, communication theory, etc.), CDs with guided meditations, inspirational and symbolical texts and poems as well as instructions for independent practice and homework. Table 1 depicts the main focus of the eight sessions as per the instructors' course materials. While the sequence of minor inputs and the wording differed occasionally, the central concepts and spectrum of exercises taught by the two instructors were identical and are combined in this illustration.

Regarding homework and individual practice, both instructors encouraged daily meditation and informal practice, stressing that the course's impact largely depended on regular practice. However, neither instructor exerted pressure on participants to practice, nor did they check practice compliance so as not to associate the course with yet another demanding and stressful context where participants may feel forced to perform and achieve.

# 3.4 Fidelity of Implementation

Various authors including Feagans et al. (2015) emphasize the importance of Fidelity of Implementation (FoI). FoI refers to "to the degree to which intervention delivery adheres to the intervention developers' model" (Feagans et al., 2015, p.2). In this case, the model in question is the rationale described in this project's proposal and explicated in the introduction and theoretical background of this dissertation. According to its original proposal, this MBSR-intervention for teachers focused on "practicing non-judgmental open awareness, equanimity and liberation from constraints that result from time pressure and various demands" thus linking mindfulness to  $Mu\beta e$ . Through meditation and core mindfulness concepts including presence, non-reactivity and acceptance, a reformed attitude towards the dictates of time perception and efficiency imperatives is hypothesized to enable participants to handle their daily and professional lives with more relaxation, reflectiveness and autonomy and improve their overall well-being.

Table 1: Themes of course sessions as per instructors' manuals

	<b>Central Concepts and Topics</b>	Main Exercises
Week 1	Presence	Body scan
	Body perception and awareness	Short breathing meditation
	Daily mindfulness	
	Nonjudgmental attitude	
	Beginner's mind	
	Friendliness and non-striving	
Week 2	Patience	Body Scan
	Deceleration	Perceiving pleasant and unpleasant bodily sensations
	Paying attention to pleasant experiences	Breathing meditation
		Mindful eating
Week 3	Beginner's mind	Yoga exercises
	Formal and informal practice	
	Stress: psycho-education	
Week 4	Trust	Long breathing meditation
	Mindfulness at the workplace	Yoga exercises
Week 5	Non-Striving	Yoga exercises
	Acknowledging thoughts and emotions	Breathing meditation
	Dealing with negative emotions	Preparing for day of mindfulness
	Psycho-education on cognitive processes	
	Dis-identifying with thoughts	
Week 6	Acceptance	Breathing meditation
	Difficult situations	Yoga exercises
	Self-care	
	Psycho-education on emotions	
	Dis-identifying with emotions	
Week 7	Letting go	Communication exercise
	Mindful communication	Reflecting on difficult communication situations
	Psycho-education on communication	
Week 8	Intention and determination	Wrap-up
	Daily mindfulness	Breathing meditation
	Self-Care	

To gauge FoI, Feagans et al. (2015) propose four dimensions: adherence, dosage, quality and responsiveness. How this project strove to meet these criteria is addressed in the following.

#### Adherence:

The extent to which the core components were implemented as designed, i.e. adherence, is ensured by the standardized MBSR course manual as well as regular meetings with the course teachers before and throughout the course. Both the continuous dialogue and the course materials indicate that the core components and understanding of mindfulness that the proposal considered vital for the desired outcomes were targeted by the instructors. Adherence was also assessed retrospectively through post-intervention qualitative interviews with participants and the course teachers as well as a psychometric measure of self-attributed mindfulness. As reported in the results section, mindfulness scores changed in the hypothesized direction and qualitative interviews indicated that course contents were consistent with standard MBSR components and the rationale of the project.

## Dosage

Dosage refers to the intensity and amount of the intervention that participants received. In this regard, the instructors kept an attendance list that suggested sufficient attendance across participants. Minimum dosage was considered met if participants attended at least four out of the eight mindfulness sessions, as suggested by authors such as Kuyken et al. (2010). Formal individual practice was not considered vital to ensure minimum dosage, however the interviews inquired into the extent to which participants engaged in meditation and/or informal practice beyond the course. The actual importance of individual practice are addressed elsewhere in this dissertation.

## Quality

Quality, i.e. "the extent to which an instructor delivered program content as intended" (Feagans et al., 2015, p.4), was ensured through the cooperation with certified MBSR teachers with extensive experience. Quality was also confirmed in participant interviews as well as interviews with the instructors.

## Responsiveness

Individual responsiveness or engagement with the program varied across participants and is part of the qualitative results of this dissertation. Generally, the perceived relevance and applicability of the conveyed concepts determined the extent to which participants engaged with the course on a consequential personal level. In most cases, the amount of independent

practice remained below the recommended level. The qualitative findings shed some light on the implications of this limitation.

# 3.5 Sample

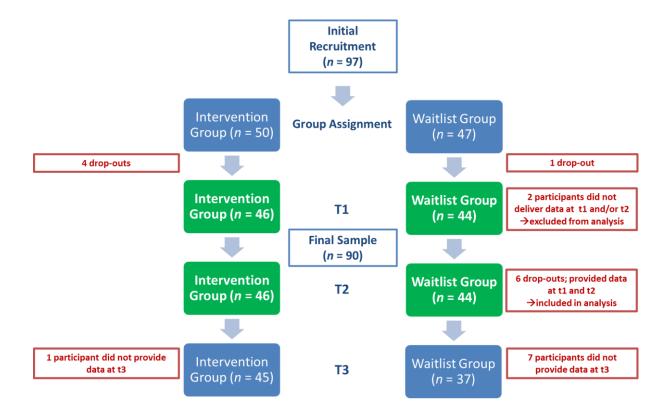
## 3.5.1 Power Analysis

A power analysis that assumed an average effect size for mindfulness-based interventions of roughly Cohen's d = 0.5–0.6 (as per meta-analyses to date) yielded a necessary sample size of approximately 48 participants per group to arrive at a power of  $1-\beta = 0.80$ . This sample size was targeted through the recruitment of participants at three separate schools.

#### 3.5.2 Attrition and Non-Respondents

From the initially recruited cumulative sample (n = 97), 11 teachers dropped out of the course due to other commitments and scarce time availability. Of those drop-outs, six were participants of the waitlist group who had delivered data at t1 and t2. Since those participants were in fact waiting for the intervention before their circumstances changed and prevented course participation, they are included in the main analysis (i.e. the group comparison) as control data. By contrast, drop-outs of the intervention group were excluded from the analysis. Likewise, two participating teachers at the first school had to be excluded from analysis since they were unable to complete the questionnaires at baseline *and* post-test, and baseline *and* follow-up respectively. At t3, one participant in the intervention group and seven in the waitlist group failed to report data. Drop-outs and non-respondents are summarized in figure 2.

Figure 2: Attrition and non-respondents throughout the project cycle



## 3.5.3 Sample Characteristics

The overall final sample included 90 teachers: 46 in the intervention group(s) and 44 in the waitlist group(s). 66 of the participating teachers were female and 24 male, with a mean age of 45.19 (SD = 8.06). Sex distribution and mean age as well as information on previous experience with mindfulness, weekly workload, work experience and living situation across groups, schools and the entire sample are depicted in table 2.

Table 2: Sample characteristics for individual schools and pooled population

		Pooled schools (n = 90)		School 1 (n = 29)		School 2 (n = 29)		School 3 (n = 32)	
		IG	WG	IG	WG	IG	WG	IG	WG
	N	46	44	14	15	15	14	17	15
Sex (n (%))	Female	32 (70 %)	34 (77 %)	12 (86%)	12 (80 %)	10 (67%)	12 (86%)	10 (59 %)	10 (67 %)
	Male	14 (30 %)	10 (23%)	2 (14%)	3 (20 %)	5 (33%)	2 (14%)	7 (41%)	5 (33 %)
Age in years	Mean	46.59	43.73	47.21	43.87	44.53	45.93	47.88	41.53
	SD	7.44	8.50	7.26	9.22	7.35	7.97	7.71	8.24
Previous experience	Mediation	13 (28 %)	18 (41 %)	3 (21 %)	8 (53 %)	5 (33 %)	5 (36%)	5 (29%)	5 (33.3)
(n (%))	Mindfulness	10 (22 %)	10 (23 %)	2 (14 %)	4 (27 %)	3 (20 %)	3 (21%)	5 (29 %)	3 (20%)
	Yoga	17 (37 %)	23 (52%)	4 (29 %)	10 (67 %)	9 (60%)	7 (50%)	4 (24 %)	6 (40%)
Workload per week	Mean	33.71	33.71	34.00	34.20	24.05	37.32	42.50	35.40
in hours	SD	13.88	13.88	10.05	13.06	9.40	11.48	14.80	11.65
Work experience in	Mean	15.19	15.19	16.20	12.70	14.73	16.00	14.75	12.38
years	SD	7.56	7.56	8.70	6.48	7.43	7.70	7.00	7.22

## 3.6 Quantitative Data Analysis

#### 3.6.1 Instruments

A comprehensive test package comprising a) standardized self-report questionnaires and b) two performance tests was administered to participants in a group setting. All instruments were screened for appropriateness for nonclinical samples with no prior mindfulness experience and for the use in the educational context. The test package required approximately 45 minutes to complete. In the following, self-report instruments and performance tests as well as the respective psychometric properties are described individually. The actual test package as delivered to teachers is included in the appendices.

### 3.6.1.1 Self-Report Instruments

#### Self-reported mindfulness:

The level of self-reported mindfulness was measured by means of the widely used 14-item short form of the *Freiburg Mindfulness Inventory* (FMI; Walach, Buchheld, Buttenmüller, Kleinknecht, & Schmidt, 2006) which assesses the two factors *mindful presence* and *nonjudgmental acceptance*. Exemplary items for each scale are "I am in touch with my experiences, here and now" and "I see my faults and difficulties without judging myself", respectively. One item (item 13) is inversely coded and was re-coded during data analysis. The statements are rated on a four-point scale ranging from "almost never" to "almost always". Internal consistency as indicated by Cronbach's alpha ranges from  $\alpha = 0.79$  to 0.86 (Walach et al., 2006). Similarly, the instrument demonstrates adequate construct validity as indicated by correlations with related constructs such as self-awareness, self-knowledge and dissociation (r = .29, .55 and -.31, respectively; Walach et al., 2006).

#### Stress:

To assess stress, the German version of the *Perceived Stress Questionnaire* (PSQ; Fliege, Rose, Arck, Levenstein, & Klapp, 2001) was used. The PSQ measures subjective stress perceptions across 20 items and four dimensions (worries, tension, joy and demands) that target both generic stressors and stress reactions. Sample items include "You have the feeling that too many demands are being posed to you" and "You feel mentally exhausted". The items are rated on a four-point scale ranging from "almost never" to "at most times". Eight inversely coded items (such as "You feel full of energy") were re-coded during analysis, such that high scores indicate higher stress levels. The authors of the German version report

satisfactory psychometric properties, including internal consistencies ranging from Cronbach's alpha  $\alpha = .80$  to .86. They also demonstrate adequate construct validity in relation to quality of life (r = .62) and social support (r = .91), as well as external validity and sensitivity to change as evidenced by significant differences in stress levels among psychosomatic patients before and after treatment (p > .0001; d = .55).

### Anxiety and Depression:

In order to assess levels of anxiety and depression, the German version of the Hospital Anxiety and Depression Scale (HADS; Hermann-Lingen, Buss, & Snaith, 2005) was administered. The HADS consists of 14 items comprising an anxiety and a depression subscale. Items are rated on a four-point scale with different verbal anchors depending on the statement. Sample items are "I feel tense and irritable" (rated from "mostly" to "almost never") and "I feel happy" (rated from "not at all" to "mostly"). Five items are inversely coded and were re-coded for analysis, with higher total scores indicating higher levels of anxiety and depression. In a review of international HADS uses (including the German version), Herrman (1997) reports internal consistencies (Cronbach alphas) between  $\alpha = 0.80$ and 0.93 for the anxiety and  $\alpha = 0.81$  and 0.90 for the depression subscale, as well as adequate concurrent and discriminant validity. Construct validity was demonstrated by significantly different scores on anxiety and depression among healthy and psychiatric samples. Similarly, significantly different mean scores among healthy individuals and individuals who were diagnosed with a mental disorder were also reported by Reuter and Härter (2001). The authors furthermore demonstrate that the German HADS can effectively detect cases of depression (Area Under Curve [AUC] = 0.80) and anxiety (AUC = 0.76). These psychometric properties are in line with the international psychometric review of HADS by Bjelland, Dahl, Haug and Neckelmann (2002).

### General Self-efficacy:

This construct refers to one's belief in one's own capacity to handle difficulties and challenges in everyday life. Two different measures were used in this respect: the long version of the *General Self-Efficacy Scale* by Jerusalem and Schwarzer (1999) in the first school, and a short version based on the same scale (Beierlein, Kovaleva, Kemper, & Rammstedt, 2014) in the second and third school. Due to revisions to the test package after the pilot run, the full-item scale was replaced with the short version for greater time economy. The long version comprises ten items (sample item: "I can always solve difficult problems if I make an effort") that are rated on a four-point scale ranging from "not true" to "exactly true". Internal

consistency as measured by Cronbach's alpha lies at  $\alpha$  = .85-.86, while construct validity is indicated by correlations with work dissatisfaction (r = -.46 to -.51) and work strain (r = -.49 to -.53). The short version has only three items (e.g. "In difficult situation, I can rely on my skills") that are rated on a five-point scale ranging from "not true at all" to "completely true". The authors report internal consistency as measured by McDonald's  $\omega$  ranging from .81 to .86. Construct validity was evidenced by correlations with the long version (r = .77) and related constructs such as optimism-pessimism (r = .68), internal locus of control (r = .62) and self-esteem (r = .54).

## Teacher Self-Efficacy:

As a domain-specific measure of self-efficacy, the *Self-Efficacy Scale for Teachers* (SES-T; Schwarzer & Schmitz, 1999) was used to assess teachers' belief in their professional competence and problem-solving skills. The scale consists of ten items (e.g. "I am convinced that I am able to teach successfully all relevant subject content to even the most difficult students") that are rated on a four-point scale ranging from "not at all true" to "exactly true". One item is inversely coded and was re-coded during data analysis. Internal consistency as measured by Cronbach's alpha ranged from  $\alpha = .76$  to .81, while construct validity was demonstrated through correlations with measures of burnout (r = -.47 to -.75), work dissatisfaction (r = -.51 to -.56) and general self-efficacy (r = -.70 to -.72).

### Self-regulation:

The *Self-Regulation Scale* (SRS; Schwarzer & Jerusalem, 1999) was used to assess participants' attention control in goal pursuit. The items of the self-report scale cover aspects of attention regulation and emotion regulation that are particularly crucial in situations when individuals face difficulties in maintaining their goal-oriented behavior. The scale comprises ten items (e.g.: "I can concentrate on one activity for a long time, if necessary.") that are rated on a four-point scale ranging from "not true" to "exactly true". The authors report internal consistency of  $\alpha = .82$  and construct validity as indicated by correlations with work dissatisfaction (r = -.43), general self-efficacy (r = .58) and teacher-specific self-efficacy (r = .53).

### **Emotion regulation:**

The *Emotion Regulation Skills Questionnaire* (ERSQ; Berking & Znoj, 2008) was employed to capture changes in emotional competencies. Composed of 27 items, the ERSQ primarily explores coping with negative emotions and includes nine subscales: awareness, sensations, clarity, understanding, modification, acceptance, resilience, self-support and readiness to

confront distressing situations. Sample items include "In the last week I was able to accept negative emotions" and "In the last week, I was aware why I felt the way I felt". All items are rated on a five-point scale ranging from "not at all" to "(almost) always". The authors report an internal consistency of  $\alpha = .72$  to .81 across subscales as well as convergent validity with measures of self-efficacy (r = .57), self-esteem (r = .53), positive mood (r = .41), life satisfaction (r = .62), depression (r = -.47), and anxiety (r = -.44), among others. Moreover, the questionnaire can distinguish non-clinical from clinical populations and can detect significant improvements among clinical patients throughout treatment, thus demonstrating sensitivity to change.

# Interpersonal competencies:

The German version of the *Inventory of Interpersonal Problems* (IIP-D; Horowitz, Strauß, & Kordy, 2000) is a self-rated questionnaire for assessing relational difficulties. The short version encompassing 64 items reflects eight dimensions that can be excessively exhibited by individuals: too dominating (PA); too vindictive (BC); too cold (DE); too introverted (FG); too submissive (HI); too exploitable (JK); overly nurturant (LM); and too intrusive (NO). Sample items include "It's hard for me to let others know I'm angry" and "It's hard for me to understand the opinions of someone else." Answers are rated on a five-point scale ranging from "no" to "very much". The authors of the German version report internal consistency as per Cronbach's alpha ranging from  $\alpha = .36$  to .64 across subscales. Correlations of the different subscales with other interpersonal measures support construct validity (for instance, FG correlates with loneliness at r = .41 to .44, while DE correlates with autonomy striving at r = .37 to .41). The instrument is moreover effective in distinguishing different clinical groups (individuals with personality disorders report the greatest IIP scores, for instance). Finally, the subscales of the IIP correlate with different attachment styles in the expected direction.

#### Openness:

This variable was measured with the *Openness to Experience* Scale of the German Version of the *NEO Five-Factor Inventory* (NEO-FFI; Borkenau & Ostendorf, 1994). The scale consists of 12 items inquiring into personality facets such as curiosity, creativity, and readiness to engage in new or unusual experiences. Across 12 items (e.g. "I often try new and foreign dishes"), answers are rated on a five-point scale ranging from "strong disagreement" to "strong agreement". Inversely coded items were re-coded for data analysis. The authors report an internal consistency of  $\alpha = .75$  and a test-retest reliability of r = .76 as well as construct validity as evidenced by correlations with self-rated adjective lists (r = .54).

### Work engagement:

This variable was measured with the *Utrecht Work Engagement Scale* (UWES; Schaufeli, Salanova, González-Romá, & Bakker, 2002). The employee version of the scale measures the dimensions vigor (six items), dedication (five items) and absorption (six items). Items include statements such as "I find my work to be full of meaning and purpose" and "Time flies when I'm working" and are rated on a seven-point scale ranging from "never" to "always." Internal consistency for the subscales has been shown to range from  $\alpha = .72$  to .89, while negative correlations of the measure's subscales with burnout dimensions (r = .16 to -.60) point to construct validity. Nonetheless, since the inclusion of other important measures necessitated a few reductions to achieve greater time economy, this scale was not employed in schools two and three.

### 3.6.1.2 Performance Tests

Since creativity is exceedingly difficult to conceptualize and measure, two different performance tests were administered to gauge this dimension. While at the first school creativity was assessed only based on drawing performance, the research team employed a complementary instrument for verbal creativity in the subsequent schools. Both instruments are presented in the following.

### **Drawing Creativity:**

One measure of creativity assessed changes in a drawing production with the *Test for Creative Thinking- Drawing Production* (TSD-DP; Urban & Jellen, 1995). This instrument attempts to assess creativity beyond the influence of verbal skills through presenting participants with six figural fragments that they are required to complete freely. The resulting drawings are scored on 14 categories (e.g. continuing elements, new elements, unconventionality, humor and expressivity) that are elaborately explained in the test manual. More specifically, research team members who were trained on the scoring of the test individually rated the answers. Subsequently, the raters discussed the scores until an agreement was reached wherever ratings differed, and the subscales were added to form a total score. Since this instrument is delivered with two variants (A and B, where B is a rotated version of A), it was ideally suited for repeated measurements. The authors of the test report interrater reliabilities ranging from r = .89 to .97, while test-retest reliability varied between r = .38 and .78. According to the authors, construct validity must be gauged with caution, since creativity is a difficult construct to operationalize and little comparable instruments exist. Nonetheless, they report correlations with measures of intelligence (r = -.37 to .31) as an

indicator of discriminant validity. Moreover, low correlations between this instrument and a measure of verbal creativity (described below) highlight the particularity of this construct. In a later validation of the instrument, Dollinger, Urban, and James, (2004) report correlations of r=.72 between the TCT and creativity ratings of the same drawings that followed a standardized technique whereby artists and psychologists assessed detail and overall gestalt (i.e. holistic integration of overall drawing) of the drawing. Significant correlations of r=.29 and .29 with two further creativity measures as well as a correlation of r=.29 with the openness scale described above were reported, however no significant correlation with an inventory of past creative accomplishment was found. Creative personality tests correlated with the instrument at r=.24 and .30.

### Verbal Creativity:

While creativity was assessed solely through the TCT-DP in the first school, further debate and consideration in the research team led to the inclusion of an additional instrument to test verbal creativity in the second and third schools. During the pilot run at the first school, the research team was under the impression that some of the teachers were disinclined to engage with the drawing task in a serious manner. Therefore, a second indicator of creativity that is potentially better suited for this population was deemed advisable. The subscale *Unusual Uses* of the Verbal Creativity Test by Schoppe (1975) assesses creative verbal productivity and divergent thinking. In this procedure, participants were asked to think of as many atypical uses for a specific object as possible. Over the span of four minutes, participants jotted down the uses for two objects at each time point (t1: "empty can" and "string," t2; "brick" and "scissors," t3: "newspaper" and "shoe"). Two members of the research team were trained on scoring the answers according to the test manual, whereby only unusual and original uses were afforded points. The raters discussed the scores and reached an agreement whenever scores differed. The items used at t3 (follow-up) were borrowed from Guilford's Alternate Uses Task (Guilford, Christensen, Merrifield, & Wilson, 1978), since the VCT provided only two variants. The authors of the VCT report correlations of both variants ranging from r = .70to .90, whereas test-retest reliability when using the second variant at re-test ranged from r =.68 to .84. Medium correlation with measures of intelligence (r = .32) and achievement orientation (r = .32) suggest that the measure's discriminant validity should be considered cautiously. Factorial loadings on verbal productivity point to internal validity.

### 3.6.2 Statistical Analysis

Quantitative data was analyzed with the *Statistical Package for the Social Sciences 21* (IBM SPSS 21). Calculations were based on the General Linear Model (GLM).

### 3.6.2.1 Group Comparisons

### Baseline Comparisons:

T-tests for independent samples and chi-square tests were conducted to investigate group differences at baseline. Significance levels were set at alpha = 0.05 for all analyses.

### Analysis of Covariance:

In order to test whether pooling all teachers for an overall comparison was legitimate, a 2x3 ANCOVA with baseline scores as a covariate *and* the school as a factor was calculated. The purpose was to establish whether there was a significant interaction of group assignment (intervention versus waitlist group) and school affiliation, i.e. to test whether the intervention had differential effects depending on which school teachers belonged to. Means score of all variables at t2 for the pooled intervention and the waitlist group were then compared through Analyses of Covariance (ANCOVA), with baseline test scores serving as a covariate in order to control for score differences prior to the intervention. Group comparisons were additionally conducted for each school separately

#### Multivariate Analysis of Covariance:

Exploratory Multivariate Analysis of Covariance (MANCOVA) was conducted for variable clusters in the pooled population in order to determine if effects and effect sizes varied according to the overall outcome domain. MANCOVAs were conducted for mental health outcomes (stress, anxiety and depression), social-emotional outcomes (emotion regulation, interpersonal problems, self-efficacy and self-regulation) and creativity / openness variables (drawing creativity and openness for experience).

#### Effect Sizes:

Effect sizes were calculated for all conducted ANCOVAs in order to assess the meaningfulness of group differences. This is particularly useful for the individual school analyses where sample size is relatively small. While the established formula for calculating Cohen's d  $(d = (M_2 - M_1)/\sqrt{((SD_1^2 + SD_2^2)/2)})$  is used in t-tests, no consistently used formula exists for ANCOVAs. In the latter, group differences are based on adjusted means to control for differences at baseline. In fact, the literature on calculating effect sizes is rife with

differences and debate (Seifert, 2008). In order to decide on the most appropriate estimate of effect size, several possibilities were explored:

- Eta-squared, as assessed by the ANCOVA calculated in SPSS
- Cohen's d, as derived from the adjusted means and regular standard deviations at t2
- Cohen's d, as derived from the difference of effect sizes of group differences at baseline and t2 (Klauer, 2001)
- Cohen's d, as derived from the difference of effect sizes of group differences at baseline and t2, with differences weighted according to the pooled standard deviation at t1 (Morris, 2008).

An exemplary illustration of the effect sizes of group differences on self-reported mindfulness as calculated by the different approaches is depicted in table 3. Partial Eta-squared ( $\eta^2$ ) values of the individual ANCOVAs will be reported as one indicator of the strength of association (whereby .01 signifies a small effect, .06 a medium effect, and .14 a large effect). However, there is a consensus that (partial)  $\eta^2$  tends to overestimate the actual effect size. Moreover, since most of the existing literature reports effect sizes in terms of the commonly used Cohen's d, an equivalent measure of effect size was deemed necessary so as to better compare results to current mindfulness research. In this dissertation, Cohen's d based on the adjusted group means and the pooled standard deviation at t2 is considered the main indicator of effect size, since this approach tended to yield the most balanced results (neither overestimating nor underestimating the effect size). Moreover, it is based on the adjusted means at t2, which most effectively control for differences at t1 and constitute the basis of the reported significances. Cohen's d values from d = 0.2 to 0.5 are classified as small while values from 0.5 to 0.8 are classified as medium, and values over 0.8 as large (Cohen, 1992).

Table 3: Exemplary illustration of effect size calculations using different approaches

	$\eta^2$	$d_{ m ANCOVA}$	d <sub>differences</sub> (Klauer)	$d_{ ext{differences}}$ (Morris)
Self-reported mindfulness School 1	.18(large)	0.67 (medium)	.70 (medium)	.66 (medium)
Self-reported mindfulness School 2	.22 (large)	.72 (medium)	.63 (medium)	.53 (small)
Self-reported mindfulness School 3	.01 (small)	.16 (small)	.20 (small)	.22 (small)
Pooled Population	.10 (medium)	.48 (small)	.47 (small)	.48 (small)

 $d_{\text{ANCOVA}}$  = based on adjusted means and standard deviation at t2;  $d_{\text{differences}}$  (Klauer) = difference of effect sizes as proposed by Klauer,  $d_{\text{differences}}$  (Morris) = difference of effect sizes as proposed by Morris

## 3.6.2.2 Outcome Stability

A one-way repeated measures analysis of variance (ANOVA) with time as the within-subjects factor was conducted to evaluate changes to the outcome variables across t1, t2 and t3 for the intervention group only. Bonferroni corrections were performed for post-hoc pairwise comparisons so as to avoid an increased likelihood of type I errors. The corresponding effect size was reported in partial eta squared ( $\eta^2$ ).

# 3.6.2.3 Assumptions

*Normality:* For within-group and between-group comparisons, the Shapiro-Wilk-Test was used to confirm normality of distribution across variables

*Homogeneity of Variances:* Homogeneity of variances as assumed by ANCOVAs was tested using the Levene-Test.

Correlation between Covariate and Outcome Variables: ANCOVAs furthermore require significant correlations between the covariate (baseline scores) and the outcome variable (scores at t2), which was tested via Pearson correlations.

*Homogeneity of Regression:* ANCOVAs assume homogeneity of regression, i.e. comparable correlations of covariates and outcome variables across groups. To confirm this assumption,

the homogeneity of the regression coefficients was explored (through customized ANCOVA models that include the interaction of outcome variables and covariate).

*Sphericity:* Sphericity as required by repeated measures analyses refers to homogenous correlations across time points and was confirmed through the Mauchly Test of Sphericity. Whenever necessary, Greenhouse-Geisser corrections were performed to counter violations of this assumption.

#### 3.6.2.4 Missing Data

In terms of missing data, no replacement of entire data-sets was conducted. Rather, missing data sets resulted in the exclusion of the respective participants from the respective analysis (see section 3.5.2). After excluding participants with whole missing datasets, the dataset was inspected for single missing values that may have occurred either during data collection or data entry. In order to establish whether values were missing in a meaningful way that reflects a systematic pattern in the results rather than inadvertent errors in the dataset, an analysis of missing values was conducted. Little's Missing Completely at Random Test (MCAR) was performed to check for missing patterns among single missing values. MCAR tests for each of the schools were non-significant, indicating a random pattern of missing values (School 1: χ2 = 0.000, df = 6542, p = 1.000; School 2:  $\chi$ 2 = 0.000, df = 7302, p = 1.000; School 3:  $\chi$ 2 = 0.000, df = 3779, p = 1.000). Therefore, missing values were replaced with the Expected Maximization Algorithm (EM), as recommended by Cohen et al. (2003). This procedure replaces missing values relying on Maximum Likelihood Estimations and is recommended for data missing at random or completely at random. Replacements of missing values using the EM imputation method is furthermore admissible in light of the low percentage of missing values for any one item which seldom exceeded 3 %. Special attention is however indicated for the teacher-specific self-efficacy scale in school two, where missing values ranged between 4 and 17 %.

## 3.7 Qualitative Analysis

The research at hand attempted to inform and extend the quantitative results through qualitative data in order to address central research questions. Individual interviews using a semi-structured interview guide were conducted with all participants of the first two schools. Due to the project's duration, time resources and capacities, no interviews were conducted with participants at the third school. In the following, the specific procedures, instruments and analytical method are outlined, and the sample selection and characteristics are described.

#### 3.7.1 Procedures

#### Data Collection:

A total of 53 interviews was conducted across the two first project schools. All participants of the first school participated in one-on-one interviews. In the second school, all participants in the intervention group were interviewed, yet in the waitlist group only nine teachers (out of 14) were able to accommodate a request for an interview. Interviews were scheduled individually with teachers as soon as possible after course termination so that impressions and course experiences could be easily recalled. Appointments were made either in person after the quantitative data collection at t2 and t3 or briefly scheduled via telephone calls. Most interviews were conducted on school premises in an available quiet room. Two interviews took place at the office of the research team. The majority of interviews was conducted by the author of this dissertation, however roughly a third was carried out by other members of the research team. The interviews lasted 50 minutes on average; a few particularly long interviews lasted for up to an hour and a half, while no interview was shorter than half an hour.

#### The Interview Situation:

At the beginning of each interview, participants were thanked for their time and briefly informed about the objective of the interview. The interviewer explained the purpose of the interview guide and the summary matrix (discussed below) and pointed out that the interviews would be recorded for transcription. As with the quantitative questionnaires, participants were assured of the anonymity and confidentiality of recorded data and transcripts.

While participants were encouraged to answer questions as freely and candidly as possible, it is likely that social desirability effects nonetheless played a role. On the one hand, participating teachers were aware of the researchers' interest in mindfulness and involvement in the project. The explicitly scientific purpose notwithstanding, it is possible that interviewees assumed that positive narratives are likelier to cater to their counterparts objectives. Moreover, a direct one-on-one conversation may have rendered it more difficult for teachers to express overt and intense dissatisfaction. These potential influences were addressed through repeated explanations that straight-forward responses of whichever kind were the sole purpose of the interviews.

### Additionally Collected Materials:

*Expert Interviews:* Aside from the interviews with participating teachers, expert interviews with the course instructors were also conducted. The purpose of these interviews was to gain a

better sense of course particularities, group dynamics and adherence (see 'Fidelity of Implementation' in section 3.4) and complement the teachers' narratives with an outside view on the group as a whole. They were scheduled after termination of the intervention at the first and third school, respectively, and took place in the instructors' private practice. Interviews were recorded and transcribed for later analysis.

Interview with the Principal of the Third School: A single interview with the principal of the third school was conducted spontaneously after the termination of both courses. This measure was prompted by the research team's growing sense that a better understanding of the specifics of the third school would be helpful in interpreting the results. An interview with the principal was deemed a fruitful complement to the collected data since she had participated in the course herself and as such could share her personal experience. Furthermore, in her professional capacity, the school's principal was in a position to evaluate staff perceptions of and reactions to the course in general.<sup>10</sup>

#### 3.7.2 Instruments and Tools

## Participant Interview Guide:

A semi-structured interview was selected as the most appropriate format to adequately address the research questions of interest. Semi-structured interviews permit the pursuit of concrete objectives and topics while simultaneously allowing participants to engage in free-flowing narratives that depict their individual concepts and relevancies. Moreover, while the research questions guiding data collection are relatively clear-cut, they nonetheless necessitate a measure of non-directive openness since no response categories were assumed in advance. Accordingly, an interview guide that delineates central topics as well as helpful questions and prompts was developed following the SPSS method (German acronym for Collecting, Checking, Sorting and Subsuming) proposed by Helfferich (2005).

A qualitative research group that meets regularly at the University Medical Center and of which the researchers in this project are members was acquainted with the project's qualitative research questions. In a subsequent brainstorming session, the group generated as many potential guide questions as possible (Step 1: Collecting). These questions were reviewed and discussed, taking into account questions of wording, comprehensibility and

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<sup>&</sup>lt;sup>10</sup> No guide was used for the interview with the principal of school three, since no specific research questions were investigated. The purpose of the interview was to invite the principal to share her experience and impressions of the course freely, with follow-up questions arising exclusively from the presented narratives.

precision. Special attention was devoted to whether questions were sufficiently open-ended, non-suggestive and encouraging. Wherever necessary, the group formulated alternative questions or discarded unfruitful threads (Step 2: Checking). Finally, the two researchers involved in this project (i.e. the author of the present dissertation and the second doctoral candidate) grouped the questions according to their thematic focus, eliminating redundancies wherever necessary and considering question sequencings (Step 3 and 4: Sorting and Subsuming). The resulting guide addressed five major topics: course experience, possible changes, mindfulness concepts,  $Mu\beta e$  and course difficulties. For each topic, initial questions and probes were formulated, bearing in mind that the interviewer may use her judgment in departing from these templates to respond to individual narratives. Particularly open questions were asked both at the beginning ("Why did you decide to participate in the course?") and the end of each interview ("Is there anything else you would like to say or think is important that we have not mentioned so far?")<sup>11</sup>.

In order to validate the guide, confirm its practicality and assess the anticipated duration of the interviews, a test interview was conducted with a member of the aforementioned qualitative research group who was familiar with mindfulness and had previously partaken in an MBSR course. This resulted in useful feedback about the interviewer's attitude and the effect of wording and sequencing.

Since no data analysis was conducted prior to the second wave of interviews at school two, no major adaptations to the interview guide were made at a later stage. However, based on the experiences of the research team at the first school, individual probe questions were adjusted and the overall guide tightened (i.e. fewer probes per question). Furthermore, rather than inquire into theoretical concepts of  $Mu\beta e$ , participants were directly asked about the relationship of  $Mu\beta e$  and mindfulness, so as to avoid impersonal and purely abstract ponderings on Muße. This adaptation is commented on in the results section; the final version of the interview guide is provided in the appendices.

### Summary Matrix:

In addition to the interview guide, a short thematic summary matrix was used at the second school after each interview. Main statements and themes of each interview were briefly jotted down so as to facilitate later interview screenings.

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<sup>&</sup>lt;sup>11</sup> Translation by the author.

### Indicators of Motivation and Expectation:

In the second school, course motivation and expectations were measured by Visual Analogue Scales (VAS) administered prior to the course as part of the quantitative test battery. Motivation was tapped through the following question: "How high is your motivation to participate in the mindfulness course? Please place a mark on the line below." Underneath the question, participants could mark a 10-cm line ranging from 1 to 10 and verbally anchored by "I am not at all motivated" on one end and "I am extremely motivated" on the other. A similar VAS was posed with respect to course expectations ("How much do you expect to benefit from the mindfulness course? Please place a mark on the line below."), with anchors stating "I think that I will benefit very little from the course" and "I think I will benefit very much from the course". <sup>12</sup>

While these VASs are not actually qualitative tools, they are reported here since they serve as part of the description of participants included in the qualitative analysis. This overview of participants' characteristics (see section 3.7.6) is used as means of contextualizing subsequent qualitative results. In addition, an open-ended question encouraged participants to name concrete expectations ("What do you expect from the mindfulness course?"). These statements are likewise intended to frame the results on a descriptive level.

### Expert Interview Guide:

Prior to the interview with the course instructor of the first school, the researchers of this project developed a tentative interview guide that outlined main interest areas and that closely followed the guide developed for project participants. The guide (see appendices) mainly addressed i) the instructor's course experience and impressions, ii) her mindfulness concept, iii) the changes she observed among participants, iv) her understanding of  $Mu\beta e$  as well as v) course difficulties.

The same guide was used as a template for the interview with the second instructor. However, the researchers' experience in the first expert interview suggested that only very few predefined questions were necessary and helpful; therefore, the interviewer departed considerably from the guide to explore the instructor's perspective as it unfolded.

## Feedback Sheets:

As mentioned earlier, no participant interviews were conducted at the third school due to lacking capacities. However, all participants at this school were offered the opportunity to

<sup>&</sup>lt;sup>12</sup> All translations by the author. VASs are shown in the appendices.

provide written feedback at the end of the final quantitative data collection (t3). Specifically, on the last page of the administered test battery (see appendices), participants were encouraged to state their feedback, describe their experiences and express criticisms. This measure was a late addition, since the research team realized throughout the project's implementation at the third school that unlike in the other two schools, participating teachers were at no point given the chance to voice thoughts and concerns openly. The question was thus intended to enable participants to articulate their opinion if they cared to do so, rather than investigate a particular research question. As will be discussed in the results section however, the teacher's comments, albeit brief, proved important in gaining a better understanding of the course's quantitative results in this school.

## Technical Equipment and Software:

All interviews were audio-recorded for later transcriptions using the Olympus Digital Voice Recorder WS-812. Transcripts of the recordings were created using the standard Microsoft Word software. During the initial stage of transcript analysis, the commenting function of Microsoft Word was used. Coding in subsequent phases was conducted with the aid of the qualitative data analysis software MaxQDa. MaxQDa offers several advantages. Firstly, data can be coded clearly and orderly, with separate "comment" and "memo" functions that allow for jotting down ideas for later stages as well as descriptions of a code's content, respectively. Secondly, the code list provided by MaxQDa illustrates the prevalence of a code both within a data item and across the data set. Thirdly, codings can be reviewed individually, with all text segments corresponding to a code displayed separately. These options greatly facilitated the crystallization of themes across the entire data set and an assessment of the centrality / prevalence of themes.

## 3.7.3 Analysis of Participant Interviews

## 3.7.3.1 Interview Selection and Transcription

The selection of interviews to be included in the final data set constituted a challenging aspect of data analysis, and continued into phase three of the analytical process (see below). Having conducted 53 interviews with participating teachers at the first two project schools, the project could draw on a wealth of material rich both in detail and scope. However, the capacities available to this dissertation did not permit a full analysis of all collected interview within the given time and financial limits, nor was an analysis of each single interview necessarily feasible if a smaller subset of interviews could adequately represent the collected data. The

following is a brief description of the decision-making process in this respect, which was guided by the research questions posed to the qualitative data and recommendations in the literature.

While the sampling concepts used in qualitative research vary and the respective terminology is often used differently depending on the source, all qualitative research can be considered to use *purposeful sampling* in that "the sample is always intentionally selected according to the needs of the study" (Coyne, 1997, p. 629). Purposeful sampling generally identifies data that bears in-depth relevance to specific research questions (Patton, 1990). Within the scope of purposeful sampling however, processes that determine further data inclusions depending on theoretical insights gained in early stages of the analysis are broadly referred to as *theoretical sampling* (Coyne, 1997, Glaser and Strauss, 1998). In theoretical sampling,

"groups are selected which help to generate as many properties of the categories as possible, that help relate categories to each other and to their properties. Joint collection, coding and analysis of data is essential and the criterion for judging when to stop sampling of groups pertinent to a category is the category's *theoretical saturation*. Theoretical sampling may therefore be seen as a *variation* within purposeful sampling."

In the present dissertation, purposeful sampling was initially used to identify feasible interviews (Phase 1 of Thematic Analysis; see section 3.7.3.2); all conducted and recorded interviews as well as the summary matrices were sighted. Based on the impressions that these screenings and notes provided, fruitful and particularly informative interviews were chosen for transcription<sup>13</sup>. Identifying information-rich data is a common practice in qualitative research and almost always part of initial sampling (Coyne, 1997; Patton, 1990). It should be noted that from a quantitative perceptive, this procedure may entail somewhat of a bias, since detailed descriptions and explanations were seldom offered for non-beneficial course experiences. However, bearing in mind the research questions, which targeted an elucidation of experience, changes, individual concepts and mechanisms of change rather than a comprehensive depiction and reduction of all interview data, this approach was deemed defensible.

Throughout later stages of the analysis (Phase 3 of Thematic Analysis; see section 3.7.3.2), further interviews were transcribed and included based on theoretical sampling, since the hitherto analyzed data revealed relevant areas that required further material (e.g. accounts of

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<sup>&</sup>lt;sup>13</sup> Transcripts were created by the project's research assistants using Microsoft Word. The transcription process and method can be viewed in the original quotations included in the appendices.

lacking benefit). In addition, continued discussions within the research team and data-specific considerations provided further criteria that informed the selection process from different angles. These included balancing male and female teachers as well as intervention and waitlist group participants as much as possible. Since there were generally far more female than male participants however, the final data set also comprises more women than men. Moreover, the generally small sample of men meant that interviews from male participants were considered of higher priority by default and were likelier to be included.

This fairly iterative process yielded a tentative data set of ten interviews from the first school and nine from the second. It must be noted that the intensive engagement with interview material for selection purposes cannot be entirely separated from the analysis process, since the act of choosing some interviews and eliminating others (largely based on unquantifiable criteria) in itself constitutes an interpretive effort. Furthermore, the selection process was highly influential in determining the grain for further analysis. Gaining an overall sense of all interviews colored the subsequent approach to the data and was indispensable for deciding on the level of detail and nuance of analysis.

### 3.7.3.2 Thematic Analysis

### Method Rationale:

Participant interviews were analyzed using *Thematic Analysis*. While Thematic Analysis as a term refers to a number of somewhat varying methodologies, the research at hand primarily relies on the guidelines and revisions provided by Braun and Clarke (2006). This particular Thematic Analysis approach was selected due to its flexibility and wide range of applicability as a qualitative analytical method. Among the typically employed qualitative analytical techniques, it was considered best suited to our research purposes due to its relatively clear guidelines and its tendency to borrow and combine practicable elements from several other techniques. A versatile and flexible method was especially helpful in light of the rather large data corpus this project is examining within a limited timeframe. In addition, the nature of this project's research questions requires an approach that is not exclusively associated with one strict epistemological paradigm. Since this dissertation is interested both in individual experiences of mindfulness and the ways in which these experiences interact with their social consistently context, it is difficult to subscribe exclusively either constructionist/interpretivist or a positivist/essentialist worldview. Braun and Clark (2006) argue that Thematic Analysis

"can also be a "contextualist" method, sitting between the two poles of essentialism and constructionism and characterised by theories such as critical realism [..] which acknowledge the ways individuals make meaning of their experience, and, in turn, the ways the broader social context impinges on those meanings, while retaining focus on the material and other limits of 'reality.'"

In that sense, on one hand we assume the utmost importance of individual experience and its primacy in addressing the research questions, yet on the other hand we attempted in several instances to relate these experiences to classic societal discourses and systemic realities, as well as constraints typical of the educational field. Thematic Analysis offers this possibility. With that said, however, the current approach *predominantly* assumes a positivist standpoint, since the examined data was largely considered on the explicit, surface level and regarded as directly representative of the participants' reality and intended meaning. This will be addressed in further detail below.

#### Initial Considerations and Choices:

According to Braun and Clarke (2006), the overall objective of Thematic Analysis is to make sense of data through identifying representative and meaningful *themes* in relation to the research questions. In this respect, a theme constitutes an important feature of the data and describes a certain pattern throughout the data corpus. These themes can serve to merely describe the data set (all data items considered in any one analysis) or interpret and explain beyond description and organization. Clarke and Braun (2006) recommend that researchers consider a number of fundamental questions when they attempt to identify themes in a dataset.

**Prevalence:** It is important to consider the size and prevalence of a theme across data items (i.e. each piece of collected data, for instance an interview). In other words, how often does a theme need to occur within the data corpus to be significant? Similarly, across how many data items must it be identified to be considered meaningful for and relatively representative of the entire data set? How extensively must a theme be evident within one data item to merit attention? These decisions are not informed by any clear-cut guidelines in thematic analysis and largely depend on the researcher's judgment. The presentation of themes in the results section will attempt to convey a sense of the prevalence and centrality of each theme, without resorting to strictly quantitative indicators that in the opinion of the author would detract from the merits of a qualitative approach in the present context.

Representative description of entire data set versus a rich focus on particular aspects: Qualitative researchers must typically make choices regarding the extent to which

they intend to depict and exhaustively represent a data set relative to the extent to which they examine particular aspects within and across that set. With respect to the present research questions, a delicate balance between those two objectives was necessary. Exploring concepts of mindfulness, for instance, required a rather comprehensive scanning of all data items to identify a representative compilation of themes that reflect the entire set. These themes are relatively easy to extract and tend to be more descriptive in nature. On the other hand, examining mechanisms and processes in detail necessitates in-depth and nuanced examination of related aspects wherever they occur, as explanations to this effect tend to be more latent. Therefore, depending on the research question, the data set was approached with varying foci.

Inductive versus deductive coding: Another aspect that Braun and Clarke (2006) address determines how themes are generated from the data: do they emerge from the text, and nothing but the text, irrespective of theoretical frameworks and concepts that the researcher may hold or that may exist in the field (inductive approach)? Or is the data examined with categories in mind, such that the extracted themes reflect a theoretical framework that is applied to the text (deductive approach)? While a larger focus is placed on inductively generated themes, we cannot claim to have ignored existing definitions and concepts of mindfulness and  $Mu\beta e$  that on occasion contributed to a somewhat deductive framing of themes.

Semantic versus latent coding: Qualitative research varies in terms of the degree of interpretation at work in the identification of themes. More constructionist approaches tend to code themes in a highly interpretive manner, depicting not only what is evident at a surface level, but what this may signify and mean over and beyond its direct semantic content (attitudes, assumptions, patterns, etc.). In other words, latent content and themes are identified early on. Alternatively, a semantic level of analysis will generate themes relying on the explicit content of the data set, thus initially describing and organizing the information that the data yield. Subsequently, these descriptions are interpreted across the data set and often in light of existing theory and literature. The research at hand largely falls under the latter category, since no deeper analysis of latent information in the data was conducted. Rather, the explicitly reported information was depicted and organized. It was then interpreted as a whole, identifying patterns, constellations and explanations across the data set and relating these to relevant theoretical frameworks. It is noteworthy, however, that in the researcher's opinion, even a semantic approach cannot sensibly identify and interpret all themes consistently and meticulously in the exact same manner or with the exact same level of

interpretive effort. Participants' narrations themselves vary in abstraction, such that some themes are more readily relatable to theoretical frameworks than others, thus requiring less interpretation. Conversely, some themes are more inferential even within a semantic approach.

Epistemological assumptions: As mentioned above, while clearly leaning towards a positivist/essentialist approach, the research at hand nonetheless is not devoid of interpretive analysis. As the majority of qualitative researchers concede, even the most realist/essentialist of analyses cannot be entirely free of interpretive engagement with the data. Inevitably, analysts bring their own set of conscious or subconscious assumptions, motivations and tendencies to the data, which is bound to color their interpretations. As Braun and Clarke state: "Data are not coded in an epistemological vacuum" (2006, p.12). In addition to this default interpretive element, this research is explicitly interested in underlying structures influencing the narratives our participants produce. It is relevant, for instance, to what extent the specific characteristics, limitations and constraints of the educational system shape the accounts our participants share with us. Similarly, the larger context of the CRC implies a focus on functionalization and performance standards, which likewise occasionally constitutes an interpretive lens.

Before the qualitative results are presented, several of these considerations are touched upon (see section 5.1).

### The Six Phases of Thematic Analysis in the Present Research:

Braun and Clarke (2006) structure the analytic process along six phases, which are not strictly linear, however. The following demonstrates the progression of the current analysis according to these phases.

**Phase 1:** Initially, all collected and transcribed interviews were thoroughly read and re-read, in an attempt to get an overall sense of the data corpus (this phase coincided with the selection process explained in section 3.7.3.1 and partly resulted in fresh transcripts). While no actual coding took place at this stage, potential themes and coarse-grained summaries were noted. During the beginning of this phase, a first data set was selected.

**Phase 2:** A first inductive coding, i.e. identification of themes, was conducted across all interviews of the first school. Coding entailed reading through interviews segment by segment and assigning each segment a brief 'title' (in MaxQDa, this meant highlighting the text portion and adding a correspondent category to an adjacent list). The large number of codings

generated at this stage was predominantly descriptive and paraphrasing rather than succinct or exclusive. Preliminary ideas on broader constellations relevant to the research questions were noted. Subsequently, the interviews of the second school were tentatively coded using both the themes generated throughout the first batch of interviews as well as new themes. At this point, it was necessary to decide whether the schools should be analyzed separately or as one cluster. The relative similarity of themes suggested that results would be richer and more cohesive if the schools were analyzed as one dataset. Two separate datasets would have featured considerable redundancy and less insightful explanations

**Phase 3:** The tentative codings identified in phase 2 were compiled in a list that was examined separately. First grouping of interrelated codes were clustered as proposed themes (resulting in a preliminary theme map of the data set) and potential explanatory interrelations were noted in a draft interpretation. Based on these proposed themes, further interviews from each school that seemed to add nuance and scope were included in the data set (see section 3.7.3.1).

**Phase 4:** The themes generated in phase 3 were now re-examined in reference to the respective coded text segments. At this point, themes were checked for internal homogeneity, i.e. strong internal cohesion within the codes of each theme, and external heterogeneity, i.e. sufficient distinctions between the individual themes. Wherever possible and meaningful, themes were collapsed or disentangled, according to the textual support. A first round of text and theme examination and modification produced a revised theme map. A second reading of the data set guided a renewed evaluation of the revised theme map and resulted in further modifications. The draft interpretation was adjusted accordingly.

**Phase 5:** In this phase, the theme map was defined in tabular form. The quintessence of each theme was formulated and sub-themes were identified and described. Final theme titles were proposed for each overarching and subordinate theme.

**Phase 6:** The produced theme map was reported in writing, with particular emphasis on interrelated and explanatory aspects. At this point, textual evidence was referenced to support the interpretive claims and conclusions.

### 3.7.3.3 Language Considerations and Translation of Supporting Evidence

Since the interviews were conducted and transcribed in German, some notes on the translation process and the generation of English themes and respective descriptions are in order. The

German transcripts, which were created by the project's research assistants, were directly coded in English according to the aforementioned phases. In this manner, the first coding iterations, which are largely a succinct paraphrase of the original text data, amounted to a translated English summary of the respective segment. Surprisingly, translation proved rather helpful, as it constituted an effective way of extracting the essential message of the verbatim text. Rather than clinging to the wording of individual passages and thus obscuring their global meaning, translating often facilitated access to the core statement. Based on the generated codes, themes were readily extracted in English and examined in the following phases, as detailed above. For each theme, the selected supporting quotations were individually translated by the author. Transcribed sounds (such as "ahm") and occasional repetitions were eliminated from the quotations so as to facilitate understanding. Punctuation and edits were likewise performed by the author. Square parentheses signal insertions by the author that complete the quote through referencing an earlier segment. Incomplete sentence fragments, stuttering or grammatical errors were preserved in translation, though extreme instances were edited for improved comrehinisibility. All original German quotations are included in the appendices.<sup>14</sup>

Naturally, some of the translated terminology fails to capture idiosyncratic and often meaningful uses of language tangible in the original version, or does not accurately and wholly match the original. Wherever this was the case, and wherever this deviation represented an important nuance of meaning, a footnote with the original term and the presumable significance was included.

### 3.7.4 Analysis of Additional Material

#### Feedback Sheets:

Since the feedback provided in written form by participants of the third school typically consisted of short, sweeping statements, no in-depth analysis was possible. Rather, the content of all feedback sheets was summarized at face value. To this effect, a transcript of all comments was coded inductively, resulting in descriptions of central benefits and difficulties from the participants' perspective. Codings in this respect were simple paraphrases that pooled similar statements. The list of themes was roughly reorganized for greater compactness and concision.

<sup>&</sup>lt;sup>14</sup> The original quotations found in the appendices represent the unedited transcripts, i.e. repetitions, stutters and transcription of emphasis, nonverbal gestures and interruptions are maintained so as to provide an example of the transcription process.

Due to the entirely different type of data (brief written comments versus full in-depth interviews) and the different objective (clear research questions versus open feedback format), the feedback sheets were not incorporated into the main analysis, and are presented independently in the form of a short commentary on course benefits and difficulties at the third school.

#### Additional Interviews:

Both expert interviews and the interview with the principal of the third school were analyzed in a separate step after other material had already been coded and interpreted. Rather than a source of new themes and content, these transcripts were considered a tool to triangulate and complement the participant interviews and the feedback sheets, respectively. For this reason, no elaborate six-step procedure was necessary. Instead, upon reading the transcripts, relevant segments (i.e. segments that relate to the themes generated from the other interviews in some way) were first coded via purely inductive and semantic paraphrases. These paraphrases were then re-grouped and renamed so as to concisely delineate areas of relevance for the main qualitative results. This information was not reported separately in the case of the instructor interviews, but injected into the discussion of the qualitative results, in an effort to present yet another angle on the proposed interpretations for further validation and elaboration.

### 3.7.5 Quality Criteria

Quality criteria within qualitative research methodologies remain a topic of debate, with many researchers cautioning against a quantitative logic that assumes a clear-cut set of criteria that are universally applicable (Tracy, 2010; Seale, 1999; Guba & Lincoln, 2005). Most researchers in fact emphasize that quality criteria vary according to the type of research (Bochner, 2000; Schwandt, 1996). Nonetheless, possible paradigms for evaluating qualitative findings are regularly proposed. Acknowledging the various controversies around quality criteria in qualitative methods, Tracy (2010) suggests that eight core principles may be considered across different epistemological paradigms, methodological approaches and research questions. In the following these criteria are described and discussed with a view to the research at hand. However, it should be noted that the conceptualization put forth by Tracy cannot be regarded as hard criteria that are either met or failed but rather constitute guiding principles. The author indeed states that "although best practices serve as goals to strive for, researchers can and will fall short, deviate, and improvise" (Tracy, 2010, p. 849).

### Worthy Topic:

Tracy defines worthy topics as relevant, timely, significant and interesting (2010). The relevance of the research questions pursued here is most obviously evident in the professional strain that teachers are subjected to (see section 1.5.1). It is however also palpable in the more subtle sense of acceleration and functionalization that is typical for modern life and that has prompted the CRC  $Mu\beta e$ . In that sense, this topic is also timely: phenomena of haste, diffuse stress and insidiously omnipresent demands are a much discussed issue in contemporary discourse. Similarly, mindfulness and MBIs are visibly in vogue, recurrently appearing in media outlets, health institutions and commercial self-optimization markets. Investigating the quality of teacher-specific stress as it relates to an overall societal context that values achievement and efficiency, as well as exploring the effectiveness of mindfulness in countering these trends, is therefore not only timely and relevant, but also significant due to the concurrent implications for mental health and quality of life. Interestingness in terms of novelty and evocativeness (Tracy, 2010) can also be considered a fulfilled criterion inasmuch as the qualitative investigation of subtle processes involved in MBIs for teachers remains lacking, and since an angle that relates mindfulness to  $Mu\beta e$  is entirely unprecedented.

# Rich Rigor:

This criterion is fulfilled when "the study uses sufficient, abundant, appropriate, and complex theoretical constructs, data and time in the field, sample(s), context(s) [and] data collection and analysis processes" (Tracy, 2010, p. 840). As theoretical constructs are limited in this study because a largely inductive approach was employed, the number, length and scope of interviews do justice to the complexity of the topic. The analysis was extensive and nuanced, as indicated by the breadth of results<sup>15</sup>. Moreover, adequate saturation was achieved, i.e. data was analyzed until "the point at which there are fewer surprises and there are no more emergent patterns in the data" (O'Reilly and Parker, 2012, p.192).

### Sincerity:

Tracy (2010) suggests that high-quality research must be self-reflective (i.e. overtly occupied with researcher's biases, faults and contributions to the findings) and transparent (i.e. honest and forthcoming about details of the research process and the path to the explicated results). This research continuously attempted to meet these criteria by elaborately describing methods and procedures, justifying and contextualizing analytical decisions as part and parcel of the

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<sup>&</sup>lt;sup>15</sup> Analysis of interviews continued throughout approximately a year and a half, which may convey a sense of the analytical scope.

findings' presentation, as well as addressing analysis problems and influences on the extracted results (e.g. in section 5.1).

# Credibility:

Referring to whether results seem trustworthy and plausible, this criterion is met when the results are thick in descriptions and concrete in detail, explicate tacit (nontextual) knowledge, tangibly demonstrate findings, triangulate and crystallize the results, exhibit multivocality and allow for member reflections. In this dissertation, results are always presented within their larger context, related to one another and interpreted with as much nuance as possible. Whenever findings are extracted, exemplary quotes with the relevant context are inserted so as to 'show rather than tell' and provide "evidence" for the interpretations. Moreover, the qualitative findings complement quantitative results which thus to some extent triangulate the data. Multiple research team members were additionally involved in the process, critically discussing analysis and results. The present research also aspired to demonstrate a measure of multivocality, which refers to the incorporation of divergent opinions and viewpoints. Interviewees were explicitly and repeatedly encouraged to express dissent or dissatisfaction, and interview selection attempted a balanced representation of stances and male/female participants. However, the type of represented teachers and contexts that informed this project is nonetheless largely uniform and participants' reflections on the generated results could not be included as part of the process. Similarly, nontextual information such as behavior, body language and emotive expression was not subject of analysis. In spite of these shortcomings, we hope that sufficient credibility markers are visible, lending legitimacy to the presented results.

#### Resonance:

This parameter for judging qualitative research is concerned with the impact of the generated results. According to Tracy (2010), research may resonate with readers through *aesthetic quality* and/or *transferability*. While the former is a function of creative and aesthetically pleasing writing and presentation, and as such difficult to evaluate by the researcher, the latter is more directly relevant. *Transferability* is the degree to which an audience may relate to the presented narratives and on some level apply the described structures to their own experience. Although this is for readers to judge, we believe that the presented findings may prove relatable to individuals, who are not necessarily concerned with teachers' health or mindfulness, due to the universality of the concepts implicit in mindfulness and the predominance of detailed, subjective narratives that in theory should offer relatable grounds

for diverse domains of inner experience (for instance processes whereby presence improves the quality of relationships). As elaborated in the results section, and indeed postulated in the introduction, the central findings in this dissertation revolve around managing daily life with awareness, self-determination and a sense of well-being. These issues are transferable inasmuch as they have equivalents in a variety of contexts.

### Significant Contribution:

Whether or not a study valuably contributes to existing knowledge is yet another quality criterion. Tracy (2010) distinguishes between *theoretical*, *heuristic*, *practical* and *methodological* significance. The study at hand intended to contribute on a theoretical level, through its explication of the processes mindfulness ties into from a first-person perspective. Ideally, this will be of value for the mindfulness community (scientific and otherwise) in better understanding how mindfulness may work. Heuristic significance, which refers to a study's capacity to trigger curiosity and generate inquiry, is ideally given through the questions this research raises about the potential of mindfulness for teachers and teaching, and the prerequisites that are necessary for mindfulness to be fruitful in educational settings. Much like the discussion of relevance above, practical significance, i.e. the extent to which this research addresses real problems, is indicated by the urgency of teachers' health situation. Methodological significance was aspired to through a mixed method approach that does not merely employ qualitative results as a validation and confirmation of quantitative findings, as is often the case with the evaluations of MBI.

#### Ethics:

Ethical considerations are an important quality criterion in qualitative research. Tracy (2010) further divides ethical considerations into *procedures ethics*, *situational ethics*, *relational ethics* and *exiting ethics*. Procedural ethics that safeguard confidentiality and anonymity, as well as participants' basic well-being (among other things) were confirmed by the review board that approved this project's design. Throughout the various interactions in the interview situation (i.e. situational and relational ethics), the researcher strove to afford the participants their due respect, treat their time resources and preferences with consideration and deal with them transparently and on a consistently equal footing. Exiting ethics refer to ethical concerns subsequent to data collection and include the presentation and sharing of results. To the best of our ability, the results are presented with due deference to individual voices and within the scope of defensible interpretation. This dissertation will be made available to all participants upon publication.

### Meaningful Coherence:

This dimension captures whether a study was successful in pursuing its purpose and presents its data in a cohesive manner that is appropriate in light of the overall theoretical framework and objective. Furthermore, a meaningfully coherent study adequately relates findings to existing literature and theory. This dissertation covers a wide range of themes with rather fine nuance, in an attempt to a) shed light on subjective processes and experience of mindfulness, b) make better sense of quantitative results and c) contribute to an understanding of the relationship between mindfulness and  $Mu\beta e$ . In our opinion, criteria of meaningful coherence are met in the resulting analysis, taking into account the complexity of this purpose.

## 3.7.6 Description of Participants

Table 4 illustrates main characteristics of the interviewees included in the analysis (sex, age, and the current living situation). Previous experience with mediation and other similar activities as measured by Visual Analogue Scales (VAS; see 3.8.2) is also indicated, with the duration of this individual practices in parentheses whenever the information was available. Table 5 additionally depicts quantitative indicators of motivation and expectation levels prior to the course as measured by VAS for participants of the second school only (since this measure was not part of the initial test package). Furthermore, participants of the second school provided short written statements about their expectations, which are likewise included. This information sheds some light on the individual context of the data analyzed and discussed in section 5.

Table 4: Sex, age, living situation and previous meditation experience of interviewees

Participant <sup>16</sup>	Sex	Age	<b>Living Situation</b>	Previous Experience (Duration)
102	Female	53	Married	None
103	Male	37	Married	None
104	Male	43	Single	Yoga
105	Female	44	Married	Meditation and yoga (2 Years)
108	Female	51	Married	None
114	Female	37	Married	Mindfulness (6 months)
119	Female	40	Married	Autogenic training, progressive muscle relaxation, meditation and yoga (10 Years)
120	Male	45	Married	None
128	Female	39	Married	Meditation and yoga (20 Years)
131	Male	36	Married	Yoga (3 months)
203	Male	62	Married	None
211	Female	40	Lives with partner	Autogenic training and yoga (16 Years)
213	Male	46	Married	None
214	Male	51	Married	None
215	Female	45	Married	None
222	Female	42	Married	None
224	Female	45	Married	Mindfulness, meditation, yoga and progressive muscle relaxation (17 Years)
227	Female	37	Married	Autogenic training and yoga (3 Years)
230	Female	34	Lives with partner	None

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<sup>&</sup>lt;sup>16</sup> Participants coded with digits from 102 to 131 are teachers at the first school, while codes ranging from 203 to 230 represent teachers from the second school.

Table 5: Course motivation and course expectations of interviewees from the second school

Participant	Course Motivation	Course Expectati	ion
	VAS / 10*	VAS / 10*	Text (Verbatim Transcripts) <sup>1</sup>
203	8.4	8.4	Pausing that leads to more calm and supports creative powers
211	8.4	5.4	New inspiration for everyday life, closer contact to my feelings, self-assuredness equanimity
213	8.8	7.9	More equanimity in daily life, the courage not to always do things
214	9.2	9.0	myself, giving higher priority to my own well-being Ways to be balanced
215	9.9	9.8	Pointers on how do manage even better, pointers for things that I have overlooked so far, pointers on how to accept and implement relaxation strategies
222	7.1	7.4	A little more calm and equanimity, expressing feelings more
224	6.4	6.7	Renewing and deepening my practice
227	9.3	9.4	Learning to heed my feelings and wishes more and to manage my time"
230	10	10	Finding more inner calm, feeling less harried, learning more about myself, winding down better/quicker, giving school less importance in my life, less exhaustion

<sup>\*</sup>As measured by 10-cm Visual Analogue Scales (VAS); 1 Written response to the test battery question "What do you expect from the mindfulness course?"

# 4 Quantitative Statistical Results

The main objective of this study was to draw conclusions about the tested hypotheses across the three targeted schools. However, preliminary statistical analyses indicated that the quantitative results of the group comparisons differed from one school to another. Findings tended to vary depending on whether the schools were investigated as one single population or individually, and, in the latter case, depending on which school was under investigation. In order to ascertain that an analysis of the pooled data was empirically and statistically viable, the comparability of the three different cohorts was assessed and indeed confirmed (see section 4.2). Nonetheless, in light of the systemic and implementational distinctions of each school and the variation in findings, exploratory analyses of group differences are also reported for each school individually, so as not to obscure potentially important information about how the intervention was received or imply the unquestioned homogeneity of the three schools. The exact nature of these differences will be further addressed in the discussion, where the respective findings are explicated.

In this section, the statistical results of the quantitative analyses across all pooled participants are reported, followed by a more compact complementary report of the findings within each individual school. These analyses are preceded by results of statistical assumption tests as well as analyses exploring the comparability of the three teacher cohorts.

### 4.1 Assumption Tests

The statistical analyses conducted within the framework of this study required that the data meet assumptions of normality, homogeneity of variance, homogeneity of regression and a correlation of covariates and dependent variables (see section 3.7.2.3). Most assumptions were met, with a number of isolated exceptions, as detailed below.

#### Normality:

In the pooled population, all variables at t2 met the assumption of normal distribution in both the intervention and waitlist group, as assessed by the Shapiro Wilk Test. However, this assumption was violated in a few cases when schools were examined individually <sup>17</sup>.

<sup>&</sup>lt;sup>17</sup> Specifically, normality was violated in the case of mindfulness, anxiety and self-regulation in the intervention group of the first school; creativity and general self-efficacy in the intervention group of the second school; drawing creativity in the waitlist group of the second school; drawing creativity in the intervention group of the third school; and mindfulness and depression in the waitlist group of the third school.

Since these violations are exceptions rather than a consistent pattern throughout the data, and since most authors agree on the robustness of ANCOVAS in the face of violations of normality (e.g. Eid, Gollwitzer, & Schmitt, 2013), the respective results are nonetheless reported. Alternative non-parametric approaches were not deemed necessary since the central analysis encompassing the pooled population showed no violations of the normality assumption.

### Homogeneity of Variance:

This assumption was tested with the Levene Test of Homogeneity of Variance. All variables in the pooled population met this criterion. Similarly, only two exceptions were found within the individual schools: Depression in the second school and interpersonal problems in the third school. As with violations of normality however, ANCOVAS are deemed robust in this respect and the results are reported accordingly (Eid, Gollwitzer, & Schmitt, 2013).

# Homogeneity of Regression:

This assumption is essential for ANCOVAs and was met in almost all instances (as indicated by non-significant homogeneity of regression coefficients). Three violations were found, however: mindfulness in the third school and self-regulation as well as interpersonal problems in the pooled population. Since none of these variables yielded significant effects in those cases, the violation is not considered highly relevant for the overall result pattern; however they do suggest that the respective ANCOVAs may be inaccurate and should therefore be interpreted with caution.

### Correlation of Covariate and Dependent Variable:

All covariate values (baseline levels of the respective outcome measure) were highly correlated with the dependent variable (scores on outcome measures post intervention) in the pooled population. Across the individual schools, only two exceptions were found (verbal creativity in the second school and drawing creativity in the first school).

## 4.2 Comparability of Cohorts

In order to assess to what extent the individual schools can be considered a single data corpus (i.e. be merged), the following exploratory analyses were conducted.

### 4.2.1 Analysis of Covariance with School as Factor

To test whether an ANCOVA based on the pooled teacher population was a legitimate analysis, an exploratory 2x3 ANCOVA with school as a factor was conducted. This served to detect potential interactions between the respective group (intervention versus waitlist group) and the respective school. No interaction effects were found for any of the variables, suggesting that the specific school affiliation could be disregarded as a factor and that the three cohorts are statistically comparable (SPSS outputs of the ANCOVA are included in the appendices).

## 4.2.2 Baseline Comparisons of Overall Schools

Chi Square tests and Analyses of Variance (ANOVA) were conducted to explore baseline differences on outcome variables and socio-demographic data across the pooled populations of each of the three schools (i.e. intervention + waitlist group). No differences were found across schools for sex ( $X^2$ = 3.57, p = .94), age (F = 0.12, p = .89), previous experience with meditation ( $X^2$ = 0.13, p = .41) and/or mindfulness ( $X^2$ = 0.36, p = .84) and work experience (F = 0.44, p = .65). However, there was a significant group difference for workload, (F = 3.63, p = .03), whereby the third school reported a higher average workload per week relative to the second school. Baseline scores on outcome measures did not differ significantly across schools, with the exception of interpersonal problems (F = 4.56, p = .01). As determined by pairwise comparisons, the first school reported significantly higher scores on interpersonal problems than the third. Moreover, anxiety yielded near-significant results. Pairwise comparisons indicated that the first school scored higher on anxiety than the third. Tables 6 and 7 list baseline scores and ANOVA significance values for sociodemographic data and outcome measures.

Table 6: Sociodemographic data for each school and p-values of ANOVAs

Variable	School 1		School 2		School 3		P <sub>Difference</sub>
	M	SD	M	SD	M	SD	
Age	45.90	8.52	45.21	7.55	44.91	8.47	.89
Workload (weekly hours)	33.87	11,37	30.46	12.28	39.06	13.64	.03*
Work Experience (years)	14.91	8.09	15.35	7.46	13.60	7.09	.65
Meditation Experience (years)	6.39	9.96	6.13	7.23	4.75	8.15	.73

Table 7: Mean baseline scores on measured variables for each school and p-values of ANOVAs

Variable	Schoo	l 1	School 2	School 2		$P_D$	ifference
	M	SD	M	SD	M	SD	
PSQ	48.17	7.46	47.69	7.31	45.59	8.94	.40
HADS-A	9.14	3.09	7.79	3.10	7.25	3.02)	.05
HADS-D	4.90	2.68	5.03	2.58	4.82	3.41	.96
ERSQ	2.68	0.55	2.81	0.50	2.78	0.54	.61
SES-T	2.91	0.37	2.99	0.39	2.91	0.38	.60
SES-G <sup>a</sup>	-		4.13	0.42	4.05	0.57	.60
SRS	2.88	0.39	3.03	0.38	2.93	0.47	.39
IIP	1.55	0.35	1.33	0.37	1.28	0.38	.01*
NEO-O	36.24	4.56	35.74	5.84	35.81	4.66	.92
TCT-DP	26.72	9.63	25.45	7.26	25.34	10.68	.82
VCT	-		11.60	4.40	10.66	4.40	.41

PSQ Perceived Stress Questionnaire, HADS-A Hospital Anxiety and Depression Scale – Anxiety, HADS-D Hospital Anxiety and Depression Scale – Depression, ERSQ Emotion Regulation Skills Questionnaire, SES-T Self-Efficacy Scale – Teacher, SES-G Self-Efficacy Scale – General, SRS Self-Regulation Scale, IIP Inventory of Interpersonal Problems, NEO-O NEO Five Factor Inventory – Openness, TCT-DP Test for Creative Thinking – Drawing Production, VCT Verbal Creative Thinking

## 4.2.3 Baseline Comparisons of the Individual Intervention Groups

Chi Square tests and Analyses of Variance (ANOVA) were conducted to explore baseline differences on outcome variables and socio-demographic data across the three intervention groups. No differences were found across the intervention groups for sex (LRT= 2.92, p=.23), age (F=0.88, p=.42), previous experience with meditation (LRT= 0..59, p=.75) and/or mindfulness (LRT= 1.30, p=.52) and work experience (F=0.17, P=.84). However, there was a significant group difference for workload, (F=9.49, P=.00), whereby the intervention group of the third school reported a higher average workload per week relative to the intervention group of the second school. Baseline scores on outcome measures did not differ significantly across schools for any of the variables.

## 4.3 Results: Pooled Population

### 4.3.1 Participants

A total of 90 teachers ( $M_{\rm age} = 45.19$ , SD = 8.06) participated in the study (46 in the intervention and 44 in the waitlist group). 46 teachers in the intervention group and 44 in the waitlist group completed the test package at t1 and t2. Due to drop-outs and non-respondents, the sample comprised 45 teachers in the intervention group and 37 teachers in the waitlist

group at t3. Socio-demographic data including sex ( $X^2$ = 0.68, p = .41), age (F = 0.85, p = .09), previous experience with meditation ( $X^2$ = 1.41, p = .23) and/or mindfulness ( $X^2$ = 0.00, p = .95), workload (F = 0.32, p = .49) and work experience (F =0.02, p =.32) did not vary significantly between the two groups. No significant group differences between intervention and waitlist group were found at baseline for any of the outcome variables, although depression yielded a near-significant difference (F = 0.10, p = .057). Table 8 shows sociodemographic data and baseline scores of all outcome measures for both groups as well as significance values of the respective t-tests.

Table 8: Sociodemographic data, baseline scores on outcome measures and p-values of ttests for pooled IG and WG

Variable	Poole	ed IG	Poole		
	Mean	SD	Mean	SD	<b>P</b> <sub>Difference</sub>
Age (in years)	46.59	7.44	43.73	8.50	.09
Workload (in weekly hours)	33.71	13,88	35.60	11.88	.49
Work Experience (in years)	15.19	7.56	13.64	7.16	.32
Meditation Experience (in years)	5.30	8.77	6.31	8.22	.59
FMI	37.42	6.01	37.10	5.17	.79
PSQ	47.20	7.69	47.00	8.33	.91
HADS-A	8.26	3.15	7.80	3.14	.49
HADS-D	5.48	3.06	4.32	2.62	.06
ERSQ	2.76	0.56	2.75	0.50	.92
SES-T	2.93	0.37	2.94	0.39	.85
SES-G	3.99	0.50	4.20	0.50	.11
SRS	2.96	0.41	2.93	0.42	.82
IIP	1.41	0.41	1.35	0.35	.47
NEO-O	35.88	5.51	35.98	4.43	.93
TCT-DP	24.37	9.17	27.34	9.22	.13
VCT	10.72	3.67	11.53	5.10	.48

IG intervention group, WL waitlist group, FMI Freiburg Mindfulness Inventory, PSQ Perceived Stress Questionnaire, HADS-A Hospital Anxiety and Depression Scale – Anxiety, HADS-D Hospital Anxiety and Depression Scale – Depression, SES-T Self-Efficacy Scale – Teacher, SES-G Self-Efficacy Scale – General, SRS Self-Regulation Scale, ERSQ Emotion Regulation Skills Questionnaire, IIP Inventory of Interpersonal Problems, NEO-O NEO Five Factor Inventory – Openness, TCT-DP Test for Creative Thinking – Drawing Production, VCT Verbal Creative Thinking

## 4.3.2 Group Comparisons

### 4.3.2.1 Mindfulness

According to our hypotheses, the intervention group was expected to improve on all outcome measures relative to the waitlist group after taking part in the MBSR course. A significant group differences was found for self-reported mindfulness; in confirmation of our hypothesis:

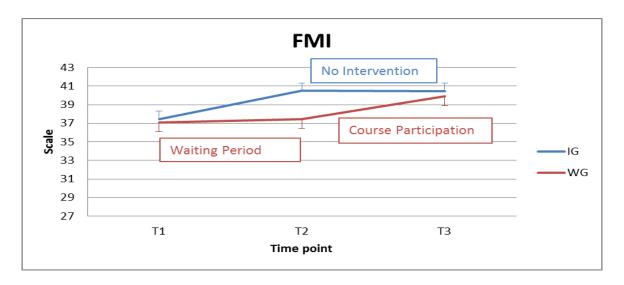
a significant increase in mindfulness in the intervention group compared to the waitlist group was revealed (F = 9.90; p = .00; Cohen's d = .48). Table 9 shows mean scores and standard deviations of self-reported mindfulness across groups and time points while figure 3 illustrates changes over time.

Table 9: Means and standard deviations of self-reported mindfulness scores for both groups across time points (pooled population)

		T1		T2		Т3	
Variable	Group	M	(SD)	M	(SD)	M	(SD)
FMI	IG	37.42	(6.01)	40.49	(5.55)	40.44	(6.08)
	WG	37.10	(5.17)	37.47	(6.01)	39.91	(4.67)

IG intervention group, WL waitlist group; FMI Freiburg Mindfulness Inventory

Figure 3: Self-reported mindfulness scores and standard errors across groups and time points



#### 4.3.2.2 Mental Health Variables

ANCOVAs were conducted to compare the intervention group and the waitlist group on all self-reported mental health variables (stress, anxiety and depression) at t2 while covarying for baseline differences at t1. No significant group differences were found. Table 10 displays means and standard deviations for both groups across all time points. Group differences and inference statistics are provided in table 11. Effect sizes across group differences ranged between Cohen's d = .04 and .30.

Table 10: Means and standard deviations of mental health variables for both groups across time points (pooled population)

		T	71	T	T2		3
Variab	Group	M	(SD)	M	(SD)	M	(SD)
PSQ	IG	47.20	(7.69)	43.90	(8.06)	42.94	(8.44)
	WG	47.00	(8.33)	46.31	(8.81)	41.86	(8.59)
HADS-A	IG	8.26	(3.15)	6.57	(2.89)	6.44	(2.99)
	WG	7.80	(3.14)	6.93	(2.86)	6.30	(3.16)
HADS-D	IG	5.48	(3.06)	4.96	(2.84)	4.76	(2.74)
	WG	4.32	(2.62)	4.00	(2.67)	3.86	(2.58)

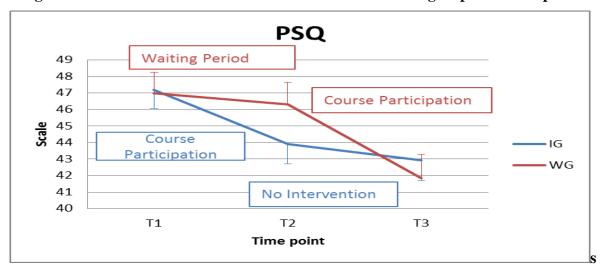
IG intervention group, WL waitlist group, PSQ Perceived Stress Questionnaire, HADS-A Hospital Anxiety and Depression Scale – Anxiety, HADS-D Hospital Anxiety and Depression Scale – Depression

Table 11: Univariate ANCOVA on posttest scores covarying for pretest scores comparing IG and WG on mental health variables

IG		WG					
Variable	Adjusted Mean <sub>T2</sub>	Adjusted Mean <sub>T2</sub>	F	df	p	$\eta^2$	d
PSQ	43.84	46.37	3.07	1,87	.08	.03	.30
HADS-A	6.44	7.06	1.53	1,87	.22	.02	.22
HADS-D	4.54	4.44	0.07	1,87	.07	.00	.04

Scores on stress and anxiety showed tendencies in the hypothesized direction, whereby the intervention group showed higher improvement than the waitlist group at t2. Notably, participants in the waitlist group also improved on those variables at t2. No such trend was visible in the case of depression. Figures 4 to 6 depict these trends and show scores and standard errors for both groups across all three time points.

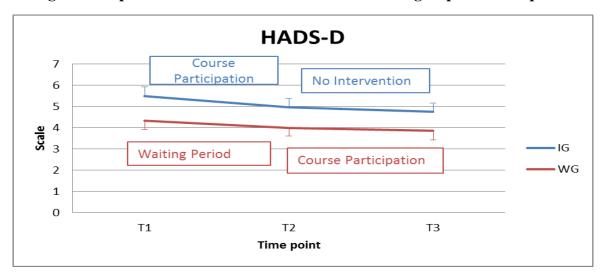
Figure 4: Perceived stress scores and standard error across groups and time points



**HADS-A** 9 Course 8,5 **Participation** 8 7,5 No Intervention 7 IG 6,5 WG Waiting Period 6 5,5 Course Participation 5 Т1 T2 ТЗ Time point

Figure 2: Anxiety scores and standard errors across groups and time points

Figure 3: Depression scores and standard errors across groups and time points



## 4.3.2.3 Social-Emotional Competencies

ANCOVAs were conducted to compare the intervention group and the waitlist group on all self-reported social-emotional competencies (emotion regulation, self-regulation, general self-efficacy, teacher-specific self-efficacy and interpersonal problems) at t2 while covarying for baseline differences at t1. No significant group differences were found. Table 12 displays means and standard deviations for both groups across all time points. Group differences and inference statistics are provided in table 13. Effect sizes across group differences ranged between Cohen's d = .06 and .23.

Table 12: Means and standard deviations of social-emotional competencies for both groups across time points (pooled population)

	T	<b>`1</b>	]	Γ2	T	3
Group	M	(SD)	M	(SD)	M	(SD)
IG	2.76	(0.56)	2.92	(0.44)	2.96	(0.51)
WG	2.75	(0.50)	2.81	(0.55)	2.90	(0.41)
IG	2.93	(0.37)	3.02	(0.33)	3.05	(0.35)
WG	2.94	(0.39)	3.02	(0.37)	3.06	(0.35)
IG	3.99	(0.50)	4.07	(0.60)	4.20	(0.40)
WG	4.20	(0.49)	4.39	(0.52)	4.49	(0.48)
IG	2.60	(0.41)	3.06	(033)	3.02	(0.36)
WG	2.93	(0.42)	2.96	(0.44)	3.06	(0.41)
IG	1.41	(0.41)	1.33	(0.40)	1.29	(0.43)
WG	1.35	(0.35)	1.34	(0.41)	1.27	(0.38)
	IG WG IG WG IG WG IG IG	Group         M           IG         2.76           WG         2.75           IG         2.93           WG         2.94           IG         3.99           WG         4.20           IG         2.60           WG         2.93           IG         1.41	IG 2.76 (0.56) WG 2.75 (0.50) IG 2.93 (0.37) WG 2.94 (0.39) IG 3.99 (0.50) WG 4.20 (0.49) IG 2.60 (0.41) WG 2.93 (0.42) IG 1.41 (0.41)	Group         M         (SD)         M           IG         2.76         (0.56)         2.92           WG         2.75         (0.50)         2.81           IG         2.93         (0.37)         3.02           WG         2.94         (0.39)         3.02           IG         3.99         (0.50)         4.07           WG         4.20         (0.49)         4.39           IG         2.60         (0.41)         3.06           WG         2.93         (0.42)         2.96           IG         1.41         (0.41)         1.33	Group         M         (SD)         M         (SD)           IG         2.76         (0.56)         2.92         (0.44)           WG         2.75         (0.50)         2.81         (0.55)           IG         2.93         (0.37)         3.02         (0.33)           WG         2.94         (0.39)         3.02         (0.37)           IG         3.99         (0.50)         4.07         (0.60)           WG         4.20         (0.49)         4.39         (0.52)           IG         2.60         (0.41)         3.06         (0.33)           WG         2.93         (0.42)         2.96         (0.44)           IG         1.41         (0.41)         1.33         (0.40)	Group         M         (SD)         M         (SD)         M           IG         2.76         (0.56)         2.92         (0.44)         2.96           WG         2.75         (0.50)         2.81         (0.55)         2.90           IG         2.93         (0.37)         3.02         (0.33)         3.05           WG         2.94         (0.39)         3.02         (0.37)         3.06           IG         3.99         (0.50)         4.07         (0.60)         4.20           WG         4.20         (0.49)         4.39         (0.52)         4.49           IG         2.60         (0.41)         3.06         (033)         3.02           WG         2.93         (0.42)         2.96         (0.44)         3.06           IG         1.41         (0.41)         1.33         (0.40)         1.29

IG intervention group, WL waitlist group, ERSQ Emotion Regulation Skills Questionnaire, SES-T Self-Efficacy Scale – Teacher, SES-G Self-Efficacy Scale – General, SRS Self-Regulation Scale, IIP Inventory of Interpersonal Problems

Table 13: Univariate ANCOVA on posttest scores covarying for pretest scores comparing IG and WG on social-emotional competencies

	IG	WG					
Variable	Adjusted Mean <sub>T2</sub>	Adjusted Mean <sub>T2</sub>	F	df	p	$\eta^2$	d
ERSQ	2.92	2.82	1.33	1,87	.25	.02	.20
SES-T	3.03	3.01	0.12	1,87	.73	.0	.06
SES-G <sup>a</sup>	4.17	4.32	2.25	1,58	.14	.04	.23
SRS	3.05	2.97	2.14	1,87	.15	.02	.21
IIP	1.31	1.36	1.09	1,87	.30	.01	.12

<sup>&</sup>lt;sup>a</sup>This measure was only applied in schools two and three  $(N_{\text{intervention group}} = 32; N_{\text{waitlist group}} = 29)$ 

Several variables showed tendencies in the hypothesized direction, whereby the intervention group showed higher improvement than the waitlist group at t2. This was the case for emotion regulation, interpersonal problems, and self-regulation. Self-efficacy increased uniformly across both groups and time points. Figures 7 to 11 below depict these trends and show scores and standard errors for both groups across all three time points on the aforementioned variables.

Figure 4: Emotion regulation scores and standard errors across groups and time points

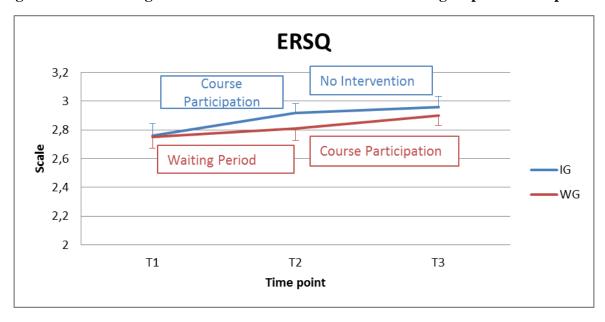


Figure 5: Interpersonal problems scores and standard errors across groups and time points

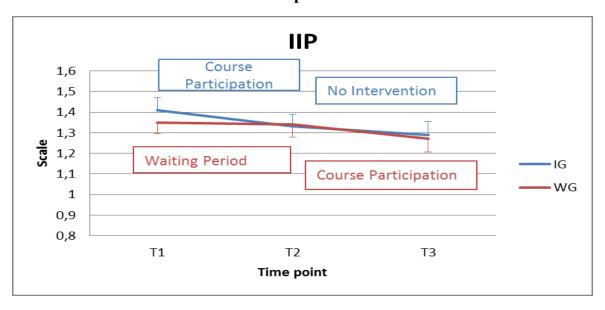


Figure 6:Self-Regulation scores and standard errors across groups and time points

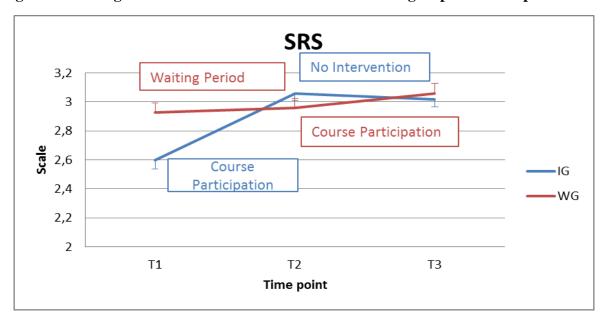
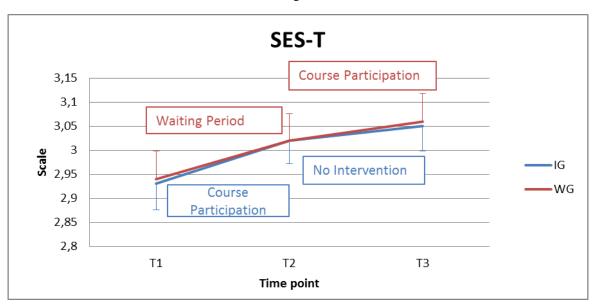


Figure 7: Teacher-specific self-efficacy scores and standard errors across groups and time points



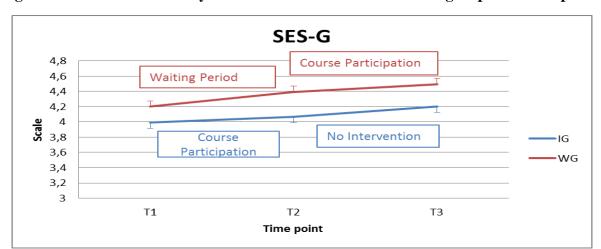


Figure 8: General self-efficacy scores and standard errors across groups and time points

### 4.3.2.4 Creativity and Openness

*Performance tests for creativity*: ANCOVAs comparing the two groups on the performance tests for creativity revealed no significant group differences at t2 for drawing-based creativity or verbal creativity.<sup>18</sup>

**Self-reported openness:** Likewise, ANCOVAs revealed no group differences for self-reported mindfulness at t2. Table 14 shows means and standard deviations across groups and time points while table 15 summarizes group differences and inference statistics. Effect sizes ranged between Cohen's d = .01 and 29.

Table 14: Means and standard deviations of measures of creativity and openness for both groups across time points (pooled population)

		T	`1	T	2	Т3	
Variable	Group	M	(SD)	M	(SD)	M	(SD)
TCT-DP	IG	24.37	(9.17)	26.64	(9.25)	27.20	(8.49)
	WG	27.34	(9.23)	25.41	(9.03)	27.88	(10.35)
VCT	IG	10.72	(3.67)	8.66	(4.40)	10.84	(4.66)
	WG	11.53	(5.10)	10.00	(4.40)	12.33	(5.35)
NEO-O	IG	35.88	(5.51)	36.00	(6.19)	35.83	(5.74)
	WG	35.98	(4.43)	36.12	(4.81)	36.12	(4.78)

IG intervention group, WL waitlist group, TCT-DP Test for Creative Thinking – Drawing Production, VCT Verbal Creativity Test, NEO-O NEO Five Factor Inventory – Openness,

<sup>&</sup>lt;sup>18</sup> Within the framework of her M.Sc. thesis, Tina Böhme assisted in the evaluation of the creativity tests and reported the respective results for a subsection of participants ( $n_{\text{TCT-DP}} = 28$ ;  $n_{\text{VCT}} = 15$ ). While ANCOVAs and follow-up ANOVAs likewise could not confirm an impact on creativity, additional moderated regression analyses tested whether the impact of mindfulness on creativity was moderated by openness levels. The effects were non-significant, yet the direction of effects on the drawing creativity measure suggested that teachers with lower openness scores are likelier to report improved drawing creativity with increasing mindfulness (Böhme, 2015).

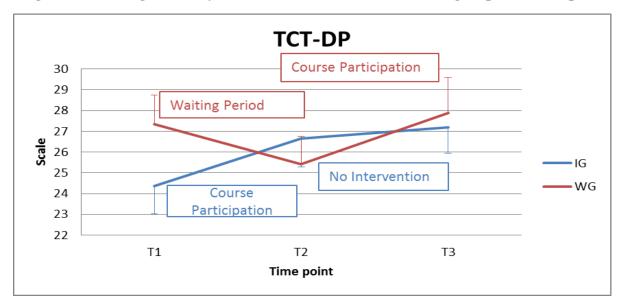
Table 15: Univariate ANCOVA on posttest scores covarying for pretest scores comparing Ig and WG on creativity and openness

	IG	WG					
Variable	Adjusted Mean T2	Adjusted Mean <sub>T2</sub>	F	df	P	$\eta^2$	D
TCT-DP	27.29	24.62	2.71	1,87	.10	.03	.29
VCT <sup>a</sup>	8.84	9.77	0.85	1,58	.36	.01	.21
NEO-O	36.05	36.08	0.00	1,87	.96	.00	.01

<sup>&</sup>lt;sup>a</sup>This measure was only applied in schools two and three ( $N_{\text{intervention group}} = 32$ ;  $N_{\text{waitlist group}} = 29$ )

On the drawing-based measure of creativity, a non-significant tendency in the hypothesized direction was found. Conversely, there was a decrease in verbal creativity in both groups. Openness remained relatively stable across groups and time points. Figures 12 to 14 demonstrate these tendencies.

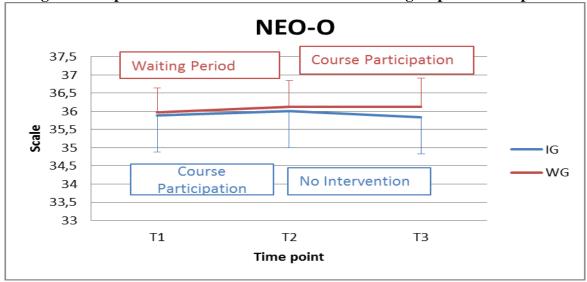
Figure 9: Drawing creativity scores and standard errors across groups and time points



**VCT** 14 Waiting Period Course Participation 13 12 11 10 9 Course IG 8 No Intervention **Participation** 7 WG 6 5 4 T1 T2 ТЗ Time point

Figure 10: Verbal creativity scores and standard errors across groups and time points

Figure 11: Openness scores and standard errors across groups and time points



## 4.3.2.5 Group Comparisons on Clustered Variables

In order to contrast trends across different variable domains, explorative Multivariate Analyses of Covariance (MANCOVAS) were additionally conducted for a) mental health variables (spanning anxiety, depression and stress); b) social emotional competencies (spanning emotion regulation, self-regulation, self-efficacy and interpersonal problems); and c) creativity and openness (spanning drawing creativity<sup>19</sup> and openness for experience). Examining these variables in a clustered fashion served to ascertain whether more closely

<sup>&</sup>lt;sup>19</sup> Verbal creativity scores were not included in this calculation since they are only available for two of the three schools.

related constructs may reveal effects or trends when grouped together and to explore whether any one area of constructs is meaningfully more responsive than the others. Mental health variables showed the largest effect size  $[F(3,83)=2,23, p=0.90, partial \eta^2=0.08]$ , followed by social-emotional variables  $[F(4,81)=0.969, p=0.05, partial \eta^2=0.05]$  and finally, creativity and openness  $[F(2,85)=1,33, p=0.27, partial \eta^2=0.03]$ . However, none of the clusters yielded significant effects.

## 4.3.3 Outcome Stability

To estimate the stability of effects over time, a one way repeated measure ANOVA of withingroup differences in the intervention group across the three time points was conducted. The ANOVA was accompanied by pairwise comparisons of the three time points applying Bonferroni corrections to control for possible Type I errors. The results are displayed in table 16. Wherever the assumption of sphericity was violated, the Greenhouse-Geiser corrected degrees of freedom are reported. Overall, no significant changes occurred between t2 and t3, suggesting generally stable outcomes over time (with the exception of verbal creativity). However, several variables continued to improve post–intervention, with pairwise comparisons revealing significant effects both between t1 and t2 and between t1 and t3 (mindfulness, perceived stress, anxiety, emotion regulation,) or solely between t1 and t3 (general self-efficacy, teacher-specific self-efficacy, interpersonal problems). Surprisingly, verbal creativity significantly dropped between t1 and t2, then increased between t2 and t3, also at a significant level. Tendencies at t3 are also visible in the previous figures.

Table 16: Repeated measures ANOVA for the teacher intervention group across all three time points

Variable	F	df	p	η2
FMI	10.27	1.57,69.03	.00* <sup>a</sup>	.19
PSQ	8.31	2,88	.00* <sup>a</sup>	.16
HADS-A	10.63	2,88	.00* <sup>a</sup>	.20
HADS-D	2.38	2.88	.10	.05
SES-T	5.08	2,88	.01* <sup>b</sup>	.10
SES-G	3.57	2,60	.03* <sup>b</sup>	.11
SRS	2.15	2,88	.12	.05
ERSQ	4.94	2,88	.01* <sup>a</sup>	.10
IIP	4.42	2,88	.02* b	.09
NEO-O	0.09	2,88	.91	.00
TCT-DP	2. 47	2,88	.09	.05
VCT	9.98	2,60	.00* <sup>c</sup>	.19

<sup>&</sup>lt;sup>a</sup> significant changes occurred both between t1 and t2 and between t1 and t3

# 4.4 Exploration of Individual Schools

#### 4.4.1 School 1

#### 4.4.1.1 Participants

A total of 29 teachers ( $M_{\rm age} = 45.5$ , SD = 8.36) was recruited from the staff of the first school (14 in the intervention and 15 in the waitlist group). All 14 teachers in the intervention group completed the test package at t1, t2 and t3. All 15 teachers in the waitlist group completed the test package at t1 and t2 while only 13 teachers completed the package at t3 (two drop-outs). Socio-demographic data including sex (p = 1.0; FET), age (F = 1.44, p = .44), previous experience with meditation (p = 0.14; FET) and/or mindfulness (p = .66; FET), workload (F = 2.12, p = .95) and work experience (F = .23, p = .43) did not vary significantly between the two groups. No significant group differences between intervention and waitlist group were found at baseline for any of the outcome variables.

<sup>&</sup>lt;sup>b</sup> significant changes occurred between t1 and t3

c significant change occurred between t1 and t2 as well as between t2 and t3

#### 4.4.1.2 Group Comparisons

We hypothesized improved scores on all outcome measures in the intervention group relative to the waitlist group. ANCOVAs were conducted to test these hypotheses, with score differences at baseline serving as a covariate. Means and standard deviations of all scores across the three time points for both groups are provided in table 17, while group differences and inference statistics are displayed in table 18.

As predicted, significant group differences were found for self-reported mindfulness and interpersonal problems (p < .05, Cohen's d = 0.66 and 0.42, respectively). In confirmation of our hypotheses, a significant increase in mindfulness in the intervention group compared to the waitlist group (p < .05) was revealed. Interpersonal problems were likewise reduced significantly in the intervention group relative to the waitlist group. Moreover, medium effect sizes at a non-significant level were found with respect to emotion regulation (Cohen's d = 0.55) and anxiety (Cohen's d = 0.46), whereby the former increased and the latter decreased in the intervention group relative to the waitlist group.

Further in line with our hypotheses, increases were found in the intervention group with respect to teacher-specific self-efficacy and self-regulation relative to the waitlist group, however not at a significant level. Non-significant decreases in perceived stress and depression as well as non-significant increases in general self-efficacy and openness were found in both intervention and waitlist group. Engagement was slightly reduced in both the intervention and waitlist group, contrary to our hypotheses. By trend, scores on the performance test for drawing creativity remained stable in the intervention group and were non-significantly decreased in the waitlist group. Effect sizes across group differences ranged between Cohen's d = .00 and .67.

Table 17: Means and standard deviations of all outcome measures for both groups across all three time points (School 1)

		T1		T	2	Т3	
Variable	Group	M	(SD)	M	(SD)	M	(SD)
FMI	IG	35,93	(6.62)	39.50	(6,23)	39.29	(5.81)
	WG	36.37	(4.80)	36.13	(4.58)	38.81	(4.37)
PSQ	IG	47.79	(7.69)	44.43	(7.82)	45.66	(8.92)
	WG	48.53	(7.50)	47.20	(7.82)	45.38	(9.27)
HADS-A	IG	9.71	(2.90)	7.29	(3.24)	8.00	(2.63)
	WG	8.60	(3.27)	8.07	(2.34)	7.38	(3.36)
HADS-D	IG	5.14	(2.80)	3.93	(2.56)	4.93	(3.17)
	WG	4.67	(2.68)	4.33	(2.50)	4.85	(2.58)
ERSQ	IG	2.55	(0.48)	2.86	(0.46)	2.82	(0.47)
	WG	2.80	(0.60)	2.69	(0.47)	2.83	(0.46)
SES-T	IG	2.96	(0.27)	2.99	(0.20)	3.01	(0.21)
	WG	2.86	(0.44)	2.82	(0.39)	2.87	(0.41)
SES-G	IG	2.84	(0.39)	2.89	(0.25)	2.90	(0.15)
	WG	2.73	(0.24)	2.85	(0.22)	2.85	(0.34)
SRS	IG	2.86	(0.40)	2.89	(0.29)	2.79	(0.30)
	WG	2.89	(0.38)	2.85	(0.33)	2.96	(0.27)
IIP	IG	1.58	(0.37)	1.39	(0.39)	1.45	(0.40)
	WG	1.53	(0.34)	1.53	(0.42)	1.48	(0.36)
UWES	IG	3.81	(0.71)	3.77	(0.54)	3.71	(0.75)
	WG	3.75	(0.91)	3.54	(0.91)	3.48	(0.87)
NEO-O	IG	36.64	(4.09)	38.00	(3.84)	37.36	(3.54)
	WG	35.87	(5.07)	36.33	(3.68)	36.08	(4.27)
TCT-DP	IG	24.14	(10.64)	24.14	(11.63)	25.43	(10.07)
	WG	29.13	(8.22)	24.00	(8.62)	27.11	(7.68)

IG intervention group, WL waitlist group, FMI Freiburg Mindfulness Inventory, PSQ Perceived Stress Questionnaire, HADS-A Hospital Anxiety and Depression Scale – Anxiety, HADS-D Hospital Anxiety and Depression Scale – Depression, SES-T Self-Efficacy Scale – Teacher, SES-G Self-Efficacy Scale – General, SRS Self-Regulation Scale, ERSQ Emotion Regulation Skills Questionnaire, IIP Inventory of Interpersonal Problems, NEO-O NEO Five Factor Inventory – Openness, UWES Utrecht Work Engagement Scale, TCT-DP Test for Creative Thinking – Drawing Production

Table 18: Univariate ANCOVA on posttest scores covarying for pretest scores comparing IG and WG on all outcome measures

	IG	WG					
Variable	Adjusted Mean T2	Adjusted Mean T2	F	df	p	$\eta^2$	d
FMI	39.65	36.00	5.71	1, 26	.02*	.18	0.67
PSQ	44.58	47.06	0.82	1, 26	.37	.03	0.32
HADS-A	7.01	8.32	2.00	1, 26	.17	.07	0.46
HADS-D	3.76	4.49	1.17	1, 26	.29	.04	0.29
ERSQ	2.91	2.65	2.54	1, 26	.12	.09	0.56
SES-T	2.96	2.85	1.53	1, 26	.23	.06	0.35
SES-G <sup>a</sup>	2.87	2.87	0.00	1, 26	.97	.00	0.00
SRS	2.90	2.84	0.42	1, 26	.52	.02	0.19
IIP	1.37	1.56	5.14	1, 26	.03*	.17	0.42
NEO-O	37.76	36.55	1.50	1, 26	.23	.06	0.32
UWES	3.74	3.56	1.43	1, 26	.24	.05	0.24
TCT-DP	25.02	23.18	0.24	1, 26	.63	.01	0.18

## 4.4.1.3 Outcome Stability

In order to assess the stability of the results across time, a one way repeated measures Analysis of Variance (ANOVA) was conducted for the intervention group, comparing all three time points on a within-subject basis. The ANOVA was accompanied by pairwise comparisons of the three time points applying the Bonferroni correction to control for possible Type I errors. The results of the repeated measures ANOVA are displayed in table 19. There were no significant changes in the intervention group on outcome measures at follow-up, indicating relatively stable outcomes over time. Moreover, pairwise comparisons revealed significant within-group effects between t1 and t2 for mindfulness (p < .05,  $\eta^2 = .24$ ) and interpersonal problems (p < .05,  $\eta^2 = .29$ ), while a near-significant effect was found for anxiety (p = .05,  $\eta^2 = .21$ ).

Table 19: Repeated measures ANOVA for the teacher intervention group across all three time points

Variable	F	df	p	η2	
FMI	4.02	2,26	.03*b	.24	
PSQ	0.94	2,26	.40	.07	
HADS-A	3.35	2,26	.05* <sup>a</sup>	.21	
HADS-D	2.10	2,26	.14	.14	
SES-T	0.30	2,26	.75	.02	
SES-G	0.29	2,26	.75	.02	
SRS	1.17	2,26	.33	.08	
ERSQ	2.21	2,26	.13	.15	
IIP	5.37	2,26	.01* <sup>a</sup>	.29	
NEO-O	1.90	2,26	.17	.13	
TCT-DP	0.10	2,26	.90	.01	
UWES	0.24	2,26	.79	.02	

<sup>&</sup>lt;sup>a</sup> Significant changes occurred between t1 and t2 as determined by pairwise comparisons.

#### 4.4.2 School 2

#### 4.4.2.1 Participants

A total of 29 teachers ( $M_{\text{age}} = 45.2$ , SD = 7.55) from this school's staff participated in the study (15 in the intervention and 14 in the waitlist group). 15 teachers in the intervention group completed the test package at t1 and t2 while only 14 completed the package at t3 (one non-respondent). Similarly, 14 teachers in the waitlist group completed the test package at t1 and t2, while only 10 did so at t3 (two non-respondents and two drop-outs). Socio-demographic data including sex (p = .39; FET), age (F = .0.55, p = .63), previous experience with meditation (p = 1.00; FET) and/or mindfulness (p = 1.00; FET as well as work experience (F = 0.02, p = .66) did not vary significantly between the two groups. There was a significant group difference with respect to workload (F = 76, p = .002), whereby the intervention group worked fewer hours per week than the waitlist group. No significant group differences between the intervention and waitlist group were found at baseline for any of the outcome variables.

## 4.4.2.2 Group Comparisons

As with school 1, ANCOVAS were conducted to test the hypothesized improvement on outcome measures in the intervention group relative to the waitlist group post-intervention,

<sup>&</sup>lt;sup>b</sup>Pairwise comparisins revealed no significant changes when applying a Bonferroni correction.

with baseline differences serving as a covariate. Means and standard deviations of all outcome measures across all time points for both groups are provided in table 20, while group differences and inference statistics are displayed in table 21.

Table 20: Means and standard deviations of all outcome measures for both groups across time points (School 2)

			71	T		T.	
Variable	Group	M	(SD)	M	(SD)	M	(SD)
FMI	IG	39.54	(5.67)	41.93	(4.80)	41.29	(6.17)
	WG	37.64	(6.42)	36.79	(6.05)	39.55	(5.74)
PSQ	IG	47.40	(6.98)	44.02	(7.17)	41.50	(7.06)
	WG	48.00	(7.89)	49.46	(9.25)	41.40	(9.12)
HADS-A	IG	8.07	(3.33)	5.93	(2.74)	5.79	(2.78)
	WG	7.50	(2.93)	6.50	(3.32)	6.80	(3.46)
HADS-D	IG	5.72	(2.40)	5.13	(2.29)	4.39	(2.23)
	WG	4.29	(2.64)	4.29	(2.84)	3.40	(2.27)
ERSQ	IG	2.86	(0.52)	2.97	(0.45)	3.07	(0.47)
	WG	2.75	(0.50)	2.77	(0.70)	2.85	(0.42)
SES-T	IG	3.01	(0.33)	3.08	(0.33)	3.17	(0.35)
	WG	2.98	(0.46)	3.16	(0.34)	3.19	(0.27)
SES-G	IG	4.09	(0.43)	4.16	(0.50)	4.24	(0.36)
	WG	4.17	(0.43)	4.43	(0.57)	4.47	(0.48)
SRS	IG	3.01	(0.39)	3.16	(0.25)	3.13	(0.27)
	WG	3.05	(0.38)	3.13	(0.49)	3.22	(0.40)
IIP	IG	1.37	(0.37)	1.31	(0.34)	1.19	(0.36)
	WG	1.29	(0.38)	1.29	(0.41)	1.23	(0.33)
NEO-O	IG	34.82	(6.97)	34.80	(7.29)	33.86	(6.97)
	WG	36.71	(4.38)	36.60	(6.29)	36.10	(5.76)
TCT-DP	IG	27.07	(6.67)	27.22	(6.90)	26.43	(6.62)
	WG	23.71	(7.71)	24.86	(8.62)	26.70	(11.12)
VCT	IG	11.93	(4.43)	9.93	(3.49)	11.86	(3.92)
	WG	11.24	(4.50)	9.29	(4.65)	13.80	(5.79)

IG intervention group, WL waitlist group, FMI Freiburg Mindfulness Inventory, PSQ Perceived Stress Questionnaire, HADS-A Hospital Anxiety and Depression Scale – Anxiety, HADS-D Hospital Anxiety and Depression Scale – Depression, SES-T Self-Efficacy Scale – Teacher, SES-G Self-Efficacy Scale – General, SRS Self-Regulation Scale, ERSQ Emotion Regulation Skills Questionnaire, IIP Inventory of Interpersonal Problems, NEO-O NEO Five Factor Inventory – Openness, TCT-DP Test for Creative Thinking – Drawing Production, VCT Verbal Creative Thinking

Table 21: Univariate ANCOVA on posttest scores covarying for pretest scores comparing IG and WG on all outcome measures

	IG	WG					
Variable	Adjusted Mean <sub>T2</sub>	Adjusted Mean <sub>T2</sub>	F	df	p	$\eta^2$	d
FMI	41.35	37.42	7.23	1,26	.01*	.22	.72
PSQ	44.21	49.26	4.04	1, 26	.06	.14	.61
HADS-A	5.77	6.67	0.95	1,26	.34	.04	.29
HADS-D	4.61	4.84	0.11	1,26	.74	.00	.09
ERSQ	2.94	2.80	0.50	1,26	.49	.02	.24
SES-T	3.08	3.16	0.86	1,26	.36	.03	.24
SES-G <sup>a</sup>	4.18	4.30	0.48	1, 26	.50	.02	.22
SRS	3.17	3.11	0.32	1,26	.58	.01	.15
IIP	1.28	1.33	0.21	1,26	.65	.01	.13
NEO-O	35.72	35.62	0.01	1,26	.94	.00	.01
TCT-DP	25.84	26.33	0.07	1, 26	.80	.00	.06
VCT	9.86	9.36	0.11	1,26	.74	.00	.12

Significant group differences were found for self-reported mindfulness (p < .05, Cohen's d = 0.65). In confirmation of our hypothesis, a significant increase in mindfulness in the intervention group compared to the waitlist group (p < .05) was revealed. None of the other variables yielded significant results, however a near-significant effect with medium effect size (Cohen's d = 0.61) on perceived stress indicates a reduction in stress in the hypothesized direction.

Further in line with our hypotheses, the intervention group reported non-significant reductions in depression and interpersonal problems relative to the waitlist group, which remained stable on these variables. Non-significant increases in self-regulation, emotion regulation, teacher-specific self-efficacy and general self-efficacy as well as a non-significant reduction in anxiety were found in both the intervention and waitlist group. Contrary to our hypotheses, openness showed slight reductions in both groups at a non-significant level. On the performance tests for creativity, drawing-based creativity increased while verbal creativity decreased in both groups. Effect sizes across group differences ranged between Cohen's d = .00 and .72.

#### 4.4.2.3 Outcome Stability

Like in the foregoing analyses, the stability of results over time was assessed via a repeated measures ANOVA comparing scores across all time points for the intervention group. The ANOVA was accompanied by pairwise comparisons of the three time points applying the Bonferroni correction to control for possible Type I errors. The results of the repeated measures ANOVA are displayed in table 22. Wherever the assumption of sphericity was violated, the Greenhouse-Geiser correction is reported. No significant changes between post-measurement and follow-up (t2 and t3) were found, indicating stable within-group effects for self-reported mindfulness and perceived stress. As determined by pairwise comparisons, a significant within-group effect on perceived stress (p < .05,  $\eta^2 = .30$ ) occurred between t1 and t3, suggesting continued impact after the intervention. Likewise, a significant change between t1 and t2 was found for anxiety (p < .05,  $\eta^2 = .32$ ).

Table 22: Repeated measures ANOVA for the teacher intervention group across all three time points (School 2)

Variable	F	df	p	η2
FMI	1.27	1.32,17.16	.29	.09
PSQ	5.69	2,26	.01* <sup>b</sup>	.30
HADS-A	6.05	1.32,17,13	.02* <sup>a</sup>	.32
HADS-D	3.21	1.23,15,98	.09	.20
SES-T	2.42	2,26	.11	.16
SES-G	1.38	2,26	.27	.10
SRS	1.84	2,26	.18	.12
ERSQ	2.38	2,26	.22	.16
IIP	2.62	2,26	.09	.17
NEO-O	0.01	2,26	.99	.00
TCT-DP	0.05	2,26	.96	.00
VKT	2.68	2,26	.09	.17

<sup>&</sup>lt;sup>a</sup> As determined by pairwise comparisons, significant changes occurred between t1 and t2.

#### 4.4.3 School 3

#### 4.4.3.1 Participants

From this school's staff, a total of 32 teachers ( $M_{\rm age=44.91}$ , SD=8.47) took part in the study (17 in the intervention and 15 in the waitlist group). All teachers in the intervention group completed the test package at t1, t2 and t3. From the waitlist group, all 15 teachers completed

<sup>&</sup>lt;sup>b</sup> As determined by pairwise comparisons, significant changes occurred between t1 and t3.

the test package at t1 and t2, while only 14 reported data at t3 (one drop-out). Socio-demographic data including sex (p = .73; FET), previous experience with meditation (p = 1.0; FET) and/or mindfulness (p = .69; FET), workload (F = 0.01, p = .15) and work experience (F = 0.21, p = .36) did not vary significantly between the two groups. There was a significant group difference with respect to age, whereby teachers in the intervention group ( $M_{\rm age} = 47.88$ , SD = 7.71) were older than those in the waitlist group ( $M_{\rm age} = 41.53$ , SD = 8.24; F = .04, p = .03). No significant group differences between intervention and waitlist group were found at baseline for any of the outcome variables.

## 4.4.3.2 Group Comparisons

As in the other schools, an improvement on all outcome measures in the intervention group relative to the waitlist group post-intervention was hypothesized and tested with ANCOVAs. Means and standard deviations of all outcome measures for the intervention and waitlist group across time points are provided in table 23, while group differences and inference statistics are depicted in table 24.

Contrary to our hypotheses, no significant group differences were found between the intervention and waitlist group for any of the outcome variables. Non-significant increases in mindfulness, self-efficacy (both general and teacher-specific), emotion regulation and self-regulation as well as non-significant decreases in anxiety, interpersonal problems and perceived stress were found in both intervention and waitlist group. Also contrary to our hypotheses, there was a decrease in openness in the intervention group relative to an increase in the waitlist group, albeit non-significantly. Likewise, depression increased non-significantly in the intervention group relative to the waitlist group. On the performance tests for creativity, drawing creativity increased in the intervention group relative to the waitlist group, however not at a significant level, while verbal creativity decreased non-significantly in both groups. Effect sizes across group differences ranged between Cohen's d = .05 and .42.

Table 23: Means and standard deviations for both groups across time points (THG)

		T	`1	T2		Т3	
Variable	Group	M	(SD)	M	(SD)	M	(SD)
FMI	IG	36.79	(5.59)	40.03	(5.64)	40.69	(6.43)
	WG	37.33	(4.47)	39.46	(7.02)	41.18	(4.10)
PSQ	IG	46.53	(8.65)	43.35	(9.35)	41.88	(9.01)
	WG	44.52	(9.43)	42.47	(8.43)	38.92	(6.77)
HADS-A	IG	7.24	(2.91)	6.53	(2.74)	5.71	(3.12)
	WG	7.27	(3.24)	6.20	(2.70)	4.93	(2.34)
HADS-D	IG	5.55	(3.85)	5.65	(3.37)	5.01	(2.86)
	WG	4.00	(2.73)	3.40	(2.77)	3.29	(2.70)
ERSQ	IG	2.85	(0.64)	2.94	(0.45)	2.99	(0.56)
	WG	2.71	(0.40)	2.97	(0.46)	3.00	(0.35)
SES-T	IG	2.84	(0.46)	3.00	(0.40)	2.99	(0.43)
	WG	2.99	(0.26)	3.07	(0.32)	1.15	(0.29)
SES-G	IG	3.90	(0.55)	4.00	(0.67)	4.18	(0.44)
	WG	4.22	(0.56)	4.44	(0.48)	4.50	(0.50)
SRS	IG	2.99	(0.45)	3.11	(0.38)	3.12	(0.40)
	WG	2.87	(0.50)	2.91	(0.44)	3.04	(0.50)
IIP	IG	1.31	(0.46)	1.30	(0.47)	1.25	(0.48)
	WG	1.25	(0.27)	1.19	(0.36)	1.10	(0.37)
NEO-O	IG	36.18	(5.27)	35.41	(6.64)	36.21	(5.93)
	WG	35.40	(4.00)	35.47	(4.47)	36.14	(4.85)
TCT-DP	IG	22.18	(9.68)	28.18	(8.99)	29.29	(8.79)
	WG	28.93	(10.93)	27.33	(10.03)	29.43	(12.33)
VCT	IG	9.65	(2.50)	7.53	(4.89)	10.00	(5.15)
	WG	11.80	(5.75)	10.60	(4.22)	11.29	(5.00)

IG intervention group, WL waitlist group, FMI Freiburg Mindfulness Inventory, PSQ Perceived Stress Questionnaire, HADS-A Hospital Anxiety and Depression Scale – Anxiety, HADS-D Hospital Anxiety and Depression Scale – Depression, SES-T Self-Efficacy Scale – Teacher, SES-G Self-Efficacy Scale – General, SRS Self-Regulation Scale, ERSQ Emotion Regulation Skills Questionnaire, IIP Inventory of Interpersonal Problems, NEO-O NEO Five Factor Inventory – Openness, TCT-DP Test for Creative Thinking – Drawing Production, VCT Verbal Creative Thinking

Table 24: Univariate ANCOVA on posttest scores covarying for pretest scores comparing IG and WG on the outcome measures

25 71 4	Adjusted Mean <sub>T2</sub> 39.20 43.20 6.19	0.43 0.05 0.19	1,29 1,29 1,29	<i>p</i> .52 .83	η <sup>2</sup> .01 .00	.16
71 4	43.20	0.05	1,29			
4				.83	.00	.05
	6.19	0.19	1 29			
0			1,27	.67	.01	.13
	4.02	2.64	1,29	.12	.08	.35
1	3.01	0.64	1,29	.43	.02	.22
5	3.02	0.10	1,29	.76	.00	.08
0	4.34	1.92	1,29	.18	.06	.41
8	3.95	1.43	1,29	.24	.05	.41
7	1.22	.30	1,29	.59	.01	.12
02	35.91	.81	1,29	.38	.03	.16
01	25.26	2,84	1,29	.10	.09	.50
)	9.84	1.52	1,29	.23	.05	.36
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	5 0 3 7 02	3.02 4.34 3.95 7 1.22 92 35.91 91 25.26	3.02 0.10 4.34 1.92 3.95 1.43 7 1.22 .30 92 35.91 .81 11 25.26 2,84	3.02     0.10     1,29       4.34     1.92     1,29       3.95     1.43     1,29       7     1.22     .30     1,29       92     35.91     .81     1,29       11     25.26     2,84     1,29	3.02     0.10     1,29     .76       0     4.34     1.92     1,29     .18       3     3.95     1.43     1,29     .24       7     1.22     .30     1,29     .59       02     35.91     .81     1,29     .38       11     25.26     2,84     1,29     .10	3.02     0.10     1,29     .76     .00       0     4.34     1.92     1,29     .18     .06       3     3.95     1.43     1,29     .24     .05       7     1.22     .30     1,29     .59     .01       02     35.91     .81     1,29     .38     .03       11     25.26     2,84     1,29     .10     .09

#### 4.4.3.3 Outcome Stability

ANOVAs were conducted to test the stability of the results at follow-up. The ANOVA was accompanied by pairwise comparisons of the three time points applying the Bonferroni correction to control for possible Type I errors. The results are displayed in table 25. Wherever the assumption of sphericity was violated, the Greenhouse-Geiser correction is reported. Although group differences yielded no significant effects, within-group tests and pairwise comparisons of the intervention group indicate a significant effect on mindfulness between t1 and t2 (p < .05,  $\eta^2 = .26$ ). Similarly, a significant overall effect was found for perceived stress (p < .05,  $\eta^2 = .23$ ), yet pairwise comparisons indicate only a near-significant effect between t1 and t3 (p = .06), suggesting a continued change post-intervention. A continued effect occurring between t1 and t3 was also found for drawing creativity (p < .05,  $\eta^2 = .27$ ). In a similar pattern, the ANOVA for anxiety yielded near-significant results (p =.06,  $\eta^2 = .16$ ) while pairwise comparisons indicate a significant effect between t1 and t3 (p = .049). By contrast, while the results of the ANOVA point to a significant effect on teacherspecific self-efficacy, pairwise comparisons applying the Bonferroni correction could not confirm this trend, suggesting a Type I error in the respective ANOVA. Surprisingly, there was a significant within-group effect on verbal creativity between t2 and t3, i.e. solely postintervention, yet contrary to the anticipated direction (decreased verbal creativity).

Table 25: Repeated measures ANOVA for the teacher intervention group across all three time points (School 3)

Variable	F	df	p	η2
FMI	5.68	1.42,22.73	.02* <sup>a</sup>	.26
PSQ	4.77	1.36,21.75	.03*c	.23
HADS-A	3.02	2,32	.06 <sup>b</sup>	.16
HADS-D	0.83	2.32	.45	.05
SES-T	4.13	1,24,19,88	.05 <sup>e</sup>	.21
SES-G	2.09	2,32	.14	.12
SRS	1.22	2,32	.31	.07
ERSQ	0.84	1.36,21,70	.40	.05
IIP	0.49	2,32	.62	.03
NEO-O	0.62	2,32	.55	.04
TCT-DP	5.87	2,32	.01* <sup>b</sup>	.27
VKT	4.25	2,32	.02* <sup>d</sup>	.21

<sup>&</sup>lt;sup>a</sup> As determined by pairwise comparisons, significant changes occurred between t1 and t2.

<sup>b</sup> As determined by pairwise comparisons, significant changes occurred between t1 and t3.

<sup>c</sup> Pairiwise comparisons revealed a nearsignificant change (p = .06) between t1 and t3.

<sup>d</sup> Significant changes occurse between t2 and t3.

<sup>e</sup> Bonferroni corrections revealed no significant changes across time points.

## **5** Qualitative Results

While the quantitative analysis and results addressed the research questions pertaining to potential improvements in mental health and well-being following an MBSR intervention, the qualitative inquiry explored experiences, individual concepts of mindfulness and  $Mu\beta e$  and subjective mechanisms of change. Before the results are presented, however, core elements of the decisions-making process in qualitative analysis and central challenges are reflected upon.

## 5.1 Decisions and Problems during Data Analysis

Bearing in mind the consensus on the importance of transparence and reflexivity as quality criteria in qualitative research (see section 3.7.5), the following section briefly comments on central decisions that shaped the present findings and that often proved difficult. Reflecting on these decisions is intended to better frame the results and render visible the implicit interpretive efforts.

One overarching tension that characterizes the presented analysis results from the different levels of interpretation of participants' statements. This tension was briefly mentioned in the explanation of latent versus semantic coding in the methods section, but bears further elaboration. Both across and within many of the presented themes, coding individual segments sometimes involved more extensive interpretation than was generally targeted. Several factors contributed to this variance. First, the research questions pursued here required a relative distinction between accounts that are reflective, or meta-descriptive, and accounts that refer directly and immediately to a participant's experience. This distinction often required interpretation over and beyond a strictly inductive analysis. Second, participants themselves vary in the abstraction of their narratives. In other words, some participants are more prone to interpret their own experience and generate tentative theoretical classifications than others. Relating the statements of such differently inclined participants to one another in order to gauge common themes often meant that some narratives are more heavily abstracted by the researcher than others. Third, as mentioned in the methods section, this research decidedly used Clarke and Braun's (2006) Thematic Analysis so as to avoid a strict alinement with either inductive or deductive methods, or with any one epistemological approach. In light of the different research questions and the generated data, it was deemed most profitable to allow the respective narratives to dictate how best to analyze them. Given the interest in Muβe, narratives that intuitively suggested a relevance of discourses around achievement and efficiency strivings, for instance, were coded somewhat more deductively. Likewise, mindfulness concepts and processes were not extracted wholly independently of existing theory on the matter.

Another key factor in understanding the findings presented here stems from the fact that most participants found it hard to discuss course impact and processes in isolation from other developments or situations they were engaged in. This is pointed out repeatedly across themes, but should also be born in mind as an overarching framework of the described narratives.

Furthermore, data analysis was often forced to weigh the distinction of finely nuanced components of individual descriptions against clustering statements so as to grasp phenomena as a whole. For instance, when inquiring about  $Mu\beta e$  or mindfulness concepts, participants frequently enumerated a long list of finely grained qualities that contribute to their understanding. However, in order to capture distinctive  $Mu\beta e$  and mindfulness experiences as they unfold for any one participant, these qualities had to be collapsed, often at the expense of a more detail-oriented description. This balance between an elaborate focus on single facets and delineating conglomerates of meaning ties into the amount of context for each quote or segment: coding short segments separately better captures minute aspects, while larger segments that provide more extensive contextual information allow for a description of an experience in its entirety. No single strategy was followed with respect to this problem, however, the analysis tended to strive for themes that capture phenomena and processes as a whole rather than dissect these processes at the risk of losing sight of the overall "object." In that sense, shades of meaning within one data item (one interview) were occasionally traded off for meaning across the entire data set. Unfortunately, this sometimes entailed the loss of expressive individual terminologies and idiosyncrasies for the sake of more representative patterns.

Yet another sacrifice in individual meaning must be noted: in order to describe the overall dataset, no in-depth inquiry into individual weighting of components could be undertaken. While themes were not coded unless they proved of minimal significance to the participant, the presented findings do not allow for statements regarding the individual perspective on the interrelation of all themes. Here too, a more exhaustive analysis of data was deemed more important than the kind of unreserved attention to subjective priorities and weighting of themes provided by a case study, for instance.

Finally, as was noted in the methods section, translating the passages that are included in this dissertation often posed difficult linguistic challenges in cases where the English equivalent of an expression fell short of the German range of meaning. This is addressed in footnotes whenever possible.

The following is a textual presentation of the themes generated with Thematic Analysis of the selected interviews. Each theme is defined, divided into sub-themes wherever feasible, demonstrated through typical passages, and discussed. A coarse-grained overview of the theme map is provided in table 27 after the summary of results. When themes are similar, distinctions and reasons for why they were disentangled are presented in the theme description. At the end of central themes, summaries are provided in italics, while underlined sentences signal the core definition of a theme or sub-theme.

# 5.2 Mindfulness Concepts

This category reflects participants' subjective concepts of mindfulness and attempts to group them around central components. Almost all concepts are extracted from explicit statements elicited upon inquiry into the respective participant's mindfulness definition. However, additional codings from occasional implicit descriptions of individual mindfulness concepts occasionally inform the category (i.e. descriptions of mindfulness that occur in reference to another topic). The aim was to discern differences in how the same course content is perceived and processed, and whether any particular concept was dominant. In a later analytical step, this may serve to elucidate differences in the course's mechanisms of change. As with most other codes, it is noteworthy that the extracted concepts may overlap to some extent. For instance, participants describing mindfulness in terms of self-care or accepting awareness may well also touch upon elements of other-orientedness. Accordingly, identified concepts of mindfulness are not wholly distinct. This is partly due to the fact that it is impossible to identify separate and independent components that together, in mere summation, constitute mindfulness. Rather, the different aspects of mindfulness are interlinked and interdependent even on a theoretical level, causing and affecting one another (it is difficult, for instance, to think of acceptance and non-judgment as completely discrete dimensions, or of presence and awareness). Therefore, the aim was to identify the main motif consistently describing a concept and capturing the most relevant component(s) for any one way of understanding mindfulness. Hence, if a participant dwells at length on implications of self-care practices, the coded mindfulness concept reflects this focus, even if other elements are peripherally touched upon. If an understanding of mindfulness was coded as a particular concept yet nonetheless displayed unique features, this was captured as an interesting accent within this theme.

The prevalent concepts of mindfulness are described in terms of *self-awareness*, *self-care and self-compassion*; *presence*; and *open awareness and acceptance*. In the following, these conceptions are presented in depth and illustrated with exemplary translated quotes.

## 5.2.1 Mindfulness as Self-Awareness, Self-Care and Self-Compassion

This theme was clearly the most common concept of mindfulness across the analyzed interviews. Participants in this category define mindfulness as a mode of awareness that eventually prompts practices and impulses of self-care in one way or another. According to these participants, mindfulness helps cultivate conscious perception of one's own state and well-being, and by consequence, one's limits and needs. Since this approach results in behaviors that target a more salutary situation, mindfulness in this category is essentially about self-care. More so than other categories, this understanding largely conceives of mindfulness as a way of relating to and treating oneself, even if consequences may extend to others.

Within this overall paradigm, different emphases are possible. Thus, for some participants, awareness can primarily target bodily sensations and states (for instance in terms of signals of stress and overload):

"[mindfulness is] paying attention to one's feelings and sensations and responding to them. So, if something is getting to be too much, then you do less and rest, and you don't over-exhaust your body." (102) <sup>20</sup>

In the above example, registering bodily reactions to stress may induce the participant to rest, which is a rather concrete form of self-care. However, self-care may also consist of subtler gestures that simply direct the attention inwards in an attempt to regulate stress or overload. In those descriptions, such mindfulness concepts seem to closely relate to notions of presence, since those brief moments of countering stress can be viewed as a way of re-establishing contact with the present moment, for instance through focusing on the breath:

"Mindfulness is, I would say, perceiving myself, perceiving my body, and consciously perceiving the state of my feelings. Also to be able to say perhaps: 'Ok, right now I am stressed', perhaps even say why I am

.

<sup>&</sup>lt;sup>20</sup> Exemplary German original (unadjusted transcription): "[Achtsamkeit heißt] dass man halt seine seine gefühle und em- also seine empfindungen beachtet und auch darauf reagiert das heißt wenn eim irgendetwas zu viel is dass man dann weniger macht und sich ausruht und dass man seinen körper nich überstrapaziert" (102)

stressed. But above all to recognize that and say: 'Ok, this is indeed stress, I see I am clenching my teeth or beginning to fidget with my fingers' or somehow just simply recognize this consciously, so that I can then be mindful and say: 'I will take a deep breath'. Breathing is really helpful for me when I realize I am getting agitated. Really consciously saying to myself then: 'Stop.' This stop-exercise. And then taking a deep breath and just looking where the breath is flowing to. That's my mindfulness at the moment." (108)

Another focus places less emphasis on bodily sensations but rather stresses *conscious* decision-making in everyday life:

"[mindfulness is] perhaps a conscious way of dealing with myself and the life around me, in many ways. This has to do with consciousness, and it also hast to do with decisions [..]. It doesn't just happen, I have to want that. [..] Sometimes it's this stop-thing, so I do have these moments in my everyday life even though I don't practice this so much. But I sometimes have moments: 'Hold on, calm deep breath, make room'. Basically, I tend to respond to the need more, and also give in to the need and somehow search for a space for this need. So I decide that I want to meditate now and then think about when and where I can do that." (105)

Similarly, the same participant shows an orientation towards conscious self-care in his description of the relationship between mindfulness and work:

"[..] that I deal with [work] consciously, decide what I do, notice myself. This is also something really important in this whole thing. Not just perceiving the outside and the demands from outside, but perceiving myself within this whole system. That's working mindfully." (105)

Mindfulness in this category was also explicitly related to self-kindness and self-compassion as a wholesome way of engaging with stressors and daily life that fosters attitudes of self-care:

"Then I discovered that an entire attitude was being conveyed to us [in the course] [..]. And this is really good for me, looking at myself lovingly. This came again and again and the others noticed it too. I am not used to that, it's more like a theoretical concept for me, I don't know if I deal with myself lovingly? I have more of an [inner slave driver]<sup>21</sup>, and this is really a revelation for me [..]: what is, may be. To be told that over and over, [the instructor] said that to us in each instruction again and again. This supported the general attitude that other things had already induced in me: what is, may be. Look at yourself lovingly. If something doesn't work out, don't panic. Just let it flow. Let the thoughts come and go, let go of that iron grip that you have or that I have in my day-to-day-life: I have to do this and that,

<sup>&</sup>lt;sup>21</sup> German: "Antreiber", literally: driver. This participant used this expression repeatedly to refer to an inner voice that serves as a driving force with severe demands and standards.

and be effective now. So the entire attitude, this is a life attitude, not just a technique." (104)

For two participants, a focus on self-awareness and self-care should be complemented by and indeed leads to other-orientedness and being aware of one's surrounding over and beyond one's own needs. One participant describes this relationship as follows:

"The basic requirement for mindfulness is self-perception, so that I notice when the stress starts in the first place, and can judge when it becomes too much. And then, when one is more advanced, to know beforehand: there is already so much on my agenda, I will have to schedule that for later or skip it because it's getting to be too much. So to have an eye for this and to take care of it. And we also talked about this thoroughly in the course: it's okay to have exhausting and stressful phases, that's not a problem. But afterwards a break is necessary. [..]. But the question is, how much do I do-gauging that. What I notice around me is that I know many people [..]- and I think that was on the first page of this course, the bit about perceiving oneself AND one's surroundings - and what I often notice is that people who practice mindfulness sometimes seem to struggle a little with the part about perceiving their surroundings. So they're great at noticing themselves: 'This much and no more, more is not good for me'. But then all the other stuff would not feel right for me. And balancing that, that is very important to me. I am someone who doesn't put herself second, but I do want to take care of others, and with the kids this has always been terribly important to me. So others might say 'this is too much for me and I'll just send my kid here or there because I need my time'. [..] So keeping this balance: what do the others need? And when is it about me? When do I say 'I cannot do this for you, you'll have to see how you'll manage because I need to recharge now as well'. This balance: I want to keep an eye on the outside, on my surroundings, but also on myself." (119)

Along similar lines, another participant states:

"If I am doing well then that works, I can also give, and then I can be there, so to speak, for students and colleagues for instance [..]. Insofar being mindful is of course the first step, right?" (213)

A further noteworthy accent of one participant's understanding in this category lies in the relationship between paying attention to one's state and needs and more autonomous behavior. According to this teacher, being more conscious of oneself may generate "freedom not to repeat certain patterns" (211) that are potentially harmful or destructive. Likewise, for participant 222, self-care entailed a tendency to disengage and detach from negative emotions:

"So not to get lost in your inner anger or resentment or whatever, or sadness, if there is something like that, but to try to look at the situation and then really 'stop!' So this is mindfulness for me as well, to say 'stop' for a moment and to look and observe first and then to continue reacting." (222)

In sum, this theme comprises mindfulness concepts that predominantly entail notions of self-awareness and self-care. This may be evident in the conscious perceptions of bodily signals, an increased focus on wellness in daily life, or concrete development towards self-compassion. Different aspects complement this central principle for many participants, such as the relationship between self-care and other-orientedness, the liberating capacity to behave in new ways, or the possibility to disengage from destructive emotional spirals. Yet these distinctions notwithstanding, the codings in this theme all share a mindfulness concept that mainly revolves around the self.

## 5.2.2 Mindfulness as Presence

Concepts where presence constituted the main component were less common than the above understanding of mindfulness. Narratives within this code generally conceive of mindfulness as a way of being in and actively connecting to the present moment. This often entails an immersed focus on whichever activity the person is engaged in at any given time as well as an absence of rumination, anticipation, worrying, planning, etc. Thus, one participant states the following:

"For me [mindfulness] is very easy to describe. I'll put it this way: when you're eating, eat, when you're working, work. When you're, I don't know, meeting friends or talking on the phone, then talk on the phone. Right? That is mindfulness for me, being HERE in the moment and really doing what one is doing, and not having ten thousand other things on your mind. This is only one element of course, but it is the element that was particularly important for me." (114)

Another participant uses an expressive image to convey this sense of presence:

"So for me mindfulness is this arriving in the here and now, and really letting the past and the future be [..]. In the here and now, for me that means a vertical, so this.. usually we're always on this horizontal line between past and future [..] and mindfulness makes me rather vertical and grounds me, and this has to do something with time again, I think, so this time bar that is always horizontal and mindfulness plants a vertical stake in it somehow." (224)

Mindfulness concepts that revolve around presence involved attitudes towards other people as well. Participants repeatedly described how mindfulness may entail a more genuine quality in the interactions with other people:

"[..] mindfulness in the sense of real interest for that person, and not rushing ahead to the next question or topic in thoughts or being somewhere in your own thoughts, but really being with what the person is telling me in that moment or how the person is feeling nowin a way also empathizing with what the person is experiencing now. I

have the feeling that this is how a relationship can come to be that is different from what was possible before, and that is where I see the connection [between communication and] mindfulness. And that is basically what I said in the beginning: when I am talking to someone, then I am really talking to this person, now, in this moment." (114)

The second participant describes <u>pleasurable experience</u> or enjoyment as yet another mindfulness characteristic that he relates to presence, or a non-distracted state:

"[In my everyday life, mindfulness is] being able to let go, to feel like I can gratefully live life and enjoy it. I think these are moments- like mindful eating means to enjoy eating. Why don't I enjoy eating so often? Because you are besides things, even if you're maybe eating at the table with the family, you talk [..], which I also find valuable and good. And so I thought to myself perhaps I can, I don't know, introduce a minute of silence before the meal becomes a valuable time for exchange again, and just set back the senses to zero and just look: what is going on, and how are we here" (103)

Notably, this participant also places emphasis on presence and mindfulness as a way of doing things for their own sake without devoting much thought to time pressure or goal-oriented considerations. In that sense, presence acquires an autotelic quality: the focus is placed on the current activity/moment to an extent that *relativizes time constraints and usual functional approaches*.

To summarize, this category of mindfulness concepts centers on a sense of presence. While participants often assume different implications (on the interpersonal and experiential level), all notions coded as part of this theme share a focus on current inner or outer experience that is diametrically opposed to a distracted or preoccupied and automatized mode often characteristic of daily life.

#### 5.2.3 Mindfulness as Acceptance and Awareness

Yet another (even smaller) subgroup of participants views mindfulness as a rather wide-ranging attitude that is characterized by <u>acceptance and awareness</u>. Rather than a central focus on self-care or present experience, the narratives listed under this theme dwell on a particular mode of awareness as the distinctive quality of mindfulness. This awareness is explicitly described as nonjudgmental, affirmative, and often appreciative and empathetic. Mindfulness is defined less as a technique or specific practice, but as a part of the individual's value system and general approach to life. Consequently, descriptions tend to be somewhat more diffuse and abstract than they are within the other concepts. Moreover, mindfulness concepts

in this category are occasionally associated with individual spirituality, entangling religious values with contents conveyed in the course.

"For me mindfulness is [..] looking with openness on everything that there is, perceiving things and making room for the things one senses in oneself and perceives outside in the world, in reality, and meeting them with attentiveness and not just functionally focusing on one's job or task or whatever one intended to do, but to look broadly on things. And I am religious, so this is something I carry with me a little, to do things with a certain kind of awareness. To be aware that this lifetime is a gift, my being here, my having this beautiful work and these wonderful children and being allowed to live here. In that sense I already live my religiosity with a certain mindfulness [..]. and this mindfulness course is something that has helped me deepen that and further develop an attitude that I already try to embody based on my religious experience. And so mindfulness sharpens my perception and creates an openness, an ideological openness as well, in the sense that you don't always only adhere to moral or philosophical concepts but rather say that things are as they are, human beings are different, there are these things and those things, we will let everything be. This message was conveyed again and again and [..] touched me very much, or I liked it very much, and this is what I associate with mindfulness. Looking at things, leaving them as they are within oneself and with others and in reality, and just meeting that with attentiveness and curiosity and an inquiring attitude, not a judging attitude that presumes the answer." (120)

More so than the other categories, this concept of mindfulness places emphasis on interpersonal implications. One participant understands mindfulness rather exclusively as an interpersonal approach, highlighting the importance of being open for the other:

"For me [..] mindfulness definitely means that I first of all take those I work with seriously, that it's not like I enter any [situation] with preconceived judgments and say right away: 'that's how we are going to do this'. Instead, I would define my role like this, that I say.. It's mindful when we enter a process together, whether it's a process that concerns a student, if he is in difficult disciplinary situation, or of it's a process with a colleague who perhaps is also in a difficult situation. That doesn't matter. But it's a process of togetherness and not one of opponents. So that means mindfulness for me means that I mainly have to listen first." (203)

Notably, *Acceptance and Awareness* as a concept shares a great deal of features with *Mindfulness as Presence*. As mentioned before, the individual notions were coded according to their respective primary focus. One instance where such overlap was evident is the mindfulness concept expressed by participant 230:

"Mindfulness is paying attention to myself and perceiving the moment as it is, not trying to judge, but just seeing it as it really is, as said with a strong focus on the present. And simply to pause and look at things afresh.. Perhaps try a new route and get out of old patterns, also through very little things, such as taking a different way home on the bike." (230)

While the above passage could obviously also be coded as an example of presence, the primary focus of the participant lies in the mode of attention and awareness with which daily life is navigated, as well as on the qualities of non-judging acceptance and non-automatized behavior.

The above cluster of narratives can be summarized as a more diffuse notion of mindfulness that emphasizes a particular type of awareness and overall attitude, and that highlights qualities such as acceptance, openness and non-judgment.

Overall, the three main categories of mindfulness concepts can be classified as 1) related primarily to the self; 2) related primarily to a modality of engaging in activities and interactions and 3) related primarily to a type of overarching awareness and attitude. Figure 15 summarizes the three described concepts and their main components.

 Noting bodily signals of stress and overload Self-Awareness, •(Re)Establishing contact to Self-Care, the body Self- Conscious self-care in daily Compassion Self-kindness Connecting to the present moment Mindfulness •Immersion in current **Presence** Concepts activity or interaction •Intense enjoyment or pleasurable experience Overarching, deliberate attitude of acceptance Acceptance Spiritual and religious and components Awareness •Openness and Nonjudgment

Figure 12: Central Mindfulness Concepts and their Components

#### 5.3 Processes and Mechanisms

Two considerations render a focus on processes and mechanisms that course participation may have set in motion especially vital. First, the analysis of quantitative results yielded limited significant effects. One possible explanation for this relative lack in results may lie in the fact that the impact of the course can be found on a subtler process level, rather than in hard facts and concrete outcomes. Second, qualitative analysis of the research questions inquiring into a) course effects and b) mechanisms of change was soon confronted with a key difficulty: rather than noting clear narratives of benefits that can be subsequently read and investigated for underlying mechanisms at play, benefits and associated mechanisms tended to be inextricable from one another. In many ways, the processes described in the following *are* in fact central benefits and changes, though in a later section an attempt at a more concrete extraction of tangible effects will be presented. However, because these processes are a vital, meaningful and elaborate dimension within almost all analyzed interviews, they are considered the point of departure from which effects can then be deduced, rather than the other way around.

While other research questions are best addressed with largely inductive interview analysis with relatively little interpretive effort, demonstrating underlying mechanisms and processes entailed a more active reading of the interviews. This research question targets a clearer understanding of how participation in the MBSR course may have affected teachers on a procedural and often elusive level. In other words, what seem to be the processes that a mindfulness training induces, and what core components of the interventions do they correspond to?

While some of these processes echo the mindfulness concepts that participants have described, they cannot be considered identical. Despite the apparent overlap, the inquiry into models of change warrants explicit and independent analysis because stated concepts of mindfulness, for one, may remain on the theoretical, definitional level rather than capture the personally relevant components of mindfulness as is evident in the participant's actual experience. A participant may thus in good faith and great detail elucidate what he or she believes mindfulness is and in so doing shed light on how the same course content is interpreted and processed by each participant. Yet this concept might be a mere paraphrase of presented input or an automatic and intellectual recall of abstract knowledge on the subject, rather than a representation of the mindfulness component(s) that seemingly took root in the participants' lives. Likewise, a focus on the description of course effects from the

participants' point of view can be enumerative and limited to concrete outcomes, which is essential in understanding the scope of impact across participants but offers little insight into how mindfulness may work to bring about those outcomes.

Typically, narratives revealing individual processes occurred in the context of questions about course effects; however they were also often elicited by seemingly unrelated questions (for instance questions about course experience and concepts of mindfulness and  $Mu\beta e$ , tangential probes, etc.). Passages that were deemed relevant for this category tended to contain a somewhat detailed description of a perceived causality or personal explanatory models of mindfulness and its impact. Brief and overly general statements were considered lacking in any actual procedural information. By contrast, descriptions rich in personal examples from participants' lives were more illuminating, bearing in mind that translating these examples and the accompanying narratives into mechanisms and processes has constituted more of an interpretive act than other coding efforts. Moreover, even more so than in the other categories, mechanisms identified for this category are heavily interdependent and should be viewed as one conglomerate or model.

In the following, processes and mechanisms that are related to <u>core elements of mindfulness</u> and actual course contents are presented. In the subsequent section/theme, parameters that likewise shaped participants' reception of and engagement with the course but that stem either predominantly from their respective background and situation, or from course characteristics irrespective of mindfulness per se are discussed.

Four largely distinct and central mindfulness processes that are likely to underlie any potential or actual changes can be found across the dataset: Awareness and Insight, Presence, Distancing, as well as Non-Judgment and Self-Compassion.

#### 5.3.1 Awareness and Insight

Almost all analyzed interviews contained elaborate narratives on processes whereby a personally meaningful realization or sensitized consciousness was afforded significance by the participant. For many participants, the course constituted - and engendered - a space to reflect and cultivate awareness. Narratives coded as part of this theme subsume descriptions of newly gained or deepened insights as well as tendencies to contemplate and re-evaluate. Pausing in the midst of everyday life and turning the gaze inwards so as to act with more mindful deliberation afterwards has repeatedly caused participants to engage in a type of reflection that is perhaps less possible in the context of a harried and predominantly

functional, efficient mindset. This gradual "shift" in attitude was often reinforced by formal practice. The resulting reflection tended to generate insights into own realities and patterns, re-establish the connection to own priorities and values, and render everyday choices more concordant with one's needs, desires and convictions. Processes related to increased or sensitized awareness occur in different domains, which are presented in the order of their prevalence.

## 5.3.1.1 Awareness (and Rejection) of Pressure to Perform

This category represented by far the most common area of mindfulness-induced awareness. It refers to participants' reflection on the demands and pressures they are subjected to either by their surroundings or by themselves through internalized standards and patterns of selfexploitation. Although wordings and manifestations varied, the common theme can be described as a realization of the extent to which individuals are urged on by heteronomous demands, allowing structures and systems in which they are embedded to functionalize, stress or even exploit them. This often meant that a given lifestyle (which at face value is entirely voluntary) would insufficiently reflect the person's actual strivings and impair his or her wellbeing. Participants who describe this insight conclude that deemphasizing demands that are posed to them is essential to their mental health and a life that is congruent with who they feel they are. In concrete terms, this may mean resisting pressures to perform, devaluing maximum efficiency and functionality, legitimizing self-care and pleasurable experiences, dis-identifying with failures and mistakes and relativizing the importance of achievement (these tendencies are described further in section 5.5: Benefits and Changes). Developing an awareness for the subjectively more essential aspects of one's life supported these participants in detaching from less important areas, for instance by acknowledging more consciously that "work does not determine who [they are]" (120). Rather, participants feel reinforced in developing and strengthening a sovereign perspective on their lives. One participant describes his growing realization of detrimental internalized expectations and judgments in the following passage:

"[..] stress, as the opposite of *Muße* can be switched off through a mindful [..] attitude. The fact that we judge and of course judge ourselves, that's what causes us stress. So I have to have an evaluation ready by tomorrow, I need to turn that in; that will only cause me stress if I say to myself: 'If that does not happen then the others will think that I don't do my work properly. This is what others expect of me. I expect that of myself, too, that I manage this'- So this expectation, this judging, 'If I don't manage this now then I will have

failed, then I am doing something wrong, then I am not meeting expectations, etc'." (103)

By contrast, the following segment is an example of a growing tendency to reject the pressure to succeed and perform:

"[One thing I got out of the course] is this thought to begin with: to let things be. To deal with it when something does not work out for once, to take away this stress that comes from that feeling that one has got to be successful, and that everything has to succeed, and everything has to work fantastically. Yes, the course simply reinforced this basic attitude." (128)

# 5.3.1.2 Awareness of Needs, Limits and Well-being

This category is closely related to the former one, since often a growing awareness of (self-) exploitation or an exaggerated emphasis on achievement and performance goes hand in hand with a clearer sense of one's actual needs and capacities, as well as the importance of one's health and contentment. However, while the former category includes descriptions of distorted norms and values or systemic pressures (whether internalized or purely external), this theme comprises segments in which participants describe heightened awareness of their own states, feelings and sensations. This may include bodily signals of fatigue or increased attention to perceived stress, for instance, or a clearer sense of one's capacities and limits. In some instances, participants moreover grew aware of preferences or needs they had hitherto not registered, such as a desire to spend time alone. Often participants report this awareness as a reason for legitimizing self-care and prioritizing their well-being. One teacher, for instance, narrates:

"I repeatedly have moments throughout the day where I mindfully observe my heartbeat and my breath, my bodily sensations, and then pause and say to myself - so really to reduce stress - and then say 'Ok, breathe, and maybe don't continue like this, but rather..'. And I did this before as well in a way but not as consciously perhaps." (211)

Similarly, another teacher describes how the course reinforced an inclination to remain serene in the face of potential stressors and pay attention to his needs:

"So I am already a somewhat older, more experienced teacher [..] So many things do not affect me as much as when I was a younger teacher, when you take everything really seriously and consider everything really important and personal perhaps even. So I moved on from there thank god, I managed that. Many older colleagues don't actually manage that. For me I would say I manage that pretty well. But [the course] was another building block that helps me actually view things in perspective, and then, before I get worked up over something for no reason, to focus on myself and then calm down

again. And so I took away a few techniques in this regard, and evaluate things differently, by putting myself first, and my well-being and then saying to myself 'Stay calm, all is well'. I did learn this a little more through [the course]." (214)

How an awareness of stress signals may bring about an attitude of self-care was also described in this passage:

"So at least I learned an attentiveness or a sensitization towards myself, so to be more sensitive and listen – ,where are signs? Take it easy now, dial it down a little, go slower'. So attentiveness, I would say, mindfulness towards certain.. [..] While eating for instance, in the morning, I do have more moments throughout the day where I consciously say 'Take it easy, take five' or something like that. I don't do a half hour walking meditation but just moments, when I'm showering or eating or whatever, moments where I suddenly pause for moment, right? And also the [short breathing exercise] that [the instructor] did, I do practice that, and I notice that I do that without intending to, it almost comes naturally to me, to just integrate that in [my] day." (120)

# 5.3.1.3 Awareness of Patterns and Behaviors

Albeit less common than the awareness processes described above, this theme was reported by a significant portion of interviewees and pertains to <u>reflections on own behavioral patterns</u> and characteristics that the participants have become increasingly conscious of. These include observations of typical and often unhelpful modes of reactivity (such as snap judgments, or unfounded and unquestioned resistance, or exaggerated identification with and susceptibility to feedback and criticism), or a sensitization to an automatized or even mindless attitude in daily life:

"So I always try to bring certain elements of mindfulness into my day, so for instance showering mindfully or eating mindfully, or something like that. I often don't succeed, because I simply.. I think of it and I succeed for the first two minutes but then the baby cries or something and then I notice that I am basically rushing, hustling there. But what I still find interesting: I am aware that I am doing that. I used to really do it mindlessly<sup>22</sup> before, so I would not know why I found the car keys in the fridge. That's an exaggeration- that actually did happen to me once. But yeah, I was not aware at all why things are this way and now I notice and catch myself at it. I manage – but this is probably a matter of exercise, I still don't always succeed, or rarely, to really change that, or to actually change that attitude, I give up too quickly. I do try, I always set my mind to it: 'Today I will go through life with a little more awareness<sup>23</sup>', but then something unexpected happens and

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<sup>&</sup>lt;sup>22</sup> German: "ferngesteuert", literally: remote-controlled

<sup>&</sup>lt;sup>23</sup> German: "Gewahrsein", literally: being-aware

then it's gone for a few hours, and then it will come back to me at some point and I notice 'Oh man, I was really far away. Now I didn't do that at all'." (114)

Another example of an increased awareness of cognitive patterns was indicated by a teacher who describes her insight into her attitude while counseling students:

"So for me a lot is happening anyway at the moment because in the past year and a half I did my training as a counseling teacher, and we practiced a lot of mindfulness there, both during the training and in counseling sessions. That's an area where I consciously apply that, because it goes really well with a counselor's approach, to empty yourself like in a meditation, and to not hold any preconceived assumptions about the student or stuff like that, but to listen first: What am I encountering there? And to open yourself inwardly so to speak in those talks. And I practice this consciously there. And then unfortunately one does keep falling back into the old pattern again and again, so I am not - I noticed on a few occasions that I, I don't know, judge really quickly, really quickly say this is good and this is bad, or speak in a deprecating way. So I'm not there yet, to really change a significant portion of my behavior. But at least I got so far as to notice: 'Ok, now I made a deprecating remark again or I judged again, or did something quickly without thinking'." (224)

Often, these narratives are followed by descriptions of newly discovered possibilities and capacities to behave differently, where one never consciously contemplated alternative options before:

"Also this question of dealing with emotions, negative emotions, negative thoughts, basically the question of patterns, and thinking 'Ok, this has been happening that way I don't know how often now, and I can do it differently for a change'. And that's also a question of judging, to have this autonomy at that point to say 'I can consciously decide to do things in a different way'- to practice that and implement that, that's another thing." (211)

## 5.3.1.4 Awareness of Priorities and Values

It follows from the processes above, perhaps, that many participants also reflected on their individual priorities with sensitized awareness, both in terms of daily routines and in terms of held beliefs and values systems. Growing more conscious of one's situation within a larger system, one's actual needs and one's behaviors plausibly entails a different quality in the attention one pays to lived and performed priorities and choices. This type of awareness was more prevalent in the first project school and was generally less central than the other processes described above. Yet it is nonetheless worth mentioning due to the far-reaching implications it tended to indicate. In one case, being more consciously in touch with one's

own orientation and outlook led to the revival of contacts to old friends or the resumption of creative hobbies that had been neglected.

As mentioned above, awareness processes occurred with different emphases, yet remain closely related. This interrelation and the potentially profound relevance of awareness and insight is illustrated in the following rather dense example, which touches upon awareness and conscious choice with respect to own needs and limits, expectations and demands posed by others, and own goals and priorities. While the different aspects are individually meaningful, it is the conglomerate of reflections and insights that as a whole contributed to a more deliberate lifestyle:

"There were thoughts and processes that this course confirmed again or gave emphasis to, or reinforced. So this question arose for me, as a life question; for us young mothers the question is always: how much time do we invest in our families? What do family and children mean and what does my job mean? I find switching back and forth on this very exhausting. And we went for this family model out of inner conviction, we sent our kids to kindergarten when they were in kindergarten age, and we did not send them to a day nursery before. [..] So I spent four and a half years at home and then really slowly started again [at school]. And then I didn't go for a permanent position. And then the question is always: By how much do I increase my teaching load? Every Year that question is posed. And then I asked myself: 'Ok, when I am eighty and look back on my life, what will fill me with joy, what will I be proud of?' Will it be to be able to say 'When the kids were five and six I taught eight hours but when they were nine I taught so-and-so many hours, and then I did this and then I did that, and then I was Academic Councilor<sup>24</sup>'? Will it be that, when it comes down to it, when I see my life path behind me, will it be that which fulfills me? And then I noticed: No, it will not be that. I think I will be fulfilled when I know I was present and there for my kids [...]. And considering this is a big question for me. I am someone who physically cannot take on very large loads, I simply need a lot of sleep, I can't change that [..] so I have to organize myself differently [..]. But I decided that I will not increase my teaching load by one or two classes, because I know that I would be totally in the grind again and then it's that again: My body will only be vibrating all the time and I will be hastening through life. And now, so yeah, this insight, to ask myself: 'What is important to me?'. Not to be lagging behind a socially prescribed model. This is absolutely expected nowadays, that you get as many nursery capacities as possible and send the kids away as soon as possible. I don't want that. And I can see very clearly now, I would rather do less, do one thing at a time. I now say 'Okay, considering my standards ..' . That's it, they tell me my standards are very high, and I am the kind of person who would rather do less

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<sup>&</sup>lt;sup>24</sup> German: Oberrat

thoroughly than do a lot without going in-depth. I need that for my own contentment. I could of course say, this is not how the system works, working thoroughly- Because if I have 25 hours and my subjects are French and German, then I would need a twenty-hourwork day, right? I could say of course 'Ok then I just won't do it as thoroughly'. And this is an autonomous decision to say 'But then I will not be happy and I will not be satisfied if I don't do in a way that satisfies me, so I would rather do less'. Alright, so I get less money, but it's enough [..] You limit yourself a little but you live well, right? And so I gained another perspective and I notice that I feel strengthened in taking this position." (119)

Other awareness and sensitization processes that were reported on a more singular basis included an increased susceptibility to stressful surroundings, a deepened appreciation of the value of one's work, a meta-awareness of the potential for reflection that can be activated through disrupting everyday routine and a more alert observation of impulses and thoughts during meditation.

In sum, awareness and insight emerged as a common theme across participants and mainly referred to the demands and pressures they face, their needs and well-being, their often automatic or subconscious behavioral patterns, and their individual values.

### 5.3.2 Distancing

Participants described an increased tendency to detach from stressful situations as another important mechanism that the course either strengthened or induced. While teachers in both schools displayed this process to varying extents, it was somewhat more central in the second project school. In this theme, participants narrate how they are likelier to take a step back in different situations and contexts, especially if they feel overwhelmed or stressed, in order to see the full picture and regain calm. Often this behavior points to a mode of dis-identification with either negative stimuli or own feelings of anger, frustration or sadness. Rather than immerse themselves in the (mostly aversive) experience, participants observe the situation from a distance and attempt to gauge it with a fresh perspective, so as to understand better and react more adequately. As with many changes that the participants report, this process tended to be triggered by a focus on the breath, which is often an anchor or a reminder of the possibility to detach from a given situation. This mechanism is closely related to *Presence* as a concomitant process which will be described next. Exemplary narratives of distancing often resembled the following passage in wording:

"Also when someone comes and gripes at you or runs you over or yells or whatever, to be able to say 'Ok, look here, we're going to take

a look at this first, take it easy'. So learning this equanimity, the course definitely helped me with that. So equanimity, to have more equanimity in everyday situations, to have some distance to things, right, not to always be totally involved<sup>25</sup> and not reach a reasonable judgment call, but rather to really say 'Ok, hold on, let's look at all the factors here, there's more to it'. I found that helpful, let's say for your judgment, for your equanimity and in the end for a healthy coping with everyday life." (120)

Acquiring the capacity to detach from thoughts and emotions often constituted an alternative behavior where previously participants may have felt less autonomous or capable of choice. In the respective narratives, the capacity to "let go" (211) and decide not to be engrossed in an experience or to consciously dis-identify with a pattern was often a "liberating" (211) discovery:

> "At the same time I would say that the question of breathing- so focusing on that, or focusing on myself. I wasn't before, and through the course I.. So I grew more aware of that, that was central. And what else was a significant change? Perhaps to get a clear sense, that thoughts and feelings - those do not have to be me personally, but - Or that this is not identical with me, that I can detach from that and see if I can find a different approach or attitude. And I didn't have such a clear sense of that, that came throughout the course, that was a very interesting evening and afterwards- so I learned that and before I was more like a victim, so to speak, of negative and positive things as well, but it was not like- I did not have this other different possibility to cope, to detach and identify that." (211)

#### 5.3.3 Presence

As described in the section on concepts of mindfulness, presence in the context of this dissertation refers to a vivid and aware connection to the present experience in all its facets. The interviews indicate that this tendency is a salient component in many of the processes that the course induced, since most participants describe an inner focus on the present in one way or another. These tendencies to create and cultivate contact to actual lived experience can roughly be classified as instances of inward presence, whereby current feelings, thoughts and sensations are brought to the foreground; *outward presence*, whereby the person consciously refreshes and sharpens his or her focus on the activity or situation he or she is engaged in; or, more rarely, a simultaneous refocusing on the entire experience in all its internal and external dimensions. However, this distinction serves more as a tentative guideline than a distinct matrix. Commonly, centering one's attention on the present is achieved through deliberately pausing and conscious perception. Many participants described the breath as helpful in this

<sup>&</sup>lt;sup>25</sup> German: "also nicht so ganz nah immer mit der Nase dran ist", Literally: not be so close to things with your

respect, since it served as a gateway to the here and now by virtue of its immediacy and accessibility. Conversely, a process of establishing presence was sometimes inferred from narratives that depict conscious breathing or focusing on oneself as wholesome without much further explication. Presence can be largely distinguished from the awareness and insight processes described above in terms of cognition: while the former is an immediate mode of experience that focuses attention on the here and now, the latter typically involves reflection and assessment.

Instances of inward presence are very often described using expressions such as "grounding", "centering" or "being with yourself". One example of an inwardly-oriented perception of present experience was expressed as follows:

"What I profit from a lot is something really banal, but this was also an insight, so relating to my breath and somehow perceiving my body, so as to be able to, like, pause and find out: 'How am I doing right now?"" (211)

A presence-oriented focus that consciously pays attention to one's state of mind and body was also often associated with self-care practices, much like the awareness processes touched upon previously. Similarly, attentiveness to present experiences and surroundings repeatedly entailed a decelerated pace whereby participants described doing only one thing at a time in relaxation and tranquility. The following passage exemplifies the combination of self-care and an unrushed sequence of activity where the present is consciously perceived and focused:

"So for instance yesterday my husband took the kids and went to his mother for the day, and I had a day at home. And usually I start to busy myself. 'What could I get done in this time? Sort out pictures and yadda yadda'. And then in the evening when they come home I'll think 'I didn't manage this, nor this'- frustrating, right? And I learned at this point to have this different perspective. And so for example I started that day with [Nordic] walking. right? And so when I go walking I often do this exercise, I say to myself: 'Ok, now until I reach that tree there I will pay attention only to what I am hearing'. This perception exercise or something- because the birds are singing so beautifully at the moment, in the forest in springtime. Or the breath, or how the wind on my skin, or how I feel in my clothes, in my shoes. So I sense these different things. [..] And so I integrate things like that. So then I went walking and afterwards [..] I weeded [the garden] and so on, and then in the afternoon I had to sit at my desk because I had an exam [to correct], and so I calmly did one thing after the other, so that I could follow, right? So the rhythm, was - I did manage a lot by evening - I still had five things on my to-do list but I was satisfied, because I saw that I did these things and I lied down briefly at noon, even though I thought I still have to get to my desk. I thought it will not get this quiet around noontime in the house again soon, no one is here and I can read. So I made a cup of coffee and sat down in the armchair and read a book for me, not for school. I set myself a time, a half hour [..] and I took that time for myself." (119)

When participants recount more outwardly directed presence, they often relate this orientation to more vivid experiences of enjoyment and pleasure. Similarly, if an outward or all-encompassing type of presence was cultivated in the interaction with other people, this often helped participants perceive others without the white noise typically produced by expectations, anticipations and ruminations. In several instances, this changed the quality of the interaction:

"So mindfulness in the sense of real interest for the person, not to rush ahead to the next question or the next topic or to be lost in your thoughts, but to really be there, with what the person is telling me in this moment, how she is feeling, and in a way to feel with her, with what the person is experiencing. And I feel that this is what brings about simply a different relationship than the one that was possible before, and I see a connection to mindfulness there. And that is basically what I said in the beginning: when I am talking to someone, then I am really talking to this person, now, in this moment." (114)

Processes of establishing presence overlap with tendencies to detach and distance oneself as described above. In that sense, the conscious decision to remain in the present and pay attention exclusively to the current experience (rather than dwell on consequences, pressuring demands, self-evaluations and -deprecations, etc.) has often helped participants to cope with stressful and overbearing situations and phases. By the same token, centering on your inner experience can in itself represent a mode of detachment from external stressors, as is the case in this example:

"[I integrate mindfulness in my work day] [..] when I notice something is not going smoothly or something like that, or repeatedly here and there, to focus on myself and think 'Ok, this is the situation with the class, I am still me, I didn't necessarily do anything wrong', so that I am somehow a little more able to calm myself." (108)

Nonetheless, these two processes, while often simultaneous, remain distinct inasmuch as presence affirmatively focuses on current experience while distancing attempts to relativize the impact of negative stimuli and to dis-identify with demands and stressors.

### 5.3.4 Non-Judgment, Acceptance and Self-Compassion

"But also in the course, that was the main mechanism, the main mechanism of change, simply this attitude of equanimity, of regarding yourself lovingly." (104).

As the above quote demonstrates, a further process that participants narrated involved an attitude of acceptance of oneself, the current situation and other people. This category was assigned to descriptions of non-judgment, deliberate non-resistance to experiences even if they are unpleasant or difficult, and active efforts to exert self-kindness and friendliness. Interestingly, acceptance of disagreeable emotions or situations often tended to eventually "dissolve" (105) these emotions. In some instances this was explicitly depicted as a way of countering feelings of guilt and tempering self-reproach. One teacher states this rather definitively:

"So what I definitely learned is changing this perspective, this - what really spoke to me - to meet yourself with friendliness, to look at yourself with friendliness, not to be critical all the time, to have the courage not to manage something for a change. These are things I really learned." (215).

When an accepting and non-judging position was consciously assumed in interpersonal situations, participants reported a more understanding and benevolent perception of others. Less frequent but no less impressive were passages detailing a non-judgmental approach as a means of countering and "undercutting" (203) the inherently evaluative and often labeling nature of teaching and schooling, which nonetheless was in some instances perceived as a difficult contradiction. The implications in this regard are addressed further below.

Processes that core mindfulness concepts induced across participants are interlinked and overlapping. Most centrally, a deepened awareness across various domains was described by participant as an important course outcome, with many insights pertaining to one's own needs, choices and well-being as well as an altered perception of stressors and pressure to perform. Other central processes can be described in terms of detachment and distancing from stress, a tendency to establish inward and outward presence in everyday life and an attitude characterized by non-judgment, acceptance and self-compassion.

### 5.4 Contextual and Individual Influences

While the processes explicated in the foregoing theme represent mechanisms that are related to core components of mindfulness practice and thought, a variety of other factors prompted and influenced course processes. These included important events and contexts in the lives of

the individual participants as well as characteristics of the course's implementation and group setting. The following addresses the main contextual and individual influences that significantly interacted with course participation.

### 5.4.1 Concurrent Influences and Attitude towards Mindfulness

Almost all reported processes and effects present the analysis process with attribution difficulties. In most cases, participants described course experience and impact in the context of other factors. These included previous mindfulness experiences, processes of growth and development that were unfolding before and irrespective of course participation, other trainings or supervision activities and personal convictions and attitudes that were compatible with course contents. Indeed, many interviewees explicitly state that they find it difficult to discern course impact from other processes in their lives:

"So I actually cannot say the course specifically did this because I think that MBSR fits really well with me and my other things, that it was just simply harmoniously incorporated." (128)

By and large, these influences reinforced or complemented insights and processes that occurred within the course. Often mindfulness concepts also constituted a confirmation of more or less diffuse orientations and notions that the participants embraced, such as prioritizing intrinsic goals and individual life scripts over work and achievement or consciously and non-judgmentally entering the teaching situation. It may be hypothesized that mindfulness interventions can in fact only be helpful to individuals inasmuch as it is able to synthesize with personal values or ongoing processes that imbue the concept with relevance and applicability.

One area where this affinity to mindfulness was especially salient was participants' spirituality or religious affiliation. Especially in the first project school, personal religious beliefs often interacted heavily with mindfulness concepts presented in the course. Where this was the case, acquired mindfulness concepts were sometimes more far-reaching and spiritual, feeding into a fundamental life attitude (as opposed to a concrete and useful tool for managing stress, for instance). This could mean that participants consider mindfulness practice as a means to pave the way for spiritual and religious contemplations or as a non-religious manifestation of values that are deeply embedded in their belief system, such as conscious appreciation and gratitude. Conversely, several teachers were able to engage with the course specifically because it was not presented as spiritual input but rather drew on secular and neutral concepts. Thus, whether because participants could relate course contents to their

spiritual orientation or because they were able to view it as decidedly non-spiritual, this aspect partly determined the way in which the course was perceived. Notably, it was also considered problematic in a number of instances as discussed in section 5.7.

The impact of concurrent influences that are compatible with mindfulness and spirituality point to the relevance of participants' previous attitudes towards mindfulness. These attitudes contributed to expectations participants may have had, which in turn colored course experience. Where participants had cultivated practices and trains of thoughts that are conducive or relatable to mindfulness, the course was likelier to be meaningful to the respective participant. Especially in cases where previous experience with mindfulness or similar practices had left a positive impression, the course was able to draw on these experiences (table 4 shows that many participants did in fact have meditation experience of some sort).

It is important to bear in mind at this point that course participation was voluntary and that therefore no decidedly aversive attitude towards mindfulness could be expected among participating teachers. Nonetheless, while indeed none of the interviewed participants described the course as wholly unbeneficial, it could be observed that participants with more skeptical attitudes towards mindfulness described a less rewarding experience, especially in instances where participants had made negative experience with practices akin to mindfulness (for instance autogenous training in the case of participant 102). One teacher described her colleagues' reaction to the course along those lines:

"My colleague with whom I often go on trips, I know in her case that the course did not get through to her so much, because she's a very sober-minded- although Christian in her orientation- so she's not so much the esoteric and mumbo-jumbo, and so she doesn't let that get through to her so much. I wouldn't call [mindfulness] that but of course if you're being nasty you can. [..] And insofar, so there, with her nothing changed much [through the course]. <sup>26</sup>" (214)

Unfortunately - or fortunately - negative attitudes towards mindfulness were not described very frequently, although participants repeatedly dwelled on their colleagues' displeasure. This phenomenon will be further discussed in the section describing course difficulties (5.7).

Finally, even participants who entered the course with some hesitations or reservations ultimately described a palpable openness that tended to render participation profitable and/or

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 $<sup>^{26}</sup>$  The colleague in question was not identified by the participant due to confidentiality considerations.

enjoyable. This supports the assumption that because the teachers participated voluntarily, motivation and attitude were seldom fundamentally resistant or negative:

"I have to say, meditation was entirely foreign to me, I never came across that. And I was very skeptical too, and I noticed though that when you are willing to engage with it<sup>27</sup>, it can actually be done, and then it works, and then you get something out of it. So that was something that I experienced for the first time, it would never have occurred to me to do something with meditation. I didn't know, like I told you I didn't know what to expect at all. And this thing with meditation, at first I thought: 'Hmm, well, let's see'. But then [the instructor] did manage to bring me closer to this, because I was very skeptical. Because I did not know these things at all, and never wanted to somehow. But I did learn this, that this works, that you can engage with it. That was a new experience." (222).

### 5.4.2 Individual Stress Level and Living Conditions

As will be addressed in further detail in the section discussing difficulties, the individual situation and context of participants greatly shaped their willingness and capacity to engage with the course. Coded in this category are references to participants' stress levels at the time of course participation that tended to prevent them from devoting as much time and energy to mindfulness practices as they would have liked. While individual stressors and living conditions were mostly reported as detrimental circumstances that hampered profit, in a few instances life crises and augmented stress caused participants to rely more heavily on strategies conveyed in the course. Similarly, in a few cases the curse was incorporated into other efforts that teachers were engaged in as a means to manage personal crises, such as therapy.

In this respect, the dataset presents a question that can hardly be answered with definitiveness: Are individuals likelier to benefit in times of acute stress, since these are phases of impaired well-being and therefore present a greater need for compensatory strategies? Or are they by contrast likelier to profit when their living conditions are sufficiently stress-free so as to permit them to fully engage with the course and invest time and energy into mindfulness non-grudgingly? The evidence in the interviews to some extent can support either hypothesis. For instance, participant 102, who profited the least from course participation, proposes that she was simply not stressed enough to find the course useful and relevant, and hypothesizes that other, more distressed colleagues are likelier to benefit due to their greater need. Similarly, a number of participants state that they are likely to fall back on course contents in times of

 $<sup>^{\</sup>rm 27}$  German: "sich einlassen", Literally: to let yourself into something

overload and exhaustion, considering mindfulness a tool they can revert to when it is necessary to actively take care of themselves. Conversely, participant 203 notes that he was able to ruminate less and feel calmer because the course coincided with a relatively manageable phase. Likewise, several teachers regret that the overall context at the time of participation was too busy and hectic to allow it to come to full fruition:

"I think I will notice the long-term effects later. Like I said, the bad timing dominated, made it a little inaccessible, which I really regretted [..] And it was the perfect offer. Nonetheless there were moments in the situation on those Wednesday evenings or during the mindfulness day where I was totally immersed, but these moments did not have a very sustainable effect like I would have hoped for. But I was back in the old rhythm really quick, in the old stress, and I simply noticed that I don't have the calm to really try out and engage with the things I learned and the new experiences I made. So I was not that advanced yet, but I think these are exercises that I can dig out every now and again in the coming months, years, and I think when there is suitable moment that I would like to dig out the CDs and review the exercises and see if I can discover something there." (103)

Based on the contradictory narratives in the dataset, one might hypothesize that mindfulness interventions require a delicate balance to realize their potential: on the one hand a minimum of energy and time capacities is necessary if participants are to grant the intervention its due attention, especially if this is an individual's first encounter with meditative approaches. This is likely impossible in the midst of very acute stress or a clear overload. On the other hand, perhaps some measure of psychological strain or perceived need is likewise conducive to real and palpable benefits. In all cases, the interviews demonstrate that the particular situation and current life events for each participant constituted a significant influence on the processes that were (im)possible during the course.

## 5.4.3 Group Setting

Participating in the course with other colleagues and in a larger group represented a twofold influence across the dataset. This theme encompassed descriptions of the group setting as a favorable condition for course experience and as a mechanism in and of itself. Firstly, the setting as such was perceived by most teachers as an enjoyable, agreeable situation that allowed participants to forge closer relationships and develop more trusting bonds. While this will be touched upon as a course outcome, it is also relevant in this context since the positive atmosphere rendered participants more open to the course and created a favorable context for other processes:

"So on the one hand they were all colleagues, and that - at the beginning I thought: 'Hmm, is that-?' So was that going to be so easy, we know each other a little. But I actually found that in terms of the group, I thought, I'm sure it will be nice, that should work fine. And that was indeed the case, so I really simply found it super super agreeable. Totally different than at school, so it was totally different for me, completely detached, even though it is the same building, but it simply, I don't know, I was able to talk to the people in the course about totally different things, before and after, than in the teachers' room, so totally different things, somehow." (114).

Secondly, the dialogue, exchange and cohesion that developed in the respective course group constituted an intervention in their own right, enabling deeper and more versatile reflection and generating a sense of togetherness and shared stakes that supported individuals in coping with their stress:

"So, [being] in exchange with each other, that was central. So both, I would say, the exercises and talking about that- So it was our homework once to talk about our own experiences which we bring into the course and then to share those with others, often. [..] And that was big relief to notice that others are struggling with this too. So this dialogue: that really had a lot of impact." (211)

On a similar note, the group setting constituted an influence inasmuch as seeing other course participants in the context of usual work processes and stressful everyday situations often served as reminder to apply mindfulness practice in daily life.

#### 5.4.4 MBSR Instructor

In the analyzed interviews, the mindfulness instructor transporting concepts and practices is integral to course experience and therefore induced processes within the group setting. Although two different teachers taught the courses at the two project schools, both populations described aspects of the MBSR teacher that seem to have influenced their receptiveness to mindfulness. Specifically, many teachers explained that the course instructor's authentic embodiment of mindfulness constituted a convincing and inspiring element. It is likely that only someone who can convey the benefits of mindfulness as part of their own attitude, i.e. through lived and performed calmness and thoughtfulness, is able to impart this approach effectively.

Thus, the sense of calmness that communicated itself to the course participants constituted an influential aspect of the MBSR instructor. Over and beyond simply admiring the instructor's tranquility, the immediate experience of a calm, serene atmosphere and an instructor who effectively suggested that "it was not about accomplishing any achievements" (203), or that

"you have time" (215) may have well been the vital experiential equivalent of central mindfulness concepts. In other words, rather than merely reflecting on a mode of existence where performance is deemphasized in favor of mindful presence, it is perhaps the practical experience of these attitudes in vivo, i.e. as embodied by an instructor and tangible in the course atmosphere, that contributed to course impacts and processes.

The instructors' person also affected processes inasmuch as they assisted participants in reflecting on and gaining insight into their own feelings and patterns. The ability to paraphrase participants or put their sensations and experiences in words accurately and sensitively was described by many as a helpful facet of their course experience. Finally, the instructors' aptitude in presenting course contents, inputs and impulses in an invitational manner contributed to the distinct course atmosphere, and was often described as a friendly offer of which one may select what one finds fitting and discard the rest with no sense of coercion or indoctrination. Ultimately, it was this non-ideological and non-missionary presentation that was often able to assuage participants' doubts or reservations or overcome shame barriers:

"But when the time came I was very surprised, because [the instructor] did a great job, and really in such a way that one was able to accept it. That one always felt invited to participate and then also felt like wanting to participate and did not feel ashamed perhaps or had that feeling of 'Is this really necessary? And they're all watching me and I think this is going too far.' So I never had the feeling that I had to cross my own boundaries or get over myself at any point, which was something I was a little worried about in the beginning. In that sense my expectations, what few expectations I had, where more than met. So I was very happy with the course, I found that very nice and an interesting experience, to look on yourself mindfully and attentively. And the fears I had where completely dispersed. I was with colleagues with whom I more or less get along, but you do think 'Do I have to lie on mat next to her?' which may stand in your way a little at first, but that was not the case at all. And that certainly was due to how [the instructor] did it too, so she had a good way of handling it, of proposing things without imposing them on you, and you always felt free to say yes or no. I thought that was very nice." (120)

### 5.4.5 Other Influences

A number of other influences were described occasionally by up to four participants; they are listed for the sake of completeness and cannot be considered representative of the entire dataset. These include the respective fit of individual exercises and participants (i.e. whether or not an exercises resonated with a participant for personal reasons), carry-over effects (i.e.

talking about the course to non-participants and ensuing reflection), personalizing exercises (i.e. whether or not participants were able to adapt the exercises in a manner that made them more compatible with their respective lives and routines), state and mood during single course sessions, engaging with societal discourse on and around mindfulness, and a supportive environment that regards the course favorably.

Two factors that - contrary to expectations - barely emerged as influential from inductive interview analysis are course motivation and individual practice. As mentioned before, it is possible that course motivation was not considered of central importance since all teachers participated voluntarily. While most teachers stated their motivations to participate in the course, they tended not to dwell on this motivation as significant, nor did it generally constitute a meaningful narrative across the interviews. Motivations were typically either an open interest in mindfulness or a desire to better cope with or prevent stress. In the very few passages where motivation emerged as more relevant, teachers either explicitly stated that the course is likely to impact participants differently depending on their motivations and individual needs, or implicitly described their own strong motivation to reap benefits as a main influence on how they perceived the course. Along similar lines, expectations did not represent an important theme either: overall, participants entered the course with either only vague notions of what they were going to encounter, or with expectations that are in line with the course's spectrum (see table 5 in section 3.7.6). This relative 'reasonableness' and uniformity in motivation and expectations may explain why these aspects did not explicitly emerge as central themes.

Likewise, individual practice, which is presumably of vital importance to the type and extent of processes brought about by course participation, was not a prevalent theme. This is likely because for the most part, participants simply did not establish any formal practice beyond the course. The lack of formal independent practice will be addressed as a difficulty in a later section, but it is noteworthy that those teachers who describe a formal practice consider it a meaningful feature of their course experience. Similarly, many participants hypothesize that their benefits would have been greater had they engaged in independent practice.

Several individual influences that are not inherently related to mindfulness practice shaped course processes and mechanisms. The corresponding themes describe participants' attitude towards mindfulness, their private religious or spiritual practice, their openness for the course even in light of specific reservations and their individual life situation at the time of the course, with data suggesting that neither too much stress nor a total absence of strain are

a favorable condition for first-time contact with mindfulness. Contextual factors that proved important include the group setting and the interaction with colleagues and the instructors' manner of teaching and embodiment of mindfulness. Influences are summarized in figure 16.

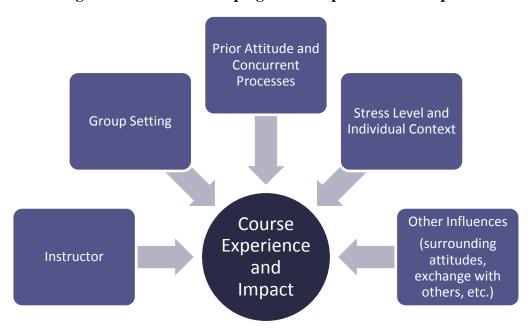


Figure 13: Influences shaping course experience and impact

## 5.5 Changes and Benefits

Having illustrated the central processes and mechanisms that participants related to the course as well as the major influences that shaped them, the following section describes <u>how these processes and mechanisms translated into concrete outcomes in the participants' daily lives.</u>

Central effects that all or almost all participants reported as a result of the course can be clustered around *Stress Reduction and Coping with Negative Emotions* and *Interpersonal Effects*. Each of these effect areas are composed of overlapping aspects that nonetheless remain of interest in and of themselves, and that very often demonstrate how the different mechanisms converge to result in tangible impact. In the following, a broad delineation of the main effect areas and their central dimensions and manifestations is presented.

## 5.5.1 Stress Reduction and Coping with Negative Emotions

This category reflects the most central cluster of changes across participants. Statements were assigned to this theme if they entailed <u>descriptions of either more effective coping with concrete stressors or difficult situations</u>, or an overall sense of improved coping with the <u>general stress level of daily life</u>. Often, narratives met both of those criteria, since a better handling of particular stressors cumulatively led to more satisfactory stress management in

general. In a few cases, participants also described improved coping with acute crises and distressing life events. Most importantly, this category was assigned only if a palpable relevance to the participants' lives was described. Facets and indicators of improved coping are presented below.

### 5.5.1.1 Increased Calm

Although the wording differed, the participants most commonly described a sense of increased calm, equanimity and serenity in their daily lives. This effect constituted a subtle shift in the quality of many day-to-day sequences rather than a major change or transformation, as evidenced by the frequent relativization of statements in this respect. The overall increase in calm and relaxation expressed itself in a sensation of equanimity in the face of normally pressuring demands and hectic, paced routines or in tendencies to find and regain strength in meditation or quietude, as well as in a subjective impression of having more time. Often, this effect is achieved via short "breathers" when starting the day, or through using time slots that lend themselves to a moment of grounding and reflection, such as commutes and meals. Participants may also seek out quietude in the midst of busy days to regenerate strength and use centering techniques (such as breathing or a short body scan) to transition from work to private life. In a number of instances, the overall sense of increased calm was achieved through formal meditation practice. One participant describes the tempering of stressful daily life as follows:

"It feels good [when I'm mindful]. I don't feel so hounded and harried, I am content, I have inner calm and not so many confused thoughts in my head. Instead, I can really enjoy what I am doing in the moment, whatever it is." (230)

Similarly, another teacher states that

"I now often [..] simply sit at my desk in breaks and eat my sandwich, and either a conversation with the person next to me ensues, or it doesn't. Right? So, I always, I sometimes do just one thing at a time. That's a total luxury, right? Just doing one thing or sometimes not doing anything. And then I go into the classroom differently, and I am not so erratic and all over the place [..], then there is more deliberation and concentration, more density, and therefore more clarity. And the less erratic I am and the fewer hectic moments there were before class, the more centered and within myself <sup>28</sup>I am when I enter the classroom and the better able I am to perceive the group, the single faces in front of me." (119)

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<sup>&</sup>lt;sup>28</sup> German original: "zentriert bei mir bin" which literally translates to "centered within myself"

### 5.5.1.2 Managing Acute Stress or Conflict

In other instances, participants report <u>different coping before</u>, <u>during or after a concrete stressful situation</u>. Here too, the coping often consists of a few deep breaths or meditations and body scans. Specifically, participants may pause to deescalate a conflict, or feel less distressed by a normally overwhelming situation, such as an exhausting classroom interaction, instead responding with more dis-identification and calmness than usual, or disengaging from the situation altogether. In this respect, one participant describes the following situation:

"Yesterday I had a fight with my daughter for instance because of a missing book [..] and she - early puberty of course - was immediately agitated and pushed back, and it could escalate easily and everyone would feel hurt. And so I said rather quickly 'Ok. Fine. You do your thing' and went out, took a deep breath and thought to myself 'come on, it's just a math book'. And it's really only very small situations, but those become easier to handle and to relax in, so that one can withdraw more easily and not enter a kind of spiral and start yelling and banging doors and what not." (108)

Similarly, participant 214 states:

"Yes but so I did notice in those stressful phases, such as right now with my fifth grade, that it's all the more important to pause during class and try to leave them be, and then briefly, not close your eyes, your eyes are open, but close them inwardly, and to try to collect yourself for a moment. I did learn this a little trough this course." (214)

On a related note, many interviewees recount that they are less irritable at minor nuisances and hassles or hiccups in their plans. In those instances, narratives describe increased flexibility in adapting to changing situations as well as a lessened susceptibility to disagreeable incidents, such as an ill-tempered encounter at the supermarket, or a rude passerby. These tendencies contribute to an overall relaxed quality to their daily routines and thus to stress reduction at large.

#### 5.5.1.3 Decreased Rumination and Worrying

Another aspect of stress reduction was found in narratives centered on a <u>notable decrease in stressful thought spirals and rumination</u>. Rather than dwell on fears, worries, plans, to-dos and responsibilities, participants often manage to clear their mind throughout the day (calming down the "thought storm" (104)) This is typically accompanied by an increased tendency to focus on the activity or situation at hand ("mono-tasking" (119). One teacher relates the following:

"My wife said I am calmer. But, hm, yeah, what did happen perhaps was that I slept better. So I do have those mechanisms. So after four weeks [of school] I am right in the middle of things and I am kept awake at night by thoughts of what happened during the day and then I cannot sleep. And that was not the case much during this phase [of course participation], remarkably so. But I do have to say that things were also not that terribly exciting." (203)

### 5.5.1.4 Self-Care Practices

Cutting across the aspects described above, almost all participants described one or more self-care practice. The changes described here depict newly acquired or intensified behaviors that attempt to preserve or further well-being and physical as well as mental health. Self-care notions that are purely theoretical, i.e. that participants narrate and reflect but do not seem to have translated into any sort of actual behavior are not included in this theme. The behaviors coded here vary in scope and magnitude but commonly manifest as a conscious decision to tend to own needs rather than increase effectiveness and efficiency whenever and wherever possible. In that sense, self-care practices are more proactive and resource-oriented than responsive stress reduction strategies. In many instances (though not always) self-care practices constitute the behavioral equivalent to the mental coping effects described above.

The most common self-care practices were taking breaks during the work day, taking time for oneself in private contexts, and taking on less work, responsibilities and chores. Other self-care practices included working fewer hours, lowering perfectionist standards or internalized demands and planning more time for single tasks. In the respective narratives, the behavioral change was typically described in the context of an increased awareness of the importance of self-care. For instance, participant 104 states that

"[The attitude of mindfulness] helps a little with this unspeakable striving for efficiency- [the tendency] to run like clockwork in day-to-day life a little bit. That's my old standard: if you do something for nothing then that's pretty stupid, right? [..] So basically this systematic sense of being overwhelmed melts away a little [..] I just deal with it with increasing relaxation. So basically this guideline "efficiency" melts away, right? This is something that is absolutely deadly, right, when that is practically your life motto. [..] Ah, now I remember [an example], I decided to really give myself a long break at noon, with lying down and everything [..] and that is a manifestation of this, I would never have thought of that before. I used to think I will go home, sit at my computer and on it goes - the result being me totally exhausted. Super. Very ineffective, right? So now I think: manage your resources better. I find that to be a clear manifestation of this: packing away the whip." (104)

The themes delineated above tend to overlap and coincide with one another in most coded segments. Thus, the quotation below, for instance, contains elements of increased calm, heightened resistance to pressure, demands and ruminations, self-care practices and deliberate 'mono-tasking':

"So for starters I did of course try to do the exercises at home, which did not always work out like I would have liked, but I did do them with some regularity. And I am not sure if it's that it's springtime or for whatever reason, but I do have the feeling that I meet demands with more equanimity and lightness, kind of like "Oh well, we will see how it goes, and this is how it is." And at the same time I am aware during the school day I get my few minutes of calm, whether I actually go to the toilet and close my eyes and catch my breath briefly or go to the coffee room during the break and consciously not have any organizational conversations, but rather settle many things calmly at home via email. So consciously taking little time-outs. Or not listening to the radio constantly but just being at home quietly for a change. And I do try to focus on just one thing and not have a thousand things planned. When I had a free time slot or was waiting in line I would already plan the next day or when I am in the waiting room at the doctor's I would read the paper or plan something - so instead to use these small slots as little breaks for myself, this is definitely a change." (230)

Tangible outcomes and concrete behaviors that teachers described in relation to stress reduction and coping included an overall sense of calm, deceleration and equanimity in daily routines, a better handling of acutely stressful situations and a tendency to worry and ruminate less. Often these outcomes were brought about by formal meditation or conscious time-outs to re-establish calm and balance. They tended to be accompanied by self-care practices such as taking breaks and time for oneself as well as working less.

### 5.5.2 Impact on Interpersonal Experiences

Effects that fall under this theme capture <u>any change that is described with reference to interactions with other people</u>. The spectrum of changes here ranges between concrete interactions on one hand and the quality of relationships on the other; they were reported for colleagues, students, and interpersonal relationships quite generally (the latter often including private relationships, such as family and friends). While most participants expressed some sort of effect in this area, here too effect magnitude and depth vary. The effects on interpersonal experiences echo some of the quantitative results on interpersonal problems, as will be addressed further in the discussion.

#### 5.5.2.1 Colleagues

The most commonly reported impact refers to the relationships to and interactions with other colleagues, predominantly among the course participants. These relationships were described as closer and more personal. Similarly, participants repeatedly described how the course engendered a fresh outlook on their colleagues, enabling them to perceive other facets of their characters and correct former wrongly held impressions. As a result, those participants considered a deepened sense of community and trust among colleagues a course outcome. One teacher described this impact with the following statement:

"So [my perception of the other teachers changed] at least with respect to my colleagues with whom we did this course, simply because our relationship grew closer and because we got to know the colleagues from different facets that we hadn't encountered much before. And in any case a more open, friendlier and more loving way of dealing with one another, I do notice that about myself, that I look at them with different eyes because I simply got to know them better." (108)

Likewise, a teacher from the second school described interpersonal effects that he attributed to the course and that seem to impact the atmosphere beyond course members only:

"So I mainly noticed once, on the day of the open door, the pedagogical day, there was one situation that surprised me. You have to know, a staff of 96 people is - all gathered in the cafeteria in the end, in some type of open market place. And I knew this, we had these 'market places' often before here at school, and usually they're very busy and very hectic, and no one paid much attention to the others, everyone just did their thing and took care to finish their stuff by this or that time and then leave. An on this day, on this market place it was completely different. The colleagues all stood there and talked calmly with one another, and they stood there in front of their boards and it was open-ended, it went on for much longer than planned, there was no restlessness, and there was none of this entirely planned out procedure. I actually found that very good. And I notice in conferences as well, there is always colleagues who take others on, and really have a go at them, and I experienced none of that anymore. [..] I do see a connection to the course there because I mean we did reflect together and that leads to conversations amongst ourselves of course, which contributes to an awareness of what actually goes on, with a detached view of our own communication culture and our way of being with each other. That definitely happens in that way." (203)

While it is important to interpret such statements with caution so as not to overstate the extent and scope of actual effects, the above quote demonstrates a potential for more systemic impacts that can improve the climate in schools over and beyond course participation, especially since this participant is the principal of the second school.

Another level of interpersonal effects was expressed by a teacher who remarked on the type of communication patterns and relationships that become possible after shared course participation:

"[The] communication with one another is different, in the knowledge of the things we experienced [in the course]. I found that very interesting, this encounter in the teachers' room for instance, that was new, because we learned a lot about one another. And I found that very, very good because I think in society generally and also here at school, we do have great conversations and relationships, but there are certain things one does not reveal, or where one says 'I think I have a problem there'. And then you realize that this concerns many others, and with this openness one has the possibility to be more at ease with those things, right? And perhaps permit yourself something because the other person is aware and knows that it may be important to do something or not to do something. So to not worry about that." (213)

This quote demonstrates the improved relationships among colleagues on one hand, but also points to implications for well-being and self-care, since the shared experience and the resulting transparency and closeness contributed to a more trusting space, whereby the participant was likelier to request social support and cope with difficulties in a more self-caring manner, again pointing to potentially systemic effects of mindfulness practices.

#### **5.5.2.2** Students

Another interpersonal area that was mentioned repeatedly pertains to the interaction with students; a number of teachers stated that a mindful attitude rendered them more open and perceptive of their students, with judgment and valuation patterns retreating in favor of a more appreciative outlook. Thus, one teacher reflected on this effect in this segment:

"[..] At school, we are constantly forced to evaluate- so to let that retreat to the background a little more. Though I still have to give grades, but I think I acquired a larger openness.. And maybe - and this doesn't always work but sometimes it does - I take a closer look or take the time to think: 'What does [the student] mean?' Not just in terms of content but also, like, who is that person sitting in front of me? Right? So I get a clearer sense of that or think about it. [..] I think in the end working on yourself - like you center yourself, and ground yourself [..] and find clarity for yourself - that's a good prerequisite for consciously dealing with others. So maybe developing yourself is also something very positive, I find, for this profession, and for dealing with others." (105)

Another observation that was less central but still prevalent in both schools indicates that exerting less pressure on oneself and engaging in self-kindness has an effect on the approach to students as well, which suggests that self-care has a positive impact on interpersonal

relationships. One of the teachers who reported this process also described how a mindful approach to classroom interactions enables students to break free from habituated behavior patterns and rigidly assigned roles and engage with the teaching situation differently, showing new aspects of themselves. Referring specifically to the effect of the course on teaching as a profession, one teacher stated the following:

"It's simply about this mindfulness towards myself, and this is transported to the students, because I deal with myself better, and then simply do better day by day, then I simply have more space for the problems of other people, to handle those." (215)

The interpersonal effects on interactions with students are also often closely related to the coping effects illustrated above. It is in the context of hostile or charged interactions that some of these effects are visible. One teacher, for instance, recounted the following:

"So when I somehow notice –but okay, this is part of our training, that you always absolutely have to [pause], especially if it's an aggressive student or such [..], that you pause first. So I had learned this before: under no circumstances do something in the heat of the moment [..]. Yes, but I have a clearer hold of that [through the course]: "Ok, how is this making me feel?". And then not to project<sup>29</sup>. So this pausing, that was reinforced even more, also in difficult situations, in a group or such. First: 'Ok, what is this, what's going on there?"" (211)

## 5.5.2.3 General Effects

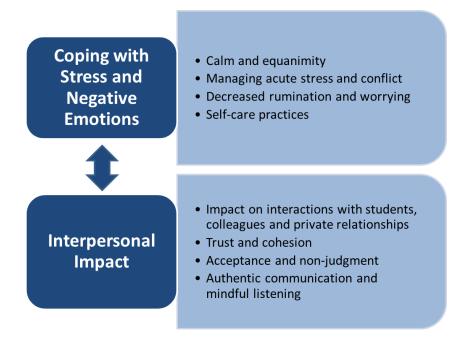
While these effects were less common, interpersonal behavior was partially impacted over and beyond the school context as well. Two participants described the transformative effect of mindful listening, in narratives suggestive of a perceived increase in authenticity in their interactions and a new-found capacity to communicate without any compulsions (for instance the automatized compulsion to ask questions or impose associations). Similarly, a few participants described at length a diminished tendency to judge, which resulted in a palpable sense of empathy and understanding. One participant felt that, as a consequence, different types of encounters with other people are possible, especially strangers, and that her increased capacity to let go of expectations in the interaction had a direct positive effect on other people's conduct. This participant also stated that the course encouraged her to revive old contacts and engage in those communications with a more relaxed and genuine attitude. In other instances, participants described a less critical and more accepting attitude towards others. One interviewee described this effect as follows:

<sup>&</sup>lt;sup>29</sup> German: "Ich-Botschaft senden"

"I don't always think of this very consciously, but also in dealing with the kids for instance, or in the relationship to my husband, I did think on a few occasions to be mindful, or to just accept the other person as he is. That was perhaps a little change sometimes. So that one isn't too critical, I did notice that sometimes, that I am maybe not too critical or didn't react like I normally would maybe. Or with the kids, my older one is nine and sometimes a little- needs to be taken as he is. He has his quirks or his oddities, so separating this from other things, for instance his performance at school and what he's like in general. So clearly saying that one has nothing to do with the other, that's how he is, and to see *him* in the way he behaves. [...] And then I feel less resentment, or could deal with it and wasn't so angry inside." (222)

In terms of interpersonal effects, the teachers described impact on their interactions with students and colleagues, as well as their private relationships. With their colleagues, closer relationships and a more marked sense of trust, understanding and relatedness were described. With respect to their students, many interviewees reported a tendency to judge and evaluate less, as well as an increased capacity to perceive students openly and empathetically. In private interactions, teachers observed more acceptance, empathy and presence. Figure 18 illustrates the main changes and benefits that teachers narrated.

Figure 14: Course Changes and Benefits



## 5.6 Interactions and Interrelations of Mechanisms and Changes

As mentioned above, the processes and effects described here were discernible in the interviews as distinct components affecting this particular population, yet they cannot be understood in isolation of one another. Many of the aspects detailed in the former themes reciprocally and iteratively enforce each other, with mechanisms and outcomes often blending into one single narrative or experience (as is often visible in the quoted passages). The analysis presented here attempted to distinguish between tangible effects that the participants relate on a mostly behavioral and observable level and the more diffuse processes that are likely to have contributed to these effects. This resulted in the tentative identification of four main processes (Awareness and Insight, Presence, Distancing, Acceptance and Non-Judgment) that - usually through some sort of interaction - led to two areas of impact (Coping with Stress and Negative Emotions, Interpersonal Effects). In the following, the way in which the different processes may have converged to produce effects is briefly addressed.

One conglomerate of processes entails an increased awareness on various levels. It is evident, both in the data and upon intuitive consideration, that these processes are related to the identified tendency to detach from stressors. Thus, an awareness of functionalized self-neglect can cause individuals to detach and distance themselves from posed demands and pressures, and in the course of this process, further reflect on the systems they are entangled in or the decisions they want to make, thereby sensitizing their awareness for their priorities and well-being. For instance, awareness processes that culminate in the rejection of societally prescribed dictates and engender a less success- and achievement-oriented attitude are likely to support individuals in detaching from the stressors they encounter. The synthesis of these processes is essential for the reported effects on coping with stress through self-care and equanimity. The example below indicates how different awareness processes may impact individual perception and choice:

"It's perhaps the fact that you notice what you get from [mindfulness] that makes you want to have that [effect] again and lets you know that you're doing something for it. And for instance, these materials we received [..], there was a text by Santorelli or Kabat-Zinn, I think it was Kabat-Zinn. And it said that if you take the time once a day, totally for yourself, to come to yourself<sup>30</sup>, that this will make you more collected and [help you] better find your way. Because we do live in a society where an incredible amount of demands comes from the outside, but it's about finding the path in life that is meant for *me*,

-

<sup>&</sup>lt;sup>30</sup> The German original is "so ganz auf sich, so zu sich kommt", which literally translates into "totally on yourself, come to yourself" but can be understood as "focusing on and collecting yourself/centering yourself".

that is right for *me*. So maybe for me it isn't the right thing to teach fifteen hours a day and have two kids and have them home in the afternoons and cook for them and so on. That is not my model. But it is kind of [expected] from the outside. [..] And when I have this time out in my day I am thrown back<sup>31</sup> onto the things that are good for *me*." (119)

An awareness of one's priority, both in the immediate situation as well as in one's overall life style may similarly lead to more presence wherever these priorities are concerned, which in turn may entail a conscious detachment from extrinsic demands and stressors. Hypothetically, the combined impact of awareness, presence and distancing may support individuals to recognize and change automatized procedures and patterns (behavioral or cognitive) that do not reflect their choices, needs or values. For instance, they may be more likely to detect self-exploitative modes of thinking and behaving and be more equipped to reject and alter them. Here too the effects on coping with stress are a logical outcome.

Moreover, the interrelation between heightened presence and the increased capacity to reject external demands may arguably also be instrumental to participants' benefit in coping with stress. It is the ability to remain within the specific actualities of any given moment while strongly rooted in one's own judgment that seems to help participants relativize generators of stress. An orientation towards self-care - as well as the analogous behaviors - often ensues by default. In some sense, relativizing external demands, introjections and heteronomous dictates is only possible inasmuch as attention is redirected to the present moment: if one is attuned to one's emotions, thoughts, bodily sensations and the immediate reality of a given situation, there is often no mental space that demands or external and internalized stressors can occupy. For instance, when one is entirely present in a conversation, with undivided attention, it is not likely (and indeed perhaps not possible) that worries and fears will gain much momentum. Likewise, if one is engaged in some work or another with a singular focus on the actual content of the task, without devoting much thought to expectations, standards and consequences, the stress that often results from performance pressure and habitual selfdeprecation is likely to cease. By contrast, an overwhelmed state that is dominated by diffuse and manifold demands from without will likely lend itself to feelings of overload, fears of inadequacy and failure, pressure and erratic loops of ticking off as many tasks and to-dos as possible. One participant describes her attempts at mindful presence and the resulting attitude as follows:

<sup>&</sup>lt;sup>31</sup> German original: "zurückgworfen auf", which literally translates into being "being thrown back on" but can be interpreted as 'being confronted with' or 'come into contact with'.

"I often just think more clearly about what I am doing, or decide beforehand: 'tonight I am not working anymore, tonight I will do this.' Even though I could always be working, I always have something to do. But [I] just take the time sometimes and say 'No, not now', rather than just allow myself to drift. So then I will leave the exams be, so I won't correct them, so [the students] won't get them back tomorrow, that's that. [..] And I don't always manage that, sometimes I still have everything on my mind, and that is neither a state of mindfulness nor of  $Mu\beta e$ , when everything is simultaneously going ratatata. That happens sometimes and then I have to try to get out of [this mode], where everything is simultaneously present somehow: 'I need to do this and this and this.' Rather, [I try to] look at one thing after another more. Now this, and then later that, and this I won't do at all today, I will do something for myself instead." (105)

The reported benefits on interpersonal relations can also be understood in terms of different interactions across mindfulness-related processes. Thus, a sensitized awareness of one's own usual patterns in relating to others may lead to a conscious effort to be more present in an encounter, detach from distracting and distressing influences or reconnect to a preferred attitude. These processes may together result in a different interaction, and perhaps even alter the quality of relationships through increased empathy and acceptance.

"And then [I learned] simply a sort of positive basic attitude towards people, things- so an understanding. Because I mentioned this earlier that I am so sensitive with people who are somehow rude to me or something- simply an understanding that right now this person is perhaps, I don't know, has a problem or something. That didn't cross my mind before, so these- that this person maybe isn't inherently evil, he is going through something at the moment or something. So that revealed itself to me above all [-] ah and another thing: not to judge, that is something that has been with me for a long time in my life and that I am aware of again and again, that I am very, very quick to judge people, so: 'yes, that's an idiot.' period. [..] So I have this image in my head and it's fixed and that's that. And I have the feeling that now I deal with that a little differently." (114)

In a similar interaction, a conscious approach to the values a teacher may hold with respect to his or her profession may fit well with acquired tendencies of acceptance and non-judgment, with palpable impact on classroom situations.

The impact on the interpersonal level may also be partly due to the improved coping with stress. As mentioned above, many participants point to the beneficial influence of self-care on the relationships to others, arguing that a less critical and severe attitude towards oneself results in increased non-judgment towards others. Likewise, managing situations of conflict or acute stress with increased calm and equanimity is also likely to impact other individuals who

are involved in the situation; rather than reacting affectively and mindlessly, individuals may be more capable of calm and non-escalating responses.

The illustration of possible constellations across processes and effects serves to point out that the distinction and classification of separate facets of the MBSR-course is analytically helpful, yet must always be considered a tool to gain deeper insight into the mindfulness-based intervention on hand. It should not prevent a holistic understanding of how the different components as a whole impact individual experience. Furthermore, the contextual influences described above play a crucial role in determining how and when processes encouraged by the intervention can indeed bear fruits. Most importantly, attitudes and mindsets that are compatible with mindfulness-related processes and favorable group dynamics were key contextual factors that shaped the results presented here.

#### 5.7 Difficulties

As mentioned in the Methods section, participants' accounts of their course experience necessarily shows a measure of bias, due to several reasons. On one hand, the interview selection in and of itself slightly favored transcripts of participants who reported at least some benefits simply because these narratives were more elaborate, thus yielding more material for analysis. This bias was compensated to some extent through the deliberate inclusion of more unfavorable accounts, which nonetheless tended to remain sparser in detail and explanation. Likewise, the natural tendency of participants to report at length on positive experiences and only briefly touch on the negative, if at all, constituted another bias inherent in the entire data set. This pattern could be due to social desirability effects or the rapport built with interviewees, but may also result from the participants' own desire to view their experience positively and highlight benefits rather than disappointments. Since all teachers participated on a voluntary basis, it is likely that their general attitude towards the MBSR course is not essentially critical which would contribute to a favorable interpretation and processing of course experience.

In light of the aforementioned, responses to the interview question inquiring about difficulties are of great significance, since they are by and large the only sections where inaccessible or unacceptable components and problems with mindfulness as a concept are narrated. Especially when bearing in mind the often lacking quantitative results, these partial explanations of what went wrong are crucial to a better understanding of how this intervention was received. Therefore, even themes that are described rarely were considered valuable clues

and indications of possible mechanisms and challenges. They are reported here almost in their entirety, even though no theme on its own can be viewed as representative of the entire data set.

The themes described in the following were coded across responses to direct inquiries into "difficulties" that participants may have experienced during the course as well as responses to other questions that indirectly elicited an account of problems or unpleasant components. The latter typically included questions about practice frequencies and general course experiences.

The difficulties that the participants described can be divided into three main clusters: conceptual difficulties, which denote problems in relation to the thoughts and contents of mindfulness, contextual difficulties, which comprise factors that are not directly related to the course yet negatively affected it in some way, and practice difficulties, which summarize problems in applying acquired mindfulness-related skills and insights and transferring the course to daily life.

# 5.7.1 Conceptual Difficulties

This theme entails difficulties that <u>stem from the way individuals relate to mindfulness as a concept and body of thought</u>. Individuals may describe practices they find displeasing, ideas they regard as unfruitful or incompatible with their own views or an overall attitude towards mindfulness that is characterized by a general dislike. All codes in this theme were relatively scarce, expressed by one or two participants each.

### 5.7.1.1 Dislike of Physical Inactivity

The most unambiguous description of a conceptual difficulty was expressed by participants who clearly stated that mindfulness practice was a suboptimal fit for them since it lacked the physical activity and exercise they need in order to best cope with stress. One participant who was forced to quit sports for health reasons stated the following:

"So I told you before that [mindfulness] perhaps isn't, isn't the single best [possibility] for me, because I am simply like that, that I always used to compensate through sports and I definitely miss that. But I just wanted to try this out." (203)

This concern is especially understandable in light of the largely sedentary daily life of teachers:

"I think I work a lot and maybe don't have much free time available, and when I do have the time - and work is usually, it usually takes place sitting down and in class you do move a little but it's actually

not much movement and then I think I would like to move, right? And not a walking meditation or something like that, but I want to run or jump or play a game with others, and so I want to use what time I have differently." (102)

While perhaps this concern is intuitively understandable, the question as to why physical inactivity is experienced as unpleasant remains unanswered. Different hypotheses are possible in this regard. Like participant 203 implies, it may be the positive, active quality of fun and pleasure that is tangibly and sorely missing from mindfulness practice ("It gave me joy to run around the pitch for two hours!"), however it may also be the inability to handle thoughts, ruminations and feelings that one may well be confronted with that renders this approach disagreeable to some. Participant 215 for instance describes her impression of the body scan exercise as follows:

"I can't actually manage [the body scan]. I find it - with my "treadmill" that keeps spinning [in my head]- I lose track. It worked better in the course because [the instructor] kept bringing us back, but with the CD for example, I would no longer listen, I'd be in my own treadmill that goes on and on: 'What am I going to do next?' and then I get up and it didn't get me anywhere." (215)

#### 5.7.1.2 Ambivalence towards the Course

A number of participants reported some measure <u>of ambivalence in their engagement with</u> <u>the course</u>. While these interviewees tended to evaluate their participation positively on a global level, they expressed reservations as well. This included recurring doubts that the course may not be as useful as they had hoped and the impression that not all course elements are equally accessible.

"So for one, when the course began I was in a good phase, where I was feeling really good and had very little stress, and I sort of had the feeling that I don't really need that so much right now. [..] I don't have all this stress anymore, and so I was always a little ambivalent in the beginning. Will I actually get anything out of this? What am I doing here?" (108)

Often, this ambivalence was also manifest in participants' basic acceptance of impulses and notions conveyed in the course but not of the concrete exercises. Accordingly, those participants adopted the involved principles to varying extents, without establishing a mindfulness practice per se:

"So I mentioned that I had the feeling that many of the exercises and approaches were not really for me, but I found other approaches for myself so to speak, or other exercises, and there's a little more motivation there, because these are things that- So specifically, coping

with stress through music. Music is something that very much defines and determines my life. [..] And there, that was one of my earliest encounters with mindfulness, mindful listening or experiencing of music, which in our society isn't really encouraged anymore. Or actually, music is being consumed more and more unmindfully, through the large variety that one has, and everything must be reduced to two minutes and ideally play in the background, and be with you everywhere and at all times- I think this basic availability. And that's why for me- so I would say that mindfulness was in itself- or thinking about mindfulness was an impulse that I can implement in my own way, for instance by saying that I will search for ways to simply enjoy music in peace or something, to cope with stress. So I don't think that I will implement the exercises from the MBSR course as they are but like I said, it's more the impulses from which I can extract other exercises, other habits, other approaches." (103)

Mixed impressions of many of the course components were also evident in participants' evaluation of the main exercises. Very often, certain exercises were met with intuitive dislike or aversion while others were readily adopted. The narratives in this respect suggest a strong individual or even idiosyncratic component, whereby some images and attitudes were incompatible with the participant's tastes and inclinations.

"What I found really hard was only focusing on walking, because I think, I think that it- I can't describe it exactly but I like the image of a mountain for example or a lake or something like that, anything - something that is steadfast is better than this shaky standing on one leg. So when I walk I have this shaky feeling more or less and for me this somehow contradicts what I want to achieve through meditation [..] I had [this shaky sensation] during the walking meditation when I had to concentrate especially on walking, so on the contact of the sole of my feet with the floor or something. That didn't work at all somehow." (114)

Conversely, another participant described the exact opposite, finding the mountain image hard to maintain during meditation.

Participants additionally often stated that they found single exercises too long, especially the body scan, or reported a dislike of exercises that relied on physical contact with other participants. One participant, whose evaluation of the course in general was considerably more negative than all others, also criticized the repetition of exercises throughout the courses.

#### 5.7.1.3 Lack of Attention Anchors

Some of the participants who reported a dislike of body scan exercises described a difficulty in anchoring their attention in their physical sensations, suggesting that a more specific focus could be helpful for mindfulness exercises:

"So with this body check I was- at some point it was too much for me. [..] So I partly just found it too drawn-out, sensing one toe before the other and so on, but maybe I am not so patient or .. But especially during the breathing exercise, the sitting exercise I noticed 'Ok, I am thinking about something again but I can return to my breath' and then that would calm me down, I can think clearly then and afterwards I always felt much better." (227)

As this quotation indicates, it is perhaps the anchoring effect of the breath that allows participants to refocus their attention and disengage from ruminations or intrusive thoughts. Arguably, exercises that lacked such a concrete object but rather invited participants to observe openly were more difficult to carry out and more susceptible to distractions.

## 5.7.1.4 Exposure to Difficult Emotions

Another challenge MBSR might pose could be traced to participants' intuitive <u>disinclination</u> to expose themselves to unpleasant or perhaps even painful components of their experience. As taught in MBSR, a mindful gaze attempts an accepting and non-judgmental observation of the entirety of one's sensations. Passages wherein participants describe that dealing with negative experiences constituted a difficulty suggest that this may be an important factor in understanding why certain notions underlying a mindful practice are sometimes rejected:

"Some of the evenings were a little exhausting for me because we had to deal a little with- especially where it was about experiences that were not so good, to feel those again and put oneself in that position, what feeling one has. And that upset me quite a bit [..] but when I think about it now in hindsight, that was helpful too. So that was a good experience, I noticed how it makes me feel and how I can deal with that." (227)

Notably, in the statement above, the participant describes how she retrospectively finds this exercise helpful. While this is a decisive aspect, it nonetheless remains possible that in the situation, devoting one's attention to a negative state of mind and emotions may constitute an impediment that inhibits individuals from fully engaging with the exercise.

#### 5.7.1.5 Concerns about Ethics and Spirituality

A few passages indicate that participants struggled with the <u>spiritual and ethical dimension of mindfulness</u>, or the lack thereof. In most instances, MBIs face the difficult task of embodying a distinct value system and body of thought that is clearly derived from spiritual/Buddhist roots while simultaneously maintaining a secular and ideologically neutral stance. This inherent paradox can be a source of friction, both inasmuch as MBIs may be regarded as latently and insidiously ideological, or, by contrast, as too devoid of explicit ethical instruction. While this dimension was not central in the at-hand project, the issue was nonetheless raised:

"I found out that I can deal very well with things that come from classical meditation [..] but so this judgment, or this non-judging during meditation, that, how should I say, that didn't really work. There were little things, for instance I noticed when we had a really shaped center during the mindfulness day, and there were like candles in the middle, that was a fixation point for me, where I could enter a sort of immersion. Whereas when I just closed my eyes and did a body scan or other exercises it was a lot harder for me to really reach such an immersion. [..] I find it difficult when things like that, that have to do with meditation and mindfulness and reflection, observing and listening, when they are conveyed in a totally ideologically neutral way, so to speak. So I simply notice, these are exercises or approaches that actually stem from a spiritual area, from different religious currents, or one finds that in many religions but it is always somewhat religiously grounded or anchored in an ideology. And that was a bit difficult for me." (103)

Non-judgment for this participant was evidently somewhat associated with an ethically neutral approach, which he found difficult to accept. Interestingly, at another point in the interview, the very same participant described how he is nonetheless glad of the conceptual difficulties he experienced, since he might otherwise have felt too manipulated. These two rather contradictory statements aptly demonstrate the problem MBIs must address in terms of ethical and ideological positioning.

### 5.7.1.6 Contradiction of Non-Functional Orientation and Stress Reduction

This theme includes references to the *incompatibility of mindfulness as an attitude of non*striving and the explicit objective of stress reduction. The autotelic and decidedly noninstrumental character of a mindful attitude is of particular relevance in the context of  $Mu\beta e$ . Therefore, the obvious (if perhaps only relative) contradiction of an intervention that explicitly targets stress reduction as an objective yet claims to refrain from goal-orientation becomes especially critical. While this apparent paradox is further discussed elsewhere in this dissertation, it is important to highlight that this conundrum constituted a difficulty among participants as well:

"And I thought, there were a few contradictions for me [..] so one thing was this purpose-free<sup>32</sup> practice and nonetheless the whole thing was set against the background of stress reduction. So I found that a little difficult. I kept catching myself at saying 'I have to optimize this exercise now for myself so that it can really reduce my stress.' And I think this is a little bit the trap you fall into." (103)

The issue addressed in this passage constitutes a theoretical problem on one hand yet may also be of concrete experiential consequence to the practice of mindfulness. If indeed an MBSR course attempts to impart a measure of equanimity and non-striving, this aspiration may well hamper individuals who are new to the practice of mindfulness and experience the state of their emotions as a stark contrast to this proclaimed "target". Fixating on the desirability of relaxation and calm and struggling intensely to achieve them could be another mechanism whereby participants misunderstand MBIs. Stated differently, this "trap" may be one way in which MBIs fail to adequately reach participants.

## 5.7.2 Implementational and Contextual Difficulties

This category comprises difficulties that stem from the <u>context and manner in which the</u> MBSR course was delivered rather than the actual principles and concepts of MBSR.

## 5.7.2.1 Impact of Stress Level on Course Sessions

While the effect of a considerable stress level on participants' individual practice of mindfulness is discussed below, it is also noteworthy that an <u>overall busy rhythm and fully exhausted individual capacities impacted the course experience itself</u>. Thus, many participants stated that they sorely missed the time that the course sessions consumed, or that the course appointment was often inconvenient and caused significant stress. Obviously, this frequently meant that participants were unable to fully relax during the course sessions, or spent a considerable portion of the appointment "lying there with heart palpitations" (215), attempting to wind down.

"I have to admit that first of all just time-wise, I missed these two hours per week, so it really put me in a tight spot with the preparations, especially on Tuesdays, and sometimes I caught myself and thought 'Oh no, now I have to get going again' and I stressed out a little but as soon as I was there I was glad to be there." (230)

<sup>&</sup>lt;sup>32</sup> German: zweckfrei, literally: purpose-free, English: gratuitous, autotelic, for its own sake

### 5.7.2.2 Disadvantages of the Group Setting

Many participants describe <u>uncomfortable aspects that arose from the group setting</u>. Thus, the necessity to divulge and share thoughts and emotions with the group was sometimes an obstacle:

"Sometimes it was hard, not just for me, others too, to speak totally openly. You notice that. So I think you sense that about some people who share but still hold back a little. [..] So I also wouldn't somehow-of course, it's confidential and everything but, well, it's still difficult of course, or you still have inhibitions to divulge something personal if colleague xy is next to you." (222)

This sense of inhibition was due to a number of reasons. While some teachers simply found the group too large for more intimate types of exchange, others had trouble with revealing personal, emotional or private information in this setting. Often, participants felt discomfort not because they disliked sharing but rather because they sensed the reservation of others in the group, or when their partner (in dyadic exercises) explicitly expressed his or her wish to remain discreet. Furthermore, a few participants did not mind the exchange per se, but tended to feel overwhelmed by the invitation or at a loss for appropriate descriptions and verbalizations.

A final difficulty with respect to the group setting was mentioned once and did not appear of great importance to the participant in question. This passage stated that the lack of commitment among other course members disrupted the course atmosphere.

#### 5.7.2.3 Dislike of the Location

This theme summarizes passage that describe how and why participants felt encumbered by the fact that the course took place on school premises. Not leaving the school context rendered it somewhat more difficult for some to let go of their daily lives and fully immerse themselves in the course. In the second school, a few teachers were also specifically bothered that they were visible from the window panes and thus exposed to late-staying students. Other participants found the space aesthetically unpleasing or uncomfortable.

## 5.7.2.4 Difficulties with the Manner of Instruction

A few singular concerns were voiced with respect to *the way in which the instructor* conveyed materials and content. One teacher found the amount of theoretical and verbal input on the part of the instructor excessive and would have also preferred less extensive exchange after exercises. Another criticized the relative lack of structure in sessions, while yet another

would have liked more definitive and binding instructions for independent practice. Notably, all of these concerns were strongly relativized and according to participants did not detract significantly from their course experience.

### 5.7.3 Practice Difficulties

This cluster of reported difficulties focuses on *problems that participants encountered in applying the acquired mindfulness techniques and transferring them to their daily lives.*Unlike the conceptual difficulties listed above, passages in this theme indicate that the teachers in question do not find the conveyed contents objectionable in themselves and would indeed like to root them in their routines. Yet for various reasons, they found it challenging to maintain an individual practice. In fact, more than half of all participants described some sort of difficulty in transferring mindfulness to their daily lives. This struggle to incorporate mindfulness in everyday experience was primarily described with respect to formal practice, but often also referred to the challenge of maintaining a mindful attitude throughout daily routines. A number of reasons were listed in this respect.

### 5.7.3.1 Stressful Daily Life

Understandably, a particularly stressful, demanding and busy daily routine or general living situation often left participants without the necessary resources to establish an individual practice. This could mean that they simply were unable to find the time to engage in formal practice, or that they were too depleted and exhausted to do so (causing them to fall asleep when practicing, for instance). Similarly, many teachers found it more difficult to claim the time they need for practicing in the midst of their often busy daily routines without the course appointment as a legitimizing reason. Even when participants managed to practice on their own, they were much more easily distracted by interfering demands and goings-on.

"My problem, if I may say so, is of course translating [mindfulness] into daily life, so practicing. That doesn't actually- or didn't take place for me till now. I am simply, I don't know, I feel too restless. So I have been trying that for a while now in the spiritual area, to sit in front of a candle every morning for twenty minutes, that's often utopian, right? [..] Because I think of course, whether I make any progress depends on practicing. Insofar I would say I could have certainly gotten more out of it but for the normal reality of daily life it seems like that is what I am capable of achieving at the moment." (104)

A stressful context was detrimental not only to formal practice but also to sustaining a mindful approach to everyday life and interactions:

"But I was back in the usual grind very quickly, and I simply noticed I don't have the calm to fully try out the things I learned or newly experienced, to engage with them." (103).

Often, everyday hassles and demands overpowered insights that the participants may have gained. Stated differently, the impulses that the course conveyed frequently seemed ineffective in the face of the relentless "bastion" (104) of daily life, which coerces individuals back into a functional, efficiency-oriented mode.

#### 5.7.3.2 The Lack of a Fixed Setting

Whereas the course provided a time, place and framework for mindfulness practice, many participants described <u>difficulties in establishing their own practice in the absence of a fixed setting</u>. On one hand, the lack of a set appointment or time slot devoted to mindfulness resulted in a weakened commitment to and a de facto de-prioritization of a regular practice. Similarly, the fixed group setting of the course appointments had lent practicing a certain legitimacy and self-evidence; transferring this approach to settings that are largely unfamiliar with mindfulness and not involved in the practice often required particular resolve. The home context was often too heavily associated with a functional, efficient and busy mode to allow teachers to spontaneously remember or resort to mindfulness practice.

"So on the one hand it was a little strange at home. So to lay down in the course that was a certain routine at some point somehow. And we had our space and our blankets and cushions and that was normal. And when I did that the first time at home it was unusual. I had to warn my family first or something, they looked at me funny at first 'What are you doing there?' But yeah, I did that two or three times and simply chose a time when there wasn't anyone there really who could disturb me. And it did work but it worked better [in the course]. So it's maybe something that you need to get into first, if you do it a more often, so that it becomes independent of the place. It was actually more like this, that it was not a problem here in the course with the external conditions, and at home everything was still somehow a little unfamiliar, a little strange [..]. Maybe at home everything is still additionally associated with so many things in your mind that it's not as much a safe space for you as it is here, where I know 'Ok, we're all together here now in this room, we're here for the course and this is my time and my space, and that's simply fixed'and at home [..] there wasn't a fixed appointment, but it was simply like 'Right now is a good time, no one is here now, I'll do that now.' And then I stood there and I somehow had this funny feeling that I am laying down in our living room now, which I never do otherwise, so it was little unfamiliar. And here it was simply clear, that you- the structures were just given: space, time, fixed appointment. That was easier for me, to engage with it, because I somehow also prepared for

it mentally and at home it was more like a spontaneous action or something. Perhaps that's why." (108)

# 5.8 *Muße* and Mindfulness

As described in the introduction to this dissertation, the mindfulness intervention reported here took place as part of a larger research initiative investigating facets of Muße. While Muβe was never explicitly part of the course contents, and while indeed the MBSR instructors rarely referred to it, it was nonetheless always present in the project title and constituted a main question in our interviews. Since one of the underlying assumptions of this project considered mindfulness a gateway to Muße and regarded the latter as a discursive, societally relevant complement of the former, the researchers were highly interested in how participants intuitively and experientially relate the two concepts. Notably, Muße was addressed differently in the two schools. In the first group of participants, two broad questions were posed, including probes and sub-questions: 1) "What is Muße for you?" and 2) "What do you think Mindfulness and Muße have to do with one another?" At that point in the research process, it was considered beneficial to elucidate concepts of  $Mu\beta e$  as well as commonalities and differences between mindfulness and  $Mu\beta e$  elaborately and explicitly. The interviews that were generated in this manner suggested that the extent of probing was perhaps unnecessarily excessive, and that it may be sufficient and indeed advisable to simply address the relationship between Muße and mindfulness (or lack thereof) in one crisp question, so as to allow the narratives to run a more natural course, rather than induce participants to construct lengthy theoretical concepts on the matter. Retrospectively, the two approaches proved comparably fruitful, yet while the initially interviewed population stated explicit concepts of Muße which were then coded semantically and inductively, the second population revealed their notions of  $Mu\beta e$  in reference to the relationship between  $Mu\beta e$  and mindfulness, which necessitated a more interpretative reading of individual  $Mu\beta e$  understandings.

In the following, the main constituent components of individual  $Mu\beta e$  concepts and experiences are briefly described. Subsequently, the way in which participants relate mindfulness and  $Mu\beta e$  to each other is presented.

### 5.8.1 Types of Muße

Analysis of Muße passages attempted to identify central understandings of Muße and highlight their main characteristics as they are actually experienced by the participants (as opposed to more theoretical definitions that draw on historical roots and academic

discourses). This process did not result in a distinct categorization of individual  $Mu\beta e$  concepts but in effect amounted to an attempted 'typology' of  $Mu\beta e$ , grouping similar understandings and experiences of  $Mu\beta e$  under overarching themes. It is worth mentioning that  $Mu\beta e$  as a phenomenon proved to be rather individually distinct. Much like the larger research center assumes and indeed often concludes,  $Mu\beta e$  seems to be composed of a number of overlapping domains of experiences, states and activities. As a consequence, no single facet of those described in the following is expressed by a vast majority of participants. Qualitative analysis must content itself with the fact that the experience of  $Mu\beta e$  is inconveniently heterogeneous and its different dimensions often overlapping.

# 5.8.1.1 Muße as a State of Self-Determination and Liberation

"What it takes [to be in  $Mu\beta e$ ] is most certainly inner freedom, and a sense of who you are, what you need, what you want, where you're going, where your own path lies and what your own inner voice is." (128)

This broad theme is the most central of the described  $Mu\beta e$  dimensions. Generally speaking, descriptions in this theme point to a sense of autonomy that is generated by the absence of pressures to perform, external demands and expectations, achievement strivings, time constraints and the functional, paced mode of daily life. In often rather urgent narratives, this theme tended to coincide with criticisms of typical daily routines (which was often sketched as the opposite of  $Mu\beta e$ ) and frequently contains ex negativo conceptualizations of  $Mu\beta e$ . Passages in this category predominantly revolved around considerations of time as a decisive factor in the experience of  $Mu\beta e$ .  $Mu\beta e$  is either associated with a complete absence of appointments and clocked sequences (as represented by alarm clocks, schedules, etc.) or with the absence of time pressure with regard to a given task or activity. This availability and free allocation of time contributed to a described sense of self-determination. More often than not, time perception and pressure were the manifestation of demands and expectations that are likewise incompatible with  $Mu\beta e$ , whether these demands are posed from without or reflect internalized standards and pressures (which are likely to "completely destroy  $Mu\beta e$ " (108)):

"It starts right away in the morning, with my calendar, the motto being 'this has to be taken care of, this still needs to be done, that needs to'so simply this time pressure, or demands. Someone wants this, the next person wants that, and "can you.." and "give me..", so these expectations or these demands, or also your own demands, if I know I still have to correct this and I have to prepare that, and I do not have the possibility in the first place to simply sit down in front of the fireplace or go for a walk because I need to take care of this and this and this. So that's exactly the opposite [of  $Mu\beta e$ ]." (108)

Accordingly, participants describe states of  $Mu\beta e$  when they feel like time constraints and demands are either entirely absent or not predominant in their momentary experience. Often, participants relate such states of  $Mu\beta e$  to a distinct sense of spontaneity and non-striving, which obviously can only occur in the absence of any demands. In such passages,  $Mu\beta e$  is experienced as marked detachment from goal-orientation or functionalized activity, which constitutes another dimension of liberation in participants'  $Mu\beta e$  concepts. In the absence of a specific striving or driving purpose, participants can "simply allow [experiences] to develop" (119) in a non-scripted, open and spur-of-the-moment fashion:

"That's difficult, because I think, I don't know if I have been in *Muße* before [..]. Maybe during the day of silence, but else .. Because I simply knew on this day I don't have to do anything, or achieve anything, nothing at all, but I can simply be the way I am and simply let the experiences flow in. But in daily life I don't manage that. I do have moments of *Muße* in my day, for instance when I, I don't know, take a walk in the area and the weather is like it is now and I look at the.., I don't know, I simply walk around without a goal, without much of a goal, and just follow my train of thoughts or something. So I feel something very very warm, a very beautiful feeling simply. But that this should remain throughout the day-[..]" (114)

In more dramatic expressions of this mode of freely unfolding  $Mu\beta e$ , a few participants described spontaneous trips that they embarked on alone and the associated sensations of freedom and sovereignty. Participants who viewed  $Mu\beta e$  as a fundamental alternative to the way daily life is organized and functionalized were likelier to associate  $Mu\beta e$  states with experiences of authenticity, fulfillment and congruence, or consider it a very personal domain (where one for instance may "experience meaning" (104)):

"[Muße for me] is very multifaceted, hm, very.. everything, everything together actually. In all cases time, allowing discovery and freedom, concentration and devotion, very personal affirmation, simply being here, enjoying and being attuned to myself<sup>33</sup>, and sort of in- sort of genuine, some genuineness too, and yeah, exactly, among other things, I could carry on." (128)

### 5.8.1.2 Muße as Leisure, Pleasure and Recreation

By contrast to the narratives cited above, a second cluster of passages described  $Mu\beta e$  without much emphasis on the criticism of functionalized daily life and external or internal pressures. These narratives depicted  $Mu\beta e$  as pleasurable experiences, breaks or rest from work and leisure activities and hobbies they enjoy. In this context, participants often dwelled on the legitimacy of  $Mu\beta e$  as a necessary and important means to regenerate strength and work

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<sup>&</sup>lt;sup>33</sup> German: "bei mir sein", literally: being with myself

capacity. Even though the focus in these passages was not on the absence of constraints and demands, most descriptions of  $Mu\beta e$  nonetheless stipulated a relaxed and calm state (for instance in the form of long and expansive breaks). Typical leisure activities that were associated with  $Mu\beta e$  included reading, enjoying the outdoors and contact with nature as well as taking walks or simple idleness. Often however, this idleness was distinctly described as "filled" (105) or particularly enjoyable, rather than a listless or unsatisfying indolence. A rather typical  $Mu\beta e$  description in this category is given by participant 224:

"For me  $Mu\beta e$  is really very much associated with nature, to-We're so lucky as to have a garden, so to really just be in the garden and not necessarily do anything, like planting or something, but really just be there, not even read necessarily, but really, I really do that, just sitting there and enjoying that I can be there. That I can feel the sun and look at my flowers or something. But  $Mu\beta e$  can also, I think  $Mu\beta e$  doesn't have to always take place in resting, I think  $Mu\beta e$  can also take place in movement, for instance. So I can also have  $Mu\beta e$  while taking a walk- so I can go for a walk hectically and somehow not notice my surroundings but I can also feel  $Mu\beta e$  during a walk. So that also depends on your inner attitude again." (224)

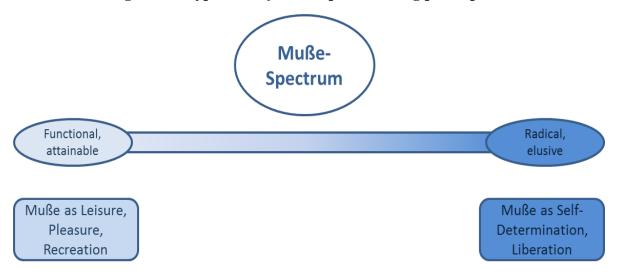
It is perhaps not surprising that when concepts of  $Mu\beta e$  do not highlight external demands and pressures very strongly, individual attitudes become more relevant to the experience of  $Mu\beta e$ , as indicated by the quotation above. Notably, rather than depict daily stress and demands with accentuated aversion, narratives in this theme repeatedly described  $Mu\beta e$  as an adequate way to regenerate capacities for work, which in turn highlights its irreproachability and legitimacy.

"Yes that's exactly it, this course essentially legitimized  $Mu\beta e$  again, the  $Mu\beta e$  to take time for yourself, to plan a break. Not because you're lazy or do not want to influence the world, but essentially in order to develop the potential to get into it again. That that's just as much a part of it." (119)

Perhaps because  $Mu\beta e$  as described in this category requires less radical conditions to occur, participants do not consider it as rare and precarious a commodity as in the formerly outlined theme. Rather than regard  $Mu\beta e$  as "a gift" that cannot be achieved through the "self-optimization frenzy of our society" which "searches for strategies with guaranteed success" to achieve  $Mu\beta e$  (103), it is an agreeable but not uncommon state that can take place in the midst of daily routines, or for a few hours after a hard days' work.

Figure 18 illustrates the two overarching prototypes of *Muße* as opposing poles on a spectrum to emphasize that actual individual *Muße* concepts may lean more towards either end, but also combine elements from both poles.

Figure 15: Types of *Muße*-conceptions among participants



## 5.8.2 Muße and Mindfulness: Constellations

Given the centrality of the relationship between mindfulness and  $Mu\beta e$  for this project's rationale, participants' views and experience of whether and how the phenomena may correlate were of explicit interest. The assumption that mindfulness and  $Mu\beta e$  are related, that indeed the former may lead to the latter, may be theoretically sound, yet is thus far largely unempirical. Aside from inferential statements that can perhaps be hypothesized based on the quantitative results, the passages in this respect constitute the main direct first-person data addressing this question. Participants were asked about the connection between the two concepts in a particularly nondirective manner, so as to allow for all possible relationships, or lack thereof, to emerge in the narratives. It is no surprise therefore, that different views on the matter were ventured.

### 5.8.2.1 Mindfulness as a Gateway to Muße

While no participants stated that mindfulness necessarily or always leads to  $Mu\beta e$ , most indicated that mindfulness can enable experiences of  $Mu\beta e$  or render them more probable in one way or another. Different mechanisms were proposed to this effect that often mutually reinforced each other.

## Mindful Self-Care Engenders and Legitimizes Muße:

When  $Mu\beta e$  was viewed as a mode wherein individuals are encouraged to tend to their own needs and inclinations, this was related to a mindful focus on self-care and self-kindness.

Some participants describe how being able to consider  $Mu\beta e$  experiences as a way of being mindful of themselves has relieved them of their "guilty conscience" (108).

"Just because the attitude changed – I think that's the prerequisite right? If you simply don't have his attitude you'll never- I think  $Mu\beta e$  is sort of a second step for me, right? But if I'm rotating and stressing myself then  $Mu\beta e$  is virtually like a fruit that I can never reach. But if I take better care of myself, if I become more serene and if I deal with myself more lovingly, then the basis is prepared, and then I can really go about the things of life with  $Mu\beta e$  or with more  $Mu\beta e$ . That's what I would say." (104)

Similarly, several participants recounted a sensitized awareness of their own need of and capacity for  $Mu\beta e$  through a mindful approach to their daily lives and well-being. One participant describes this development as follows:

"I do believe that only mindfulness can help you reach  $Mu\beta e$ . So I think that recognizing what is going on with you opens the door to doing whatever it is that may mean  $Mu\beta e$  for you. And I think the two belong closely together. And therefore I think that this course is one way to get there." (128).

Interestingly, the same participant not only describes a heightened awareness of her need for  $Mu\beta e$ , but also a clearer sense of her "capacity" for  $Mu\beta e$ , which implies that  $Mu\beta e$  may be considered a valuable asset or skill rather than a mere privilege or luxury.

### Relativizing and detaching from Stressors and Expectation enables Muße:

An increased propensity to view stressors and demands differently due to a mindful attitude was described to be conducive to experiences of Muße by a number of participants. In this context, deprioritizing obligations ("So then I will simply not correct the exams, so [the students] won't get them back tomorrow, and that's that!" (105)) or assuming a different attitude towards daily hassles and strains rendered individuals more capable of recognizing and enjoying moments of Muße:

"And what I am also more aware of is that my own, so that my own experience of  $Mu\beta e$  has a whole lot to do with me, and not just external things. So I cannot avoid that people are somehow rude or something, I simply cannot avoid that, but I can change my attitude toward that. This insight has something to do with  $Mu\beta e$  for me because then I can be much more relaxed when I know I have the possibility to react in this or that way, so I don't have to let this ruin my day. And then I have the possibility to integrate that in my day a bit, to simply really enjoy these moments [of  $Mu\beta e$ ] without getting hung up on my thoughts- what just happened or something. So I have the feeling that these moments were there before too but now I can really recognize them." (114)

The relationship between stress and  $Mu\beta e$  was also expressed in narratives relating more serenity and calm to an increased likelihood of experiencing  $Mu\beta e$ , such as explained here:

"So perhaps because the course furthered this sense of inner calm a little,  $Mu\beta e$  can now grow better, or  $Mu\beta e$  is more possible, more activities in  $Mu\beta e$ ." (104)

### Mindfulness engenders Muße through Presence, Openness and Awareness:

Participants who felt that mindfulness contributed to a more conscious perception of the present moment and of their situation and surroundings, considered this approach to daily life favorable to  $Mu\beta e$ . In the respective passages, teachers described how increased awareness and an active perception of the immediate reality are likely to reveal pleasurable aspects that can catapult them into moments of  $Mu\beta e$ . Examples include enjoying free time slots or waiting periods rather than feeling frustrated with them, perceiving more beauty in details, or taking active pleasure in observing students:

"So you can interpret everything in different ways, so I can, I don't know, pass by a tree in bloom, that could maybe give me a moment's joy, I can rush past it or I can look at it and then I can maybe, I don't know, draw strength from that." (114)

Similarly, enjoyable activities (which often constituted *Muße* for the participants) were experienced more vividly if approached mindfully, i.e. with heightened consciousness. In a related mechanism, a few participants report that mindfulness renders them more fundamentally open towards "oneself but also towards one's surroundings" (120) because regarding oneself with kindness can generate energy and resources for engaging with the world:

"So that's why I thought the course was great, because it really started with the person, and with mindfulness towards yourself, living a friendliness towards yourself. And that opens up resources and it opens, let's say, the heart, right, and the eyes for the beautiful things with which you can then engage, so in order to be capable of  $Mu\beta e$  you first need to go through this opening on the inside or as a person, where you suddenly don't think you need to conform to any fears or anxieties or pressures." (120)

## 5.8.2.2 Muße as a Facilitator of Mindfulness

Far fewer participants perceive  $\underline{Mu\beta e}$  as a prerequisite or facilitator for mindfulness. In those narratives, the relationship between the two concepts is reversed: it is the relaxed and calm state of  $\underline{Mu\beta e}$  (as the opposite of stress) that can allow for a mindful attunement to one's

surroundings and interactions, since then the necessary mental resources and time are available.

"So I think that you first need to have this  $Mu\beta e$  in order to be mindful. So I can't be totally stressed or something and then say 'but now I'll be mindful'. So therefore I think you need a certain  $Mu\beta e$  in order to come to, and then actively perceive the mindfulness or act accordingly" (222)

Similarly, one teacher describing  $Mu\beta e$  as a de-functionalized mindset and an open process-orientation considers this attitude as necessary for mindful interactions with others. Especially when dealing with students,  $Mu\beta e$  diverts the focus from single-minded goal-attainment and learning outcomes and thus enables mindful interpersonal encounters.

Figure 19 depicts possible constellations of  $Mu\beta e$  and mindfulness as described by the participants.

Self-Care and its
Legitimization

Attitude of Presence,
Awareness and Openness

Relativizing and detaching
from Stressors and Demands

Muße may generate capacity and
resources for mindfulness

Figure 16: Constellations of  $Mu\beta e$  and mindfulness according to participants

#### 5.8.3 Commonalities and Distinctions

Often, the relationship between  $Mu\beta e$  and mindfulness was not described in terms of causality but rather in terms of commonalities and differences. Most participants were in fact directly asked about possible <u>similarities and distinctions between the two phenomena</u>.

#### 5.8.3.1 Commonalities

The most commonly reported similarity between  $Mu\beta e$  and mindfulness is a quality of presence. Participants repeatedly describe the relationship between the two experiences as "being there" or "being in the here and now". In the context of  $Mu\beta e$ , being in the present moment generally entailed gratification and pleasure. Mindfulness, as attending to pleasurable present experiences, is part and parcel of  $Mu\beta e$ :

"When you are doing something in  $Mu\beta e$ , painting something beautiful, you are living in the moment and mindfulness is also exactly that, that you pay attention what, how you are feeling in that moment or being there in the moment." (230)

Presence is also implied as a similarity in  $Mu\beta e$  accounts that expound a joyful attention to details and surroundings (for instance nature) and complete immersion in pleasurable activities. Yet other narratives indicate presence as a shared feature in their mentions of "conscious experience".

Further commonalities that were mentioned by only one or two participants each include a sense of <u>calmness</u> as inherent in both <u>mindfulness</u> and <u>Muße</u>, reflection in the absence of <u>strict</u> goal-orientation, using time resources for own needs and desires, and a non-judgmental <u>approach</u>. A compilation of several commonalities between <u>Muße</u> and mindfulness is found in the following quote:

"Well,  $Mu\beta e$  actually conveys something very positive, it precisely means-  $Mu\beta e$  hours are hours where you precisely don't follow any particular goal or do something in order to follow a particular goal, but you're simply there for once, in the here and now. And that's what mindfulness is about as well, this being here through the breath, that's how I would view the connection. [..] and without judgment, above all things, without judgment, sorry, yeah.. (I: So you mean in  $Mu\beta e$  or in mindfulness? Or-)Both. That's the connection. So when I am engaged in  $Mu\beta e$  I have- then I am just hanging out, I do, I have no- I just do what I feel like doing right now and somehow I don't have the feeling that if I don't do this then in turn I won't manage that, but things just flow. And when I am mindful then this also draws on that first and foremost, to let things come and not judge right away but to somehow look at things first and, yeah, pause." (211)

#### 5.8.3.2 Distinctions

Similarities notwithstanding,  $Mu\beta e$  and mindfulness were also typically considered largely distinct phenomena. In this regard,  $\underline{Mu\beta e}$  was mostly depicted as an experiential quality while mindfulness tended to be regarded as an overarching attitude. This distinction was often expressed rather searchingly, with participants referring to  $\underline{Mu\beta e}$  as "an activity in the sense

of engaging with something, actively contemplating something that is beautiful" (120), a focus on a specific moment/sensation, a fulfilled way of spending leisure time, or even a state of happiness. Mindfulness on the other hand was described a broader attitude that can encompass work or unpleasant experiences and that entails a way of relating to oneself and one's surroundings generally. The following quote contains one such attempt to capture the distinction between  $Mu\beta e$  and mindfulness and illustrates the elusiveness of this difference:

"Because I see mindfulness, if I disregard the life attitude for now [..] [in mindfulness] I learn how I can grow more open to myself or more open to my surroundings. But practically- then I'm ready, it's like the vessel [I mentioned] before, and this vessel can then be filled with new experiences, and that is  $Mu\beta e$ , this filling in, and that which whatever I filled in will do with the empty vessel, right? The constellations that can then result." (104)

A few participants described another differential feature which, albeit not common, is particularly relevant for the discourse and debate around  $Mu\beta e$ . Specifically, mindfulness was considered compatible with functional and demanding everyday life, while  $Mu\beta e$  required time onto its own and was harder to integrate into everyday routines.

Less frequent attempts to disentangle the two concepts depicted *Muße* as passive enjoyment while mindfulness entailed an active effort or similarly conceived of *Muße* as a matter of relaxation and calmness while mindfulness actively pays attention to specifics over and beyond one's well-being.

## 5.9 Feedback from Participants of the Third School

As mentioned in the methods section, feedback sheets served to provide at least some insight into the specific course processes at the third school, the absence of qualitative research questions and interviews notwithstanding. In the following, the central messages of the feedback sheets are presented and later complemented by the school principal's comments.

## 5.9.1 Feedback Sheets

Out of the 32 teachers who participated in the course at the third project school, 30 provided short written feedback regarding their course experience. A summarizing coding process of this material yielded two central areas: Course Benefits, describing the various positive effect that participants noted, and Course Difficulties, spanning course aspects that participants found unpleasant or problematic. They are described in the following.

#### 5.9.1.1 Course Benefits

Statements regarding course benefits are particularly important inasmuch as no other indicator exists with reference to participants' overall perception of the course. Since quantitative results suggest little to no impact, these comments are the sole support for the assumption that some participants may have nonetheless reaped benefit. Most participants who described the course as beneficial mentioned either the instructor's competence or the presence of colleagues as positive influences on their course experience. This is in line with the importance of these contextual factors in shaping course perception and benefits, as was found for the two other schools. The comments on course benefits can be divided into *Positive Global Evaluations* and *Calmer Daily Life / Coping with Stress*, thus echoing some of the results reported for the other two schools.

#### Positive Global Evaluations:

This theme encompasses comments that describe the overall course experience as positive and worthwhile, whether or not this evaluation is elaborated in some form. Most statements coded here did not include elaborate explanations, however if positive evaluations were complemented with more precise descriptions of beneficial components or put in perspective through criticisms, these components were captured as separate themes. 17 of the 30 comments regarded the course as generally beneficial. Typical global evaluations used expressions such as "I profited a lot from learning meditation techniques." (310) or "For me personally, participating was profitable. I will continue to deal with this topic and stay in touch with mindfulness" (314).

## Calmer Daily Life / Coping with Stress:

Several participants found that the course contributed to a general sense of calm and equanimity. This effect ranges in impact from the tendency to simply "switch off" (311) more in everyday life to feeling more "more balanced, not as restless as before" (305). One particularly powerful statement indicated a lasting resonance:

"I can often use the body exercises in everyday life and the cognitive process has brought about a more life-affirming and equanimous attitude in some ways. I grew more mindful and I'm grateful for this gift, which will surely often prove useful." (327)

In two instances, participants specifically mention an improved ability to handle stressful situations and phases as an outcome of their course participation: "The course nonetheless influenced my life; in difficult situations I pay more attention to my bodily sensations" (328). This participant reports a concrete benefit in taxing situations; the reference to the increased

awareness of sensations suggests that self-care and awareness as described in the main qualitative results may have been relevant mechanisms in this case as well. Similarly, another participant states that the course inspired ideas how to cope with stress "without completely losing myself in it" (328), which could be interpreted in terms of the dis-identification and distancing processes discussed above. One feedback comment was especially elaborate:

"The course experiences or what I learned for myself in terms of relaxation techniques and especially strategies for 'mental' relaxation/rethinking exceeded my expectations by far. The course came at a right time in my life for me personally - I am impressed by how much it is possible to question and positively "invert" cognitive structures through focused impulses - [The course instructor] took very good care of us and gave us many thoughts and impulses that will continue to unfold for a long time." (326)

While the exact nature of the benefit that this participant experienced remains relatively vague, the comment nonetheless clearly highlights the essential influence of contextual mechanisms: the personal life context and the instructor made it possible for this participant to engage with the course's central concepts in a fruitful manner.

## 5.9.1.2 Course Difficulties

Much like the aforementioned positive evaluations provide the only indication that the course may have been helpful to at least a portion of participants in some way, the course difficulties that are described in the individual feedback sheets serve as the sole explanation of why the course evidently yielded poorer effects in this school. Indeed, almost half the comments revealed a measure of dislike of one or more aspect of the course. Drawing once more on the central themes described for the first two schools, the difficulties can be clustered into conceptual and contextual difficulties.

### Conceptual Difficulties:

Perhaps the most obvious conceptual difficulty was a clear sense of skepticism towards mindfulness as a general approach. This was expressed in circumscriptions such "this path does not really suit me" (325), "not my world" (316) or "not my thing" (313). Unfortunately, these statements remained short and non-descriptive; however the comment below may offer some indication as to the source of these impressions:

"I was bothered by the candle and the napkins in the middle of the room, that struck me as forced and exaggerated. Also, I found having to sit on a chair because of knee problems unpleasant. I often didn't know what to do with the meditation. I thought it was nice to see the colleagues in an unusual context, to learn more about them. Overall,

I'm probably not susceptible to this type pf meditation because it partly strikes me as too "esoteric" and not concrete [practical]<sup>34</sup> enough." (307)

This passage touches upon several of the categories described for the other schools, such as ambivalence towards a perceived spirituality of course contents and a dislike of physical inactivity. Evidently, more participants in this school were not able to find an intuitive access to the contents presented in the course and remained reluctant to fully engage with the approach. This was also apparent in repeated comments stating that course concepts could not tangibly take root in daily life.

A less central conceptual problem was expressed by two teachers who had hoped for more immediate relevance and applicability of mindfulness concepts for the school context. On a related note, two teachers remarked that the overall objective of the course was not clear. It can be argued that in some cases, the intuitive dislike of mindfulness concepts resulted in part from a suboptimal explanation of course objectives and central notions. The most vehement negative feedback in fact combines several conceptual objections:

"Before the course, I expected it to be something different than it turned out to be. For me [the course instructor] was not prepared for the course: I was very irritated when the sheets/summaries he handed out "had" to be read by him first before he then "explained" them. My time is too precious for that. Also, the relevance for schools was completely lacking! I did not get any impulses / motivations / new inspirations / ideas for my work at school. Compared to the supervision groups that took place here at school to date, the course did not give me any benefit! If I had had to pay for the course personally, I would have been very upset. I was still present at every session and tried every time (consciously and attentively) to engage with the course. The images / exercises /.. that [the course instructor used] did not appeal to me at all. [..]The goal / ideas /.. of mindfulness did not become clear to me during the course. I can do little with it, even though I don't consider myself an unmindful person otherwise." (301)

This participant mentions unclear course objectives, disappointed expectations and unappealing exercises as central hindrances that prevented any benefit from the course. She also touches upon several contextual difficulties that are discussed below.

## Implementational and Contextual Difficulties:

As the passage quoted above illustrates, it is often the interaction of implementational problems and conceptual disinclinations that ultimately may render the course inaccessible

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<sup>&</sup>lt;sup>34</sup> German: "handlungsorientiert", literally: action-oriented

and unbeneficial at large. As mentioned previously, this emphasizes the importance of factors that are not necessarily mindfulness-specific in understanding when and how MBIs can work. The comments provided by this school's participants include contextual difficulties with respect to a) the manner of instruction and b) the group setting, - again mirroring some of the themes that proved relevant for the first two schools.

While the instructor and the manner of instruction were also evaluated favorably by several participants, a number of difficulties were nonetheless reported. Several teachers found the amount of verbal input both by the instructor and by other participants too extensive, and would have preferred "more doing than talking" (307). One teacher is an exception in this regard and would have preferred more time for exchange and more detailed instructions.

The group setting was likewise perceived as an agreeable context by many, yet a few found it difficult to share with the group. Two particularly important factors may have contributed to an overall negative impact of group dynamics on course experience: the presence of the principal and the "open rejection of course contents by some by some of the colleagues" (332) participants. While these motifs were not mentioned often, they provide valuable pointers to disruptive elements that in all likelihood negatively affected the course.

Other contextual factors that were mentioned once each and that taken together are likely to have had a significant impact include lacking time resources, dislike of the location and the impression that homework was unrealistically time-consuming. Participant 323 aptly illustrates the importance of context in the following comment:

"I would indeed be interested to find out if the filling out [of questionnaires] reveals a difference before and after the course, because personally I have the impression that my quality of life<sup>35</sup> has not changed much due to the course but is rather influenced by external factors." (323)

#### 5.9.2 Interview with the Principal

The interview with the principal of the third school confirmed and contextualized many of the indicators extracted from the feedback sheets. The themes from this interview are sketched below, yet should be interpreted with caution since they often represent the principal's opinion of how others interacted with the course.

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<sup>&</sup>lt;sup>35</sup> German: Lebensgefühl; Literal translation: Life-feeling

#### 5.9.2.1 Course Benefits

In terms of course benefits, the principal herself evaluated the course very positively on a global level, yet describes little impact on her daily life or well-being. Rather, the course sessions in themselves were viewed as a time for relaxation and calm. Beyond the course sessions, she considers an occasionally more attuned awareness (for instance during meals at work) the main palpable impact:

"Small things are present, so we - it started with chewing this raisin and then on the mindfulness day also this eating in silence and perceiving consciously - I often come across these things in passing, so when I make myself some cereal and eat by the by at my desk, then I say to myself "At least look out into the greenery and chew properly, and realize that you're eating something, and not so heedlessly [..]"

While this effect may hint at self-care and awareness, it remains moderate to weak in impact. Similarly, mindfulness effects that the principal considers important for the teachers staff as a group and the school setting at large remain theoretical, with the exception of a closer "connection" to other course participants.

## 5.9.2.2 Course Difficulties

When asked about less favorable course perceptions among other participants, several informative themes emerged. According to the principal, a number of factors contributed to the continued skepticism and repeated criticisms of some teachers.

# High Expectations and Goal-oriented Approach

Dwelling at length on the demanding nature of teaching as a profession and the increasingly heavy load on teachers, the principal pointed out the particularly acute stress levels and time pressure among her staff. In her opinion, many teachers who experience acute job strain approached the course with high expectations to alleviate stress. This concrete expectation resulted in a very goal-oriented attitude throughout the course that was quickly frustrated if no immediate impact or result materialized. She describes this impatient approach to the course as follows:

"This 'What am I getting from this? So I am sitting here and I am investing my time and - WHAT? I know this already, go on, go on, what's next?' So something like that, results-oriented: 'This needs to be done, I get this out of that, and this out of that.' So for a few maybe - so for one colleague in our course especially, she's such a go-getter who always wants to work out all concepts real quick and see the results at once and so on. And that wasn't - or if something was repeated: 'We already did that, now this again, there should be something new on the agenda now'. Or also because [the course

instructor] is very calm and very slow, so [the teachers] would just wish 'Aww, can't this move along quicker?'"

In a related vein, the principal argues that the stress that many teachers are subject to also prevented them from investing time and effort into mindfulness:

"I think we have an absolute time problem. And that is a big hindering factor I think in the integration [of mindfulness]. We have much too little time or don't want to take the time."

## Exposure to Difficult Emotions:

Another observation that the principal shared related some teachers' reservations about mindfulness to the confrontation with negative emotions or difficult inner processes throughout the course

"So if throughout your life you're not in touch much with yourself, then it was - I think things did surface and this was not the right place to work through them. And then you'd notice in these exchange rounds: 'Uh-oh, there is something there with someone, there's a problem hidden there'. And this would be hinted at but also no one can take care of it and then this is maybe frustrating for that person, because something is touched upon that she would have to take care of herself - 'At home the harmony is off, I always have to struggle with my husband when I want to go to this course because he does not want to take care of the kids..' And then this course is just a signal of what is fundamentally going wrong or something. And then in that moment there was no solution, and if you want to make things easy for yourself you attribute that to the course and say 'Stupid course, only eats up my time but I'm not really getting anywhere.' But in reality it's something else. And I think something like that happened occasionally, that you somehow hoped for the cure-all."

## Group setting

From this participant's' point of view, the group setting was generally a positive aspect of the course, since it created closer bonds among participants. However, her descriptions suggest that the group dynamics were colored by a few teachers' unwillingness to "detach from their criticisms[..]". Bearing in mind the feedback noted by a few teachers, it stands to reason that the teachers who found it difficult to accept the course's notions influenced the group atmosphere with their reservations. Moreover, the principal remarked that not all teachers were equally comfortable in the group setting:

"And then the atmosphere was good at times, and other [teachers] were a little apart and kept more to themselves, so I noticed that some are simply sociable and enjoy being with each other and others find it hard and kept to themselves a little."

Overall, the principal's account confirms some of the difficulties reported in the feedback sheets, especially the conceptual difficulties and palpable skepticism of some teachers, and suggests possible explanations. It is noteworthy that these observations refer to the course offered to the intervention group; the possible relevance of these themes for the quantitative results is addressed in the discussion.

## 5.10 Summary and Preliminary Discussion of Qualitative Results

The interviews analyzed as part of this dissertation offer valuable insight into several aspects of school-embedded mindfulness for teachers. In the following, the central findings extracted from the interviews conducted at the first two schools are summarized and discussed<sup>36</sup>. Wherever applicable, these finding are complemented by feedback from teachers at the third school. The interviews with the two instructors yielded a valuable perspective on many of the extracted findings and are also addressed in this section.

In terms of mindfulness concepts, participants conceive of mindfulness as primarily a) self-awareness, self-care and self-compassion, whereby mindfulness is a self-related practice that contributes to a healthier and more wholesome way of dealing with one's resources and stress; b) presence, whereby the focus of mindfulness lies on connecting to the current experience and c) acceptance and awareness, whereby participants emphasize a set of values and qualities as crucial to mindfulness rather than a technique to cope with stress or a modality of being.

These concepts are echoed in the mechanisms and effects reported by the teachers, yet are not identical with either, indicating that the intellectual or conscious mindfulness concepts may only partly capture the way the intervention worked or the impact it was associated with. When the instructors were asked about the concepts they attempted to convey, both stated similar notions of mindfulness that highlight its attitudinal nature and the importance of self-kindness and acceptance. They do however concede that it is unlikely that each participant individually grasps the entirety of mindfulness through the course. Rather, participants will tend to choose a focus that is concordant with his or her needs and susceptibility.

The central processes and mechanisms that the analysis extracted comprised a) awareness and insight, which spanned domains of performance pressure, needs and limits, patterns and behaviors, as well as priorities and values; b) presence, which mirrored the explicit concept of connecting to the present moment in further detail and with greater implications; c) distancing, which generally refers to participants' ability to detach from stressors and relativize their significance and relevance; and d) non-judgment, acceptance and self-compassion, which is related to the explicitly stated concepts of acceptance and awareness but places a stronger focus on the qualities and consequences of treating oneself and others with a spirit of empathy and understanding. One very common practice that was often inseparable

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<sup>&</sup>lt;sup>36</sup> An integrated discussion of both quantitative and qualitative results with a view to existing theory and empirical findings will follow in section 6.

from the described processes involved an awareness of the breath as a key factor that can refocus one's attentiveness, establish presence and help detach from distressing situations. Breath-oriented exercises and gestures were thus a common denominator of most processes and stand out as a simple yet remarkably meaningful component. A few of the comments from the feedback sheets collected in the third school suggest that awareness and self-care may have been meaningful processes for those teachers who report some benefit, yet remain few in number and cannot be considered sufficiently strong evidence.

The mindfulness processes that the teachers reported are largely in line with the instructors' understanding of how mindfulness may work. The instructor of the first project school defines mindfulness as an overall attitude that is characterized by sensitized awareness and that combines both a healthy distance to one's surroundings and an empathic, ethical engagement. Her stated mindfulness concept thus touches upon elements of distancing and presence. Nonetheless, the profundity and scope of this mindful attitude are not necessarily echoed by all or most participants. In the second expert interview, the instructor stated that a mindful attitude can enable individuals to notice their automatic reactivity (awareness and insight) and then tolerate experiences without immediately reacting on the automatic impulse to avoid unpleasant sensations (distancing, acceptance):

Instructor 2: "So one part I think is that you notice that we react with automatic patterns. That's one part. And the other part is that I can take more time to deal with pleasant or unpleasant sensations, and without primarily — so I don't have to scratch immediately when it itches. Rather, I can observe how the itch changes and I don't have to follow this impulse. If I do that I discover something new. And this attitude is so different [..] from what we are used to .. That takes time right? "This is unbelievable, why do I have to deal with this" [..] And this [attitude] dissolved a little into a kind of "Let's see.". [..] So that means it's actually is confrontational work, right, it's a matter of confrontation. That's how I see it in all cases, that's how I try to convey it."

Many of the processes that the participants describe can be understood as in-depth descriptions of emotion regulation efforts. Gross (1999) postulates five categories of emotion regulatory processes: situation selection, situation modification, attentional deployment, cognitive change and response modulation. The first and second category, situation selection and modification, are arguably better identified on a behavioral level and can indeed be inferred from the self-care and coping effects further addressed below. Attentional deployment, i.e. the active direction of one's attention to or away from specific aspects of a given situation mirrors presence and distancing tendencies described here. Similarly, cognitive change, or the appraisal of a situation and its implications, can be assumed to be

part of awareness and insight as well as distancing processes. Finally, tendencies towards distancing and acceptance, non-judgment and self-compassion represent facets of response modulation, i.e. actively influencing one's reaction to a situation or stimulus. While interpreting the processes identified in the present interviews in terms of emotion regulation may prove useful in relating our results to wider research bodies (see also section 6.2.), we believe that this should not replace a more fine-grained understanding of the actual processes that exceeds the often vague terminology found in the literature.

Contextual influences were of notable significance since arguably, other mechanisms would not have been possible in their absence. Specifically, concurrent influences (such as stress level and group dynamics) or attitudes (such as a religious approach or a mediation-inclined stance) emerged as major determinants of whether mindfulness-related concepts were able to take root and speak to the individual teachers. Indeed it appears likely that mindfulness can only ignite developments and produce effects if the individual in question can relate it to a personal value, conviction or other growth processes he or she is involved in. In the expert interviews, other contextual processes, such as group dynamics and the instructors' role were also described as central. Feedback gathered at the third school likewise confirms that contextual factors including the interaction with colleagues, time capacities, and the impact of the instructor's person were decisive in individual course experience.

Overall, descriptions of processes were the most significant component of analysis since course experience, mechanisms and in a sense impact were most tangible in descriptions of ongoing developments that participants related to the course, rather than clear-cut effects. Indeed, the instructor of the first project school specifically states that she views the "objective" of the course not as an alleviation of stress, but rather as an alternative method of responding and perceiving one's stress, i.e. coping with it. The orientation towards processes rather than concrete outcomes is tangible in this description by the instructor of the first project school:

Instructor 1: "The essence of the course is not primarily about stress reduction, so it's only superficially about stress reduction and actually on a more basic level [it's] about a different coping with one's own stress or one's own suffering or one's own life. And that [mindfulness] is an appropriate way of, how should I say, offering that, or inviting [participants] to sense in that direction – to develop in that direction is already too goal-oriented for me, but so something in between, so to get a sense that there may be something else. It's also often the case that in the conversations it stops being about stress and becomes about whatever one is preoccupied with."

On a specifically behavioral level, participants reported changes and benefits with respect to stress coping and interpersonal relations. (In the third school as well, what little benefit is reported revolves around increased calm, relaation and stress management.) This is concordant with the instructors' observations, who feel that particularly in the second school, self-care, self-kindness and stress coping generally were palpable outcomes. Notably, the different processes described here are interrelated and seem to have produced the reported effects through the concurrence of several factors. As mentioned repeatedly throughout this thesis, the concrete effects of the course are not major transformations in participants' mental health or lifestyle, but are rather found in subtle changes in the quality of daily routines, interactions and response patterns. These changes are not homogenous across participants. Rather, they seem to correspond to individually salient needs and circumstances, and are therefore difficult to capture in a generic formula. As both instructors (and several teachers) state, participants did not each accept all offered contents and inputs, but rather chose components that were compatible with their needs and lives. Indeed, both instructors deliberately strived to offer a broad spectrum of techniques and impulses so as to suit different agendas and personalities. It would follow that mindfulness supported participants in their respective individual needs and processes and can be acquired and applied in versatile ways. Thus, the instructor of the first school explains

Instructor 1: "So I think that one of the courses' features is that the offered mindfulness exercises are so broad that basically everyone can choose their own focus and pick what is good for them and implement that in their daily lives. And that's why I can't evaluate that comparatively, who profited more or less. I also don't know if I can compare that within one course, across the participants of the courses, because the teachers all profited according to what they think they did."

The qualitative findings with respect to mechanisms and changes are largely in line with another analysis of a portion of the data (exclusively from the first project school) conducted by Cornelia Schwarz (Schwarz, 2014) within the framework of her thesis project using qualitative content analysis<sup>37</sup>.

The interviews considered in this research were selected based on representativeness of the larger set of 27 interviews. Upon listening to the interviews, Schwarz identified 5 types of participants, who differed from the course to varying degrees and in distinct ways<sup>38</sup>. The

<sup>37</sup> In this context, Cornelia Schwarz also assisted in the transcription of interviews for the project.

<sup>&</sup>lt;sup>38</sup> The first type (labeled Type T) generally regards mindfulness as a useful technique but prefers others. Type L tends to consider mindfulness an overarching attitude in life and has largely integrated the concept and reaped benefits in virtually all domains of everyday life. All teachers classified under this label have previous experience with some form of meditation. The third type, labeled type A, likewise regards mindfulness as a

presented results are largely descriptive and summarize the five participants' statements to the respective questions. Central findings illustrate that a) mindfulness concepts primarily revolve around attentive perception of the self (in terms of needs and self-care) and others; b) all five types view course experience positively and note some effects, typically finding some exercises more helpful than others; c) all participants incorporated informal practice in their lives in some way, yet only two practiced formally; and d) some effects were shared by all five participants, including an increased focus on the moment and improved self-care. Other common effects included an appreciation of silence/quiet, increased equanimity/distancing and the reinforcement of worldviews that are related to mindfulness. The author recommends further qualitative research into mechanisms of change

These results of a subsection of the same material echo many of the findings this thesis proposes for the dataset at large, including the effects on self-care and processes of presence and distancing. More importantly however, they demonstrate the gradual nature of effects and processes that are difficult to lump together in a clear-cut factual diagnosis of concrete outcomes.

The interviews also yielded valuable information with respect to difficult and less acceptable course dimensions. Difficulties were categorized as conceptual (i.e. related to the concepts of MBSR), implementational/contextual (i.e. related to the way contents were conveyed or the influences that affected the course from without) or as practice difficulties. The most important conceptual problems that participants described were the lack of physical activity, the difficulty of focusing on the exercises especially without an attention anchor and ambivalence towards participation that expressed itself in different doubts. The difficulty in maintaining an open, presence-oriented focus without succumbing to intruding thoughts and the stress they may entail was implicitly evident in the passages that described physical exercise as more effective in de-stressing than contemplative practice. By the same token - if on a different scale - explanations of how the lack of an attention anchor in exercises such as the body scan (as opposed to a breathing meditation) rendered participants more easily distracted seem to support the assumption that a portion of the reported difficulties is due to an inability to dis-identify with thoughts or emotional reactivity. This is not very surprising, since this component of mindfulness is arguably particularly difficult. The results suggest that

useful attitude, yet finds it difficult to implement consistently. Like Type L, teachers in this group report benefits in many areas of their personal and professional lives, yet less pronounced, and tend to employ mindfulness as a relaxation technique. A fourth type, labeled Type F, similarly regards mindfulness as stress coping technique, yet requires continual input and fixed structures to implement and benefit from the practice. Finally, Type S theoretically considers mindfulness a useful approach, however lacks the time to put that into practice since acute stress does not allow for the necessary time capacities. Type A and Type L comprised the majority of interviews (13 and six teachers, respectively),

more intensive yoga elements and a more active focus on the breath as an attention anchor may be helpful for participants who struggle to keep mind-wandering (and frustration thereat) at bay, or for those who need physical exercise to enter a more relaxed state.

A difficulty that was only rarely expressed directly but that may have been latently more prevalent regards the contradiction between the non-striving and accepting attitude that mindfulness aspires on one hand and the declared objective of stress reduction on the other. Arguably, considering a near-impossible state of perfect equanimity and relaxation the target of one's practice may have prevented some participants from grasping the quintessence of the course. In this context, the role of the instructor may be of particular importance, since it is the *embodied* mindful attitude (as opposed to the theoretically taught concept) that can ultimately help participants glimpse the effects of mindful acceptance and serenity on an *experiential* level. If instructors succeed in creating a space where mindfulness can truly unfold, the non-demanding and deeply affirmative and relieving quality of mindfulness practice can safeguard the essential tenets against insidious misunderstandings, or dismantle them as such before they stand in the participants' way. In this regard, the instructor of the first project school voiced the following conviction:

Instructor 1: "The exercises themselves aren't the decisive part, so the 'how' is more decisive, which attitude guides my instruction. And I believe that I can present this upfront a little based on my own experience with myself, or that I had as an instructor, or the experiences I made with myself, what are the traps, so to speak, when one is practicing. So for example "Once again, I did not manage not to think!" So to take away this pressure to perform that becomes evident and to defuse it, to create an atmosphere where it becomes clear.. [..]So I think that this is the art of instruction that has an impact and not so much the exercise in itself."

Implementational and contextual difficulties spanned a number of factors that seem to have affected the experience of individual teachers. In this respect the scarce time resources and the overall stressful daily life of participants were the most common direct influence on the course sessions. The effect of the group setting on individual experience was mainly mentioned as a positive process, yet a few teachers also report this circumstance as a difficulty that could render sharing and exchange uncomfortable. Accordingly, while the instructor of the first school perceived the growing closeness and trust among participants as an entirely supportive factor, the instructor of the second school noted that the participants were relatively reluctant to show vulnerability and unreservedly open up to in the presence of their colleagues. The fact that sharing with the group has been described both as a facilitator and an obstacle points to the centrality and potency of this factor. Much like a distracted,

stressed and absent mindset can prevent a real encounter with mindfulness, an individual's well-being in the group is decisive in terms of how much he or she is willing to truly engage with the course.

According to the instructor of the second school, another contextual difficulty occasionally stemmed from participants' critical attitude that overshadowed the naïve openness he finds ideal for a mindfulness practice. Likewise, the instructor felt that the school management as well as the participating teachers somewhat lacked commitment to the course.

Overall, many of the contextual and implementational difficulties were not decisive in their own right, since most concerns were expressed by only few members each and seem to be largely dependent on individual preferences and situations. Nonetheless, they indicate that contextual influences as a whole are of significant importance in terms of how the course is received, and should accordingly be a conscious focus of any intervention.

The most influential difficulties were reported in the third category (Practice Difficulties); participants struggled intensely to practice mindfulness independently and integrate the concept in their daily lives. Stress, overload and busy time schedules often prevented participants from fitting in formal practice, and in many cases rendered informal practice unlikely and difficult due to exhaustion and preoccupation. Similarly, the lack of a setting and a group within which mindfulness is practiced seems to be a serious impediment to sustainable benefits.

The passages portraying the effect of daily stress on course experience and individual practice are particularly meaningful, since they point to a fundamental issue that possibly codetermines the role and potential of mindfulness in modern society at large. Mindfulness, which is an approach and attitude embodied by the individual, must always be considered in the broader context of a system that perpetuates and necessitates achievement, efficiency, competition and performance. It is perhaps a particularly difficult challenge for individuals to forego a mode of being that is not only constantly required of them, but that has also proven functional and productive in the past. Nonetheless, mindfulness-based interventions attempt exactly that: a radical shift in orientation and attention, away from functionality and towards present experience, without constantly calculating the sum total of one's losses in every minute. Seemingly minor examples demonstrate this difficulty across the different narratives that the teachers shared:

"Because the French exam was still lying around upstairs or I don't know what – which you could have perhaps have already corrected if you had not gone to the course, and switching this off, getting it out,

that was difficult, but you learned this a little. To force yourself to do this, because you also have to do that in daily life or else you completely lose [this mindful attitude]." (214)

This lasting resonance of hectic and stressful daily life throughout the course sessions may be critical inasmuch as many of the messages conveyed in the course arguably cannot be fully comprehended unless the functionalized and efficient mode of going about one's day retreats in favor of a presence-centered, open state of mind. If for, instance, a participant is lying on the mat, attempting to meditate but essentially thinks about all the useful chores and tasks s/he might be accomplishing in this time, it is nearly impossible to embrace a mindset of acceptance and presence, or experience the effects it could bring about. In a sense then, it requires mindfulness to experience mindfulness; the conditions of the course and the state in which one enters it become critical in enabling participants to follow the instructor's invitation and take this first step into a different mode. The instructor of the first school remarked on the particularly stressful and functionalized daily life and rhythm of teachers and highlighted the importance of creating a protected space within the framework of the course, so that teachers may enter an often radically new mode, where they are completely freed of responsibilities and demands and can thus devote themselves entirely to their own experience. In her opinion, this safe space is tangible when logistic and organizational matters run smoothly, so that no assistance from the teacher is required, and when the instructor is able to convey an inviting, unburdening and caring attitude.

Instructor 1: "What was important to me was that an inviting atmosphere can grow and is also there from the beginning, so that the space "school", which is filled with associations for the teachers and students, can develop into a different space in the first place."

However stress levels both as an impediment to individual practice as well as an influence on course experience cannot be simply discarded as harmful for anyone who wishes to gain an access to mindfulness. As stated above, mindfulness is likely a needs-oriented practice that gains personal relevance when individuals are successful in relating it to their hopes and problems. Having revealed that she does not consider mindfulness the best path for her, participant 102 proceeded to state that

"[the type for mindfulness] is someone who is terribly stressed out and cannot relax anymore, right? Who is always like "What do I have to do, when?". And then I think something like this is very helpful. When I am stressed I can cope with that or I think 'My god, don't get so worked up'. So then I'd rather do some sport and then I go on, so a break." (102)

This passage, and similar ones mentioned under 'Course Difficulties', suggests that MBIs may require a sufficiently elevated stress level to be perceived as helpful and effective. It may also point to the role of self-efficacy in the way mindfulness is regarded. Individuals who a) feel rather stressed and b) do not believe they are well equipped or in a position to cope with their stress may therefore benefit more from a mindfulness practice if, and only if, subsequent course experience succeeds in offering an experiential alternative.

As for difficulties reported in the third school, the comments extracted from the teachers' feedback sheets and the interview with the prinicipal remain brief, but can also be understood as either conceptual or contextual. Most obviously, conceptual difficulties in the form of fundamental skepticism and ambivalence towards mindfulness as an approach stood out as a recurrent problem for many teachers. In the opinion of the principal, this was at least partly due to misguided course objectives and an overly goal-oriented attitude. Contextual impediments included difficult group dynamics, which were exacerbated for some by the presence of the principal and the overt resistance among other partcipants, as well as objections to the manner of instruction and lacking time resources.

A final block of qualitative findings presented participants' understanding of  $Mu\beta e$  and the way in which  $Mu\beta e$  may be related to mindfulness in their own experience. Since  $Mu\beta e$  continues to prove an elusive concept, the individual notions were grouped in terms of salient dimensions rather than distinct concepts. Examining these dimensions resulted in two main clusters. Participants tended to regard  $Mu\beta e$  either as a state of Liberation and Self-determination, or as mode of Leisure pleasure and recreation. The former often entailed sharp criticism of systemic stress and functionalization and posited  $Mu\beta e$  as a radically different state that is devoid of demands, pressures and time constraints, thus enabling a sense of freedom and, often, experiences of meaning and congruence. The latter tendency by contrast considered  $Mu\beta e$  as fulfilled resting and recreation that is associated with relaxation, pleasurable activities and hobbies, and often derives its legitimacy from the fact that it regenerates work capacity. While the former  $Mu\beta e$  notion was considered rather rare, the latter can easily be a part of daily life.

One possible hypothesis to explain these two different  $Mu\beta e$  conceptions may perhaps be the different degree to which individuals feels oppressed and exploited by their daily lives and the demands they face. While the analyzed data does not directly permit this conclusion, it is possible that those who feel more shackled by the various functions they are required to fulfill, or those who feel more deeply affected, bonded or indeed stressed by the demands posed to them, are likelier to entertain  $Mu\beta e$  notions that are radically different from their

daily life, since more temperate alternatives, such as a prolonged lunch break or a nice game of racket ball, are unable to alleviate their strain.

Inquiries into the possible relationship between  $Mu\beta e$  and mindfulness mostly resulted in descriptions of mindfulness as a path towards  $Mu\beta e$ . However, the manner in which mindfulness may bring about  $Mu\beta e$  differed across interviews: While many participants found mindful self-care practices essential in increasing the likelihood of  $Mu\beta e$ , others saw the connection in the altered attitude towards stress and stressors or the focus on presence, openness and awareness. Along similar lines, participants described presence as a central feature that both concepts share, with fewer narratives focusing on commonalities such as calmness, free and open reflection, sovereign use of time resources and non-judgment. Some of these commonalities are echoed in one instructor's opinion on the matter:

Instructor 1: "So mindfulness has another aspect that is not mentioned often in the course [..], that's actually open awareness. So real mindfulness goes away from this directed focus and in the end has an open awareness of everything. And that's something like sitting and doing nothing [..] and being more or less conscious of that. So for me there's an overlap there, and open awareness for me is a skill that I have to have when I have  $Mu\beta e$ , or that is there when I have  $Mu\beta e$ ."

Distinguishing mindfulness and  $Mu\beta e$  proved more difficult. Nonetheless, often mindfulness was considered an attitude while  $Mu\beta e$  constituted some type of experience. Interestingly, a few participants also described the compatibility with a functional modes and daily life in the case of mindfulness but not of  $Mu\beta e$  as an important difference. When asked about distinctions, the instructor quoted above described the explicitly ethical orientation and its investigative quality as a distinction of mindfulness.

The qualitative findings pertaining to  $Mu\beta e$  clearly indicate that the assumption underlying this project is valid to the extent that  $Mu\beta e$  is considered the opposite of stress and self-exploitation. It is possible that mindfulness as it is typically received in an intervention such as this one renders  $Mu\beta e$  likelier especially for those participants who think of  $Mu\beta e$  in terms of leisure, pleasure and recreation. The various effects on coping with stress can be assumed to create more opportunities for these types of  $Mu\beta e$ -experiences. By contrast, mindfulness may be related to the more radical conception of  $Mu\beta e$  as a state of self-determination only for those who practice mindfulness in a very far-reaching and personally meaningful manner. When mindfulness helps individuals maneuver their lives with deep awareness of their needs, desires, failings and values and a more fearless inner voice, it may well contribute to a more autonomous and congruent lifestyle. However, this is arguably a rarer manifestation of the full potential of mindfulness practice.

Table 26: Map of core themes and their definitions

Overarching Theme	Theme Subdivisions	Theme Subdivisions
	Level I	Level II
Concepts of Mindfulness  Participants' stated mindfulness concepts as reflected in central motifs	Mindfulness as Self-awareness, Self-Care and Self-Compassion	
	Mindfulness as a mode of awareness that eventually prompts practices and impulses of self-care in one way or another	
	Mindfulness as Presence	
	Describes mindfulness as being in and actively connecting to the present moment	
	Mindfulness as Acceptance and Awareness	
	Describes mindfulness as a particular mode of awareness characterized by nonjudgmental, affirmative, and often appreciative and	

## empathetic qualities

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Participants' accounts of processes as reflected by perceived causality or personal explanatory models of mindfulness and its impact Awareness and Insight

Personally meaningful realization or

sensitized consciousness

Awareness (and Rejection) of Pressure to Perform

Awareness of Needs, Limits and Well-being

Awareness of own Patterns and Behaviors

Awareness of own Priorities and Values

# Distancing

Increased or acquired tendency to detach from stressful situations

### Presence

Vivid and aware connection to the present experience in all its facets

*Non-*Judgment, Acceptance and Self-Compassion

Descriptions of non-judgment, deliberate non-

resistance to experiences even if they are unpleasant or difficult, and active efforts to exert self-kindness and friendliness

#### **Contextual and Individual Influences**

Influences that shaped participants' reception of and engagement with the course that stem from the individual background and situation or from course characteristics, irrespective of core mindfulness concepts Concurrent Influences and Attitude towards Mindfulness

Descriptions of the impact of individual inclinations (such as religiosity, spirituality, affinity to meditation) and attitude towards mindfulness (i.e. relative openness or skepticism) on course experience

Individual stress and living conditions

Descriptions of concurrent stressors and strains that shaped course experience

Group setting

Descriptions of how the group setting and other

participants influenced course experience

#### **MBSR** Instructor

Aspects of the MBSR teacher that influenced receptiveness to mindfulness and course experience

## Other influences

Infrequently mentioned and less central influences that occasionally shaped course experience

# **Changes and Benefits**

Tangible impact on daily life and concrete behavior changes that are at least in part attributed to course participation Stress Reduction and Coping with Negative

**Emotions** 

Descriptions of either more effective coping with concrete stressors or difficult situations, or an overall sense of improved coping with the general stress level of daily life Increased calm

Descriptions of increased calm, equanimity and serenity in daily life

Managing Acute Stress or Conflict

Descriptions of different coping before, during

or after a concrete stressful situation

Decreased Rumination and Worrying

\_Descriptions of a notable decrease in stressful thought spirals and rumination

**Self-Care Practices** 

Descriptions of newly acquired or intensified behaviors that attempt to preserve or further own well-being and physical as well as mental health

Impact on Interpersonal Experiences

Colleagues

Descriptions of changes in the interactions with other people, both in concrete situations / encounters and the quality of relationships

Interpersonal effects manifest in relation to colleagues

Students

Interpersonal effects manifest in relation to

#### students

## General effects

Interpersonal effects that shape interactions and relationships at large, including private relationships

### **Difficulties**

Aspects of course experience that participants found difficult, unpleasant or challenging

Conceptual difficulties

Difficulties that are related to mindfulness concepts and practice

Dislike of Physical Inactivity

Descriptions that mention the lack of physical exercises as a difficulty

Ambivalence towards the Course

Descriptions that illustrate reservations, doubts and selectivity with respect to course contents

Lack of Attention Anchor

Descriptions that dwell on the difficulty to avoid

mind-wandering during meditation

Exposure to difficult emotions

Descriptions of aversion to focusing on negative emotions or sensations

Concerns about Ethics and Spirituality

Descriptions of difficulties in accepting the course's stance on ethics and spirituality

Contradiction of Non-Functional Orientation and Stress Reduction

Descriptions of the incompatibility of mindfulness as an attitude of non-striving and the explicit objective of stress reduction

Implementational and Contextual Difficulties

Impact of Stress Level on Course Session

Difficulties that stem from contextual influences

Difficulty in Sharing in Group Setting

	or course implementation rather than course contents	Dislike of the Location
	Practice Difficulties	Stressful Daily Life
	Difficulties in incorporating course contents into daily life in spite of the intention to do so	The Lack of a Fixed Setting
$Mu\beta e$ and Mindfulness  Narratives addressing $Mu\beta e$ and the relationship	Types of Muße  Identification of central understandings of Muße	Muße as a State of Self-Determination and Liberation
between mindfulness and Muße	and their description	Descriptions of Muße as a state of autonomy that is generated by the absence of pressures to perform, demands and time constraints
		Muße as Leisure, Pleasure and recreation
		Descriptions of Muße as pleasurable experiences, breaks or rest from work and leisure activities and enjoyable hobbies

	Mindfulness as a Gateway To Muße
Muße and Mindfulness: Constellations  Descriptions of the relationship between mindfulness and Muße	Mindfulness can enable experiences of Muße or render them more probable in some way
	Muße as a Facilitator of Mindfulnes  Muße is a state that renders mindfulness likelier
Commonalities and Distinctions	Commonalities
Descriptions of similarities and differences between mindfulness and Muße	Distinctions

# 5.11 Excursion: Digressions and Reflections

In the course of the interviews, almost all teachers reflected on issues pertaining to education, mindfulness and  $Mu\beta e$  from various angles, over and beyond the research questions of this dissertation and the theme map resulting from qualitative analysis. Thoughts and musings that interviewees expressed were coded as 'reflections' if they were abstract in nature and did not denote an experiential aspect or actual personal process related to the course, though they are very likely interlinked with mechanisms of change described above (especially *Awareness and Insight*). Needless to say, these passages contained many insightful and interesting narratives that unfortunately cannot be all presented within the scope of this dissertation. However, in light of this project's interest in the implications of mindfulness and  $Mu\beta e$  for the school system as well as the societal dimensions such a junction is likely to entail, the following section presents a few excursions into vital questions raised in the interviews. These digressions may serve to enrich the background against which this dissertation is set and provide fruitful framings for many of its arguments and conclusions.

# 5.11.1 Schools, Mindfulness and Muße

"I am of the opinion that class is in essence a laboratory. And that means that each contribution a student makes is only supposed to help advance the overall process, or question the overall process, no matter how. I stand by that. And that also means that any opinion that a student voices with reference to a process has its purpose, because it directs the process in some way. And I try to convey this impression to the students too. No course content fits this directly but the reflections [do]." (203)

Why and how exactly mindfulness practice may be particularly beneficial for schools was a recurrent topic amongst participants. Conceiving of class and teachings as a process that is equally shaped and informed by all participants as indicated in the quotation above, is indeed mindful inasmuch as it is an open approach that allows a free unfolding of the classroom encounter in what is necessarily a presence-oriented and nonjudgmental manner. The emphasis that mindfulness places on acceptance and non-judgment is perhaps of immediate value to school settings and will be further addressed below.

Many teachers also reflected on the potential mindfulness and  $Mu\beta e$  may hold particularly for students. Finding the reality of student life fraught with challenges and stressors, several teachers indicate the value of mindfulness and  $Mu\beta e$  in providing young people with time and capacity to contemplate and realize their needs, desires and goal.

"That is a productive sort of idleness, that you simply need at some point so that you get to know yourself better. So otherwise you don't get to- so I have the impression that many students function wonderfully but don't know themselves at all. They don't know anything about themselves; they don't know what they're especially good at or especially bad at. They rarely have enough distance to themselves, because they don't have time to think about themselves and from an early age they are used to having to do all sorts of things totally rationally. The parents come here and have the notion that they have to become doctors or, god knows, musicians but then the daily routine is settled, so you have 34 to 36 hours of class per week and then comes piano lessons, a kind of sports, and then this and that and yeah - and then there's nothing much left. And then you jingle around on your cell." (203)

Imparting on young people an alternative approach to the challenges and structures they face was also considered vital in light of the continual societal demands they will soon be released into:

"At the same time for students [..], stress is also a big issue there, not for all students, but some feel the stress and the pressure to perform, and later in life this will continue in the exact same way. And therefore I think if you know such [mindfulness] mechanisms and know how they work then you can counteract at an early point to leave the vicious circle, right?" (230)

Similarly, several teachers find their jobs particularly stressful and consider mindfulness interventions a useful and much needed response to the growing demands on teachers:

"I think the demands on teachers are constantly higher, and that the student body is increasingly difficult [..], that it's difficult to manage everything and simultaneously remain healthy in the long term, right? So teachers have the highest burnout retirement rate and I think that it is important to simply know such strategies and techniques." (230)

The emphasis on the needs of both students and teachers is likewise present in passages that describe the importance of mindfulness as an approach that lends visibility and priority to the individual within collective systems that often overlook the singularity and needs of each person in his or her own right.

"I think it's useful [to offer mindfulness at schools]. You simply feel seen and that is, you are - you actually feel important and seen and that's something that's so quickly forgotten here at school. You always only have pressure from the outside, you have the feeling you're working against the parents - so all teachers are stupid. You're working against the kids, then you may have a principal who always wants something from you, then there are the colleagues. So you always have so many negative things at school, right? No one says thank you anymore right? [..] But this a little bit something where I think we are personally receiving something for a change, where you

have the feeling now they're noticing me as a teacher, as a person perhaps even, when there's such a seminar from or for the school. To me that's appreciation. [..] I find that useful, important, valuable, because everybody is ranting about teachers, but we still do a rather good job, many of us, and this appreciation did me good. So that's why I would very much support that, for the students too because they also certainly don't get much appreciation, also often get pressure." (215)

Mindfulness based interventions are thus worthwhile both as a manifestation of the intention and effort to provide structural support to the individual within intricate, overbearing systems and in terms of their actual content and specific impact:

"So I definitely think and hope that [the course] will be sustainable insofar as we colleagues now tend to these things with more awareness and perceive more and allow more and are better able to perceive that kids are really in the exact same situation we're in: that we simply don't have time for ourselves, for our needs, and that we need a regard for that, for the fact that we need to be seen and also see. And that if that happens all the rest will happen on its own. So the whole transfer of knowledge is secondary if we give this enough space. And I think awareness of that is growing and I think it's very important that we tend to that at school, and really convey that and embody it ourselves. Knowledge transfer is one thing but at school I think we're role models above all else. And I strongly feel that that the kids need that, to affirm it if they are not feeling good for once and that this is not a drama. And I think that's very important and therefore I think this course is very sustainable and I think a lot more should be done, bringing that to teaching staffs and student bodies with much more self-evidence, and perhaps make special room for that in the school structure, so not so exclusive for a few colleagues at school but much, much more. So that it's a matter of self-evidence that kids grow up with that, to deal with themselves and their beings very lovingly and preserve their resources. So I find that very important and therefore I think this course is so valuable in schools and I think that it is definitely worth expanding. [..] Yes, I simply wish for all kids to grow up with that, to deal with themselves mindfully, especially since the surrounding can sometimes be very destructive with these little souls and in the end they have a very big life with a lot of responsibility before them." (128)

## 5.11.2 The Subversive Potential of Mindfulness

The above notes on the appropriateness of mindfulness and  $Mu\beta e$  specifically for schools touch upon rather controversial issues, since introducing mindfulness into the stringent school system places it in a precarious position. The debate around mindfulness frequently points to the dangers inherent in an approach that can be utilized to render individuals more compatible with exploitative structures, or abused to accentuate expectations of performance and

functionality. Indeed, at face value, MBIs hardly intend a fundamental reformation - let alone revolution - of the systems or populations they target. Yet it is nonetheless the subversive potential of mindfulness that can safeguard its core principles in goal-oriented contexts that emphasize achievement and efficiency. In a number of elaborate passages, the principal of the second project school addresses this subversive potential:

"So I'll put it this way, what I experienced above all was that there was a lot of calm [through the course], to focus on yourself, and to put aside that stuff you often just do, the many judgments, so these are especially demanded of me in my task. But I have always been, let's say skeptical, of this permanent "judgeritis". It leads to us not having an open approach to our fellow human beings anymore and that is what makes the system extremely inhumane. And that's why I have, more on a rational level- I try to refrain from that. That sometimes leads to the absurd fact that you have an intuition and then you ask 'is that right?' and sometimes it results in you taking longer until you can make some decision. On the other hand among other things it helps people you make contact with to not always immediately feel like they are put into boxes. And I thought that was especially good [about the course] because it contributed to that, that everyone who was there tried to gain some distance to this constant judgment. That's why I think it would be wonderful for the teaching staff, if you could actually [do] something like that repeatedly as teaching staff, because then it would become clear that there is in fact a fundamental flaw in our system, this putting [people] in boxes. I experienced that as a trainee teacher, came to a school [..] and there the deputy, four weeks into school, said 'these and these students do not belong here'. That was the biggest shock for me that I experienced as a trainee teacher because in my opinion it is really difficult to pass judgment on the development of a human being. That stems a little from my own biography [..], so I went through all the lows as a student and I can empathize with what happens to students when they find that it is not working. I experienced the opposite too, it also took many supporters for me to make it this far, and if you don't meet such a supporter it just goes downhill. And I think what motivates me the most as a teacher in the first place, is that I never believe that a child who comes here is in any way predestined for anything in specific, and is already determined after a short time, and either makes it through that or doesn't make it at all- That's utter humbug. Rather, it strongly depends on what we do with them as teachers and that's why I thinkso that was the decisive element in the entire course, that you could witness that many of these pre-judgments that you carry around with you, that they also weigh heavily on you." (203)

The passage above illustrates how within a system that is characterized by inherent "judgment", mindfulness may serve to undermine this potent feature. Schools, in their function as gateways to society, often label and limit their students, imposing on them societal expectations and standards at the expense of openly and empathically accompanying the

growth of young people. While mindfulness is not in a position to eliminate this risk, it may foster attitudes that can defuse it to some extent: in deliberately and consciously deciding to assume a certain distance to judgment patterns, or in growing aware of automatized classification and labeling tendencies that could be harmful to the student, teachers may well be better equipped to mitigate the destructive effects of a merciless, market-oriented public domain that is likely to infiltrate the school setting. Grades, degrees, and exams notwithstanding, the teaching situation could be a tentative space where these goals and evaluations are to some extent deemphasized or suspended so as to provide a safe platform entirely devoted to the processes that the students undergo. This thought is expressed in the following:

"I'll put it this way, if all thoughts, everything is functionalized and geared towards goals, you actually have little opportunity to really be mindful towards someone else. That's probably similar in daily life at school or any other profession, that a lot of goals are geared towards the product you want to create. And I think what's actually great about school is that there is no product you want to create, but that you can actually rightly say 'I am working with the students on a process of education, and I don't have to create a finished product' but- I do have the distant goal of Abitur<sup>39</sup> but that too is, how should I say, a fictional distant goal that is normative in the written areas, but in other areas there is absolutely a lot of space for real individual and personal development. And that means if you can gain some distance to this rigid goal-orientation through reflection time - and that would also be Muβe for me - then that would be very productive. [..] In the end it would in effect contribute to a questioning of the system, because the system is the problem. We're all just numbers in the system and if we just functionally align ourselves with that as numbers then we cannot be mindful towards one another. The moment we overcome the status of numbers and encounter each other as humans and take the time for that, statements like 'you bum' or whatever won't happen anymore, we'll possibly say 'ok, hold on now, I will shut my mouth for a moment and tell him to come in an hour", and then I will have already solved the problem. And that is often of course for teachers, that's a struggle for life. Only if they have Muße can they get some distance from this struggle for life, reflect 'what did I actually do there?' and then they have an opportunity to remain mindful in the situation." (203)

For the principal of this school, mindfulness and  $Mu\beta e$  embody the potential to negate and elide the arguably crippling constellations of society in general and a functional approach to education in specific. In describing school as a space where no product is necessarily targeted and where the focus can and should be on the educational process, this participant amply demonstrates the Greek origin of both schools and  $Mu\beta e$ : scholé. In this view, much like

<sup>&</sup>lt;sup>39</sup> German Highschool Diploma

states of *Muße* cannot radically alter the predilections of modern life but rather constitute an alternative state, a tenuous space, for claiming some distance and engaging in criticism, *Muße* and mindfulness in schools may be one possibility to activate resistance to objectionable and damaging facets of educational settings. This resistance is twofold: On one hand, teachers who (re)define their focus and more consciously shift their approach and priorities to rid them of labels and judgments directly impact the encounter with students and support their unhindered development. On the other hand, this approach is crucial inasmuch as it affects the internalizations and self-image of the students in question:

"So I think that in class mindfulness processes already occur simply through more appreciation of the students, but I don't want to imply that most of the colleagues don't already do that. For the bulk that step needs to be actually taken, that these judgments that constantly take place, that [teachers] detach from those more and also show the kids a way to refrain from that as well. Because it is actually these judgments, I think, [the students] take them.[..] at the latest in junior high school, they take them with them, so that there are fixed judgments, and they last until senior high school and they won't get rid of these judgments so easily. But they are a part of the reason why certain things cannot be achieved. Now I would of course argue the opposite [..] that this in turn mustn't be functionalized so that you achieve better results afterwards. Rather, one would have to reach a place where you - so first as a teacher to take that step that you once again realize very clearly: 'I like doing this job, I do it with my heart and soul and it is not important for the time being what the outcome will be at the end of every day, the important thing is that the process with the kids brings me joy, brings us joy together". If that was the outcome then that would already be a big step- and that requires distance. I mean you can actually only gain this distance if you detach from this daily business from time to time, [daily business] however is such that I have to say - I know that myself [..] that in the end you're fully clocked, every second is pure functionality [..] and if you don't have any opportunity at all to take a break in between then you're trapped in this functionality loop that you can't escape from and I think the teachers need to get out of that first, because only if they get out can they convey to their students that they should not get caught in that loop of course, and as I see it in the moment too many students are really in this with  $G8^{40}$ , so a lot of students who not only suffer from that but also get ill because nothing is left from them, from them as a person, they are pure function, that's really the case." (203)

As participant 203 is obviously well aware, this potentially subversive facet to mindfulness is precarious. There is a fine and perhaps permeable line between resorting to mindfulness as a counterweight to unwholesome conditions and distorting the demand for mindfulness so as to

<sup>&</sup>lt;sup>40</sup> The term G8 refers to a school reform that was ushered in in many German states throughout the past years, whereby the duration of secondary school was shortened from nine to eight years.

ultimately capitalize and celebrate performance. Likewise, requiring teachers to relativize the impact and active principles of structures they are subjected to, by virtue of a mindfulness practice or other means, may be both unreasonable and unjust, especially in light of the often acute pressure teachers are exposed to. Therefore, while claims of a subversive potential of mindfulness are not unfounded, it is essential that this potential be viewed with caution and with due attention to the prevailing structures and systemic limitations. This contentious position of mindfulness and  $Mu\beta e$  within systems that function according to their own internal logic and thus tend to dictate their values echoes the rather difficult stance that MBIs navigate with respect to spirituality, ethics and secularity.

### 5.11.3 Systemic Hindrances to Mindful schools

As was indicated above, mindfulness practices in schools can encounter basic obstacles that may hinder or altogether prevent a meaningful impact. Some of these obstacles stem from a rather conceptual conundrum:

"I think [mindfulness] is totally worthwhile, but I also think it's a very, very long process until it actually makes its way [into schools], because it's actually fundamentally contrary to what schools are or practice, at the moment at least. So we always first practice this – this is also what actually really made me struggle with my job after the first MBSR<sup>41</sup> course. Two things, first that you always have to judge as a teacher, and that you always have to plan. So in class you can't at all - so if you are in the lesson then it's in the here and now but before that I always have to plan the lesson, I have to plan the unit, so I'm always in the vertical- nonsense, horizontal, exactly - and always in this judging mode so I - and I think that it's really, really important that you get out of that regularly, so that - I could actually imagine that it would change schools very much if that is practiced more, or with wider coverage, because this, yes, well, because it's actually so contrary to that and I think that could change a lot about the atmosphere and the way we deal with each other." (224)

While in the above passage expresses the utility of mindfulness for the school setting, the participant also describes two basic features of the school system that seem to contradict and impede mindfulness: evaluation, and rigid planning. Certainly, if the aspired ideal is an educational situation that fully encourages the student in his or her growth process and seeks to maximize the potential of an encounter that varies from individual to individual and from moment to moment, then timetables, fixed curricula, benchmarking, examinations and grades

<sup>&</sup>lt;sup>41</sup> The teacher had previously completed an MBSR course that she found preferable to the one that the project at hand offered.

are suboptimal. It is within those largely immutable constraints that MBIs targeting schools attempt to leave a mark.

Other problems inherent in the school setting were discussed as well. With respect to offering mindfulness to entire classes or staff, for instance, the principal quoted above also discussed the difficulty of collectivizing mindfulness processes, stating that the dynamics necessary to effectively convey such contents depend entirely on an open voluntary basis, which in turn would not reach everyone. Similarly, constraints on resources and systemic logistics were addressed:

"[..] But our school system is not made for [mindfulness practice]. These things come from up top; I mean perhaps private schools who have more freedom of action could offer this as a school subject. We personally could perhaps offer an extracurricular activity, that would certainly also not be as sustainable as desired, or as would be desirable. But our system certainly stands in the way there. Because we can only get sustainability through having time and space for that. We would need a space for that too where this atmosphere can arise in the first place. To have time to open up to that, that really requires intensive time and also space. And then you have to consider if you can - with thirty kids [..] and I think that's hopeless, with the current situation of the ministry of education, that's my experience. Unless we have a principal who says 'Ok, we'll take a lesson off the teaching load and do this, get us the people from the university'- so I find it important that this comes externally, that it is not we as teachers who do this because then you'll be back in this - so if we have grades and this evaluation, so it shouldn't be the teachers in that case." (215)

#### 5.11.4 Sustainable Mindfulness in Schools

How then can a reasonably sustainable mindfulness practice be introduced to schools, bearing in mind the above reflections, obstacles and visions? Based in part on the difficulties they encountered, many teachers voiced explicit recommendations that may further sustainable mindfulness approaches in the educational setting. These suggestions varied from relatively simple, straightforward ideas to initiatives that would require considerable resources and policies.

Most commonly, teachers expressed the need for adequate spaces that could serve either as a place to withdraw to or a suitable location for meditation. Similarly, time slots that could be used for mindfulness exercises or as a way of infusing daily life with  $Mu\beta e$  were found lacking, both for teachers and students.

More elaborate and systemic thoughts on rooting mindfulness in schools entailed the necessity to incorporate mindfulness elements in teachers' trainings so that they may embody mindfulness in their overall approach as well as potentially integrate mindfulness inputs and exercises into their classes. Similarly, a number of participants suggested that mindfulness should be offered to staff on a larger scale and in various forms, in order to reach as many teachers as possible and thus spread awareness in a more basic manner.

Several more critical participants were of the opinion that a sustainable practice of mindfulness in schools can only be achieved if a corresponding culture was gradually introduced:

"So it's simply the school, public schools barely developed a culture where there are community-building times and space. So, I don't know, for instance at the beginning of the school year there is a celebration at the Waldorf schools<sup>42</sup>, where they introduce all new students, they all come onto the stage, everyone one has gotten to see them once, flowers- and you don't have this here at all. [..] I notice these things, that the kind of culture where you can for example tie in a mindfulness practice doesn't actually exist. So if there were a room of silence here, I don't know if anyone would even go there. So one would have to do some work beforehand, so basic work [to pave the way], so that they can actually do something with that. So that they know already that they will get something out of it if you go there or something, [..] I can actually only imagine this if indeed it reaches the students via the class teachers. So to train the class teachers [..] So it is necessary that the class teachers experience that themselves and realize that it's important for the students and then you can create spaces [for that]." (224)

The opinion that mindfulness needs to be systemically rooted in the school context should it prove sustainable - and that this in turn requires intensive effort and resources - ties back into the difficult position mindfulness must navigate as a force for change within rigid systems. To some extent, this was also evident in the following passage:

"I basically said before that [mindfulness in schools] is necessary, ideas how to do that – [...] I think school always works in a threefold system of staff, management and well of course higher authorities, and parents, and this network - and of course students, evidently - but this network of several circles of people in the end that interplay. And I think before this can really become a constant factor a kind of briefing has to take place there first. If that's not the case then I think it will remain sporadic, it can be well-received as well, but if it's to become a constant - and I think that would be very, very good - then something has to be done there first right? [..] Maybe an open meeting, so to do it even more openly, where all involved parties are there, like I said.

<sup>&</sup>lt;sup>42</sup> Alternative schools that implement anthroposophical pedagogy.

And then this has to be communicated to higher school authorities as well of course, so that resources are actually made available, in the form of time and spaces and of course someone who can instruct this, because we are not professionalized for that I think. And I think it would not be good if we say we will try to somehow have a minute of silence or we try to somehow be semi-professional meditation and course instructors, I think that would not be good at all. [..] Or you decide directly to train colleagues who can then offer that on a smaller scale in class and then you really have to assume that smaller units will take place in class itself, which I can imagine as well - but for this, a training or qualification training would still have to directly take place for those who are interested." (213)

Along similar lines, other more fundamental suggested prerequisites for sustainably mindful schools included a lighter load on teachers, smaller classes and indeed more flexible curricula. The latter thought is particularly interesting as it aptly demonstrates the relevance of both  $Mu\beta e$  and mindfulness, inasmuch as flexible open curricula allow for a perceptive, individual-oriented approach to classroom encounters, while project-based learning as a more autotelic and intrinsically motivated form of learning may arguably be conducive to  $Mu\beta e$ .

The range of recommendations and the variance in their scope and depth demonstrate that in the opinion of participating teachers, the impact of mindfulness on schools is largely contingent on the rationale with which it is adopted. A more transformative influence is perhaps only possible within more systemic approaches to mindfulness as a core principle in the school's model. Accordingly, integrating mindfulness into curricula, teacher's trainings, logistics, and the lived and embodied culture is necessary if mindfulness is to be sustainable on a fundamental level. On a less ambitious level however, participants proposed a number of ideas to retain benefits from their mindfulness experience without necessarily aspiring to impact the school context as a whole.

# 6 Discussion

This dissertation departed from three overarching research questions:

- 1. Do teachers who engaged in mindfulness practice show improved mental health and well-being?
- 2. From the teachers' point of view, what are specific processes and potential mechanisms of change set in motion by participation in an MBSR course?
- 3. How are the concepts of mindfulness and *Muße* related to one another?

The conclusions that can be drawn from the presented quantitative and qualitative results are discussed in the following.

# 6.1 Benefits on Mental Health and Well-being

Both within the quantitative and the qualitative approach as well as across the two data blocks, the findings on mental health and well-being benefits present a mixed picture. Quantitative results comparing the intervention and waitlist groups of the pooled population suggest that benefits in this area generally did not reach a substantial level, since only self-reported mindfulness differed significantly. However, a closer look at the data of the individual schools, while lacking in statistical power and adequate sample size, reveals that in the first two schools teachers exhibited changes on several variables. Likewise, the qualitative results suggest a clearly more fruitful course experience than the overall quantitative results of the pooled schools would indicate. A discussion of these findings must therefore address benefits and the lack thereof, as well as the often disparate results across schools and data types.

# 6.1.1 Mindfulness

The quantitative results of the pooled population as well as the first two schools revealed a significant improvement in self-reported mindfulness in the intervention group relative to the waitlist group (d = .48). While the third school showed no significant group difference with respect to mindfulness<sup>43</sup>, within-group comparisons reveal a significant increase in mindfulness in the intervention group occurring between pre-test measurement and follow-up, pointing to a potential cumulative effect. Overall, the quantitative results clearly indicate that the implemented intervention fostered central mindful attitudes as was intended. The

<sup>&</sup>lt;sup>43</sup> For this particular ANCOVA, the homogeneity of regression assumption was violated (see section 4.1.3). The result is therefore questionable.

employed instrument assessed two specific facets: mindful presence and nonjudgmental acceptance. Qualitative results corroborate an increase in these attitudes, with participants of the first two schools reporting mindfulness concepts revolving around presence, acceptance and self-awareness/self-care. This finding is consistent with international studies to date, whereby mindfulness interventions resulted in increased mindfulness levels among teachers (Poulin et al., 2008; Gold et al., 2010; Kemeny et al., 2012; Meiklejohn et al., 2012; Flook et al., 2013; Jennings et al., 2013; Roeser et al., 2013, Gu et al., 2015). It should be noted however, that the results reported here may to some extent reflect a tendency towards socially desirable responses. Since the used instrument was recognizable as an inventory of mindfulness; teachers who participated in the course may well have felt that some benefit on the main construct *should* have taken place.

The effects on mindfulness have several meaningful implications. First, increased mindfulness has been associated with improved mental health generally (e.g., Khoury et al., 2013) and among teachers in particular (Poulin et al., 2008; Franco et al., 2010; Gold et al., 2010; Mañas et al., 2011; Kemeny et al., 2012; Flook et al., 2013; Jennings et al., 2013; Roeser et al., 2013; Weare, 2014, Lomas et al., 2017, see sections 1.4 and 1.5). Since teachers are often severely ailed by stress and at risk for burnout (Bauer et al., 2007; Unterbrink et al., 2008; Bauer, 2009), the increases in mindfulness reported here may in the long run constitute an asset to teacher mental health.

Secondly, increases in mindfulness among teachers have been linked to favorable teaching practices, good student-teacher relations and a positive classroom climate. <sup>44</sup> This may be due to the fact that teachers who cope well with potential stressors are in a better position to invest commitment and effort into this demanding profession (Jennings and Greenberg, 2009). However, mindfulness may also be valuable to teaching in itself, in that it fosters nurturing classroom attitudes and interactions (Flook et al., 2013). Roeser et al. (2012) in fact regard mindfulness a "habit of mind" that underlies many development programs offered to teachers in recent years. The potential of a mindful attitude for teachers specifically has been related to the nature of the challenges teachers face. As illustrated in section 1.5.1, much of a teacher's

<sup>&</sup>lt;sup>44</sup> In this respect, many of the participants shared reflections on the need for mindfulness among teachers and students specifically, and described potential systemic impacts MBIs may induce in the educational setting (see section 5.11). Narratives touched upon the particular stress of students and teachers, the importance of recognizing the individual and his or her needs within the larger context and the benefits of mindful teaching. While these thoughts are not direct effect areas of this intervention, they nonetheless confirm many of the assumptions underlying MBIs in schools and for teachers.

work involves emotionally intensive encounters with students, colleagues and parents as well as social activities that require vigilance, self-management and constantly renewed selfmotivation (Keller et al., 2014; Weare, 2014). Keller et al. (2014) propose that these kinds of tasks require extensive "Emotional Labor". Emotional Labor in this context entails surface acting and expressive suppression, i.e. the management of difficult emotional impulses such as anger, frustration or insecurity, such that they don't manifest visibly or directly influence the present situation. Emotional Labor has been argued to cause emotional exhaustion, which is an essential component of burnout. Mindfulness may be of value for teachers since it might mitigate the necessity and effects of taxing Emotional Labor. Instead of suppressing or masking difficult emotions that cannot be entirely avoided in this profession, a consciously mindful attitude may enable teachers to acknowledge and accept them. In the exact manner that many of the teachers involved in this dissertation described a new-found capacity to disidentify with negative emotions and stressors, mindfulness is likely to offer an alternative coping approach to one's own reactivity: irritation and disappointment for instance can arise and then pass, without compelling the teacher in question to act or react on the spot. The reported qualitative findings pertaining to awareness and acceptance suggest that this is indeed a feasible avenue.

#### 6.1.2 Mental Health Variables

#### Stress, Anxiety and Depression:

While group comparisons of stress and anxiety did not yield significant results in the pooled population, a number of indicators nonetheless point to benefits with regards to stress, anxiety and negative emotions generally. First, promising effect sizes on anxiety (d = 0.46) and perceived stress (d = 0.61) were found in the first and second school, respectively. Second, within-group comparisons of the intervention group in each of the three schools as well as in the pooled population point to consistent decreases in anxiety and/or stress, occurring either cumulatively in the period from baseline to follow-up, or from baseline to post-intervention. These trends are visible in figures 4 and 5 in section 4.3. Third, and perhaps more importantly, qualitative findings clearly support an impact on stress and anxiety since stress reduction and improved coping with negative emotions was a main outcome across the two schools that were investigated qualitatively. Specifically, participants reported a sense of increased calm, an increased capacity to manage conflict or overwhelming situations,

decreased rumination and worrying and a stronger tendency to engage in self-care practices.<sup>45</sup> This is in line with research to date (see section 2.3.2) and corroborates a relative impact on health-related variables.<sup>46</sup>

By contrast, neither quantitative nor qualitative findings directly support the hypothesized improvement on depression in the targeted population. One possible explanation lies in a potential ceiling effect, since this sample comprised healthy, fully functional individuals. When bearing in mind that the reported values on the depression instrument are generally low (M = 4.91, SD = 2.90); scores beneath 7 are considered healthy), the consistent lack of a response across group and time points may reflect the lack of symptoms and deficits in this area. Similarly, while the range of scores on the depression scale reaches from 0 to 15 (i.e. the full range of the scale), those participants who scored higher than 7 at baseline tended to report significant improvements, as per exploratory analyses.<sup>47</sup>

Inconsistencies in the evidence for depression benefits following MBIs for teachers have been pointed out by other studies as well. For instance, as mentioned in section 1.5.2, the first evaluation of the Cultivating Awareness and Resilience in Education program (CARE; Jennings et al., 2013), revealed no significant group differences on the overall scores of several of the targeted variables, including depression, positive and negative emotions, emotion regulation and burnout. The authors nonetheless consider the program feasible and effective based on a number of responsive indicators, such as mindfulness, daily physical symptoms, efficacy, and the subscales of employed instruments (e.g. the reappraisal subscale of the emotion regulation instrument). In the systematic review conducted by Lomas et al. (2017), the authors present a similar conclusion: while for the larger part the reviewed studies confirm the positive impact of MBIs on emotional and physical well-being, most individual variables nonetheless did not yield consistent results; burnout, depression, stress, well-being and physical parameters systematically yielded significant results in some studies and non-significant results in others.

<sup>&</sup>lt;sup>45</sup> Even in the third school, feedback sheets revealed that approximately half of the participants reaped some benefit that typically entailed improved coping with stress or an increased sense of calm in daily life (see section 5.9.1).

<sup>&</sup>lt;sup>46</sup> Notably, when clustering variables into domains, MANCOVAs revealed that mental health variables showed the largest effect size, relative to social-emotional competencies and creativity and openness (see section 4.3.2.5).

<sup>&</sup>lt;sup>47</sup> The 12 participants of the intervention group who reported depression scores higher than 7 at baseline showed significant improvement in an exploratory within-group t-test comparing baseline and post-intervention scores. Statistics are included in the appendices.

#### 6.1.3 Social-Emotional Competencies

### 6.1.3.1 Emotion Regulation

Of the schools examined in this dissertation, only the first showed a medium effect size, albeit nonsignificant, on emotion regulation in the quantitative analysis of data (d = 0.55). However, a trend in the hypothesized direction was evident across groups (see figure 7 in section 4.3). Moreover, a within-group analysis of the pooled intervention group across the three time points indicated significant increases in emotion regulation skills both from baseline to postmeasurement as well as from post-measurement to follow-up (see also figure 7 in section 4.3). While the latter can only be considered an exploratory indicator, an impact on emotion regulation can nonetheless be deduced from the qualitative findings, which point to improved coping with stressful and negative emotions through the previously mentioned mechanisms and processes (see section 5.3). Emotion regulation can be defined as "the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross 1998, p. 275). Such processes are recurrently described by participants. Thus, awareness and insight processes tended to affect the appraisal of situations and stressors and, by extension, their emotional impact. Similarly, distancing and detachment were described as a concrete strategy to lessen the impact of challenging emotions, or prevent them from arising in the first place. Presence, non-judgment, acceptance and self-compassion can likewise be considered efforts to meet difficult emotions constructively, rendering them less damaging or forceful. By this token, the processes that the teachers report entail antecedent-focused and response-focused emotion regulation (Gross, 1998) since they modulate whether a stimulus evokes specific emotions as well as the unfolding and experience of an already present emotion. These findings notwithstanding, it is crucial to bear in mind the overall lack of statistically meaningful results, which is further commentated below.

#### 6.1.3.2 Interpersonal Effects

Quantitative results point to a significant effect on interpersonal problems in the first school only (d = 0.66), with the pooled population exhibiting a trend in the expected direction (see figure 8 in section 4.3)<sup>48</sup>. While the two other schools yielded no group differences, withingroup comparisons of the pooled intervention group across the three time points revealed a

<sup>&</sup>lt;sup>48</sup> As mentioned in section 4.1.3, this trend is potentially more reliable than the actual ANCOVA, since the homogeneity for regression slopes assumption was violated for this analysis.

significant decrease in interpersonal problems from baseline to follow-up, suggesting a potential cumulative effect that proved fruitful over time. This tendency is discernable in the trend illustrated in figure 8 (section 4.3). Qualitative results, moreover, unequivocally reveal that effects on interpersonal relations and interactions with others were a consistent theme throughout the interviews, whereby teachers from the first and second school describe palpable impact on the relation to students, colleagues as well as friends and family. As with emotion regulation, we consider the overall results indicative of an impact in this area, yet must remain mindful of the limited quantitative effects.

One possible factor influencing the presented results on interpersonal competencies in the present data may lie in a deficit-specific impact of mindfulness interventions. Baseline comparisons of the three schools showed that the first school reported the highest levels of interpersonal problems, with differences between the first and third school reaching significance. Bearing in mind that it is likewise the first school where interpersonal problems decreased most obviously (as indicated by the quantitative findings), it is conceivable that the intervention was able to produce particularly tangible effects in this context precisely because interpersonal dimensions constituted an area of need. This is consistent with research pointing to particular benefits from MBI wherever there is a marked need (Kuyken et al., 2015) and suggests that mindfulness concepts often prove adaptable to individual shortages and deficits. Indeed, as reported in section 5.10, the course instructors themselves stated that they observed a need-specific response to course inputs both generally and in the present population.

Mindfulness and mindfulness-based interventions have previously yielded auspicious results on an interpersonal/interactive level, especially as regards teacher-student relations (Benn et al., 2012; Jennings, 2015; Kemeny et al., 2012; Napoli, 2004; Singh et al., 2013). Improved interpersonal skills and relations are doubly important for teachers. On one hand, the relationship to students plays a considerable role in teacher mental health (Bauer et al., 2006, 2007; Bauer, 2009; Jennings and Greenberg, 2009; Schaarschmidt, 2010; Jennings, 2015; see section 2.3.2). On the other hand, the relationship between students and teachers is crucial for improving the climate of the educational setting at large (Flook et al., 2013; Jennings et al., 2013). Furthermore, rewarding and satisfactory relationships at the workplace constitute a major resource that teachers can ideally tap and draw resilience from, as discussed in section 1.5.1.

Our conclusions regarding interpersonal aspects are of particular relevance since the majority of psychological measures in mindfulness research to date are limited to dimensions of individual traits and states as well as personal well-being and behavioral regulation. Thus, the meta-analysis by Sedlmeier et al. (2012) found that only four out of 125 studies assessed interpersonal aspects of meditation, even though interpersonal variables obtained the largest effect size of all other psychological areas in this meta-analysis.

# 6.1.3.3 Self-Efficacy

Quantitative data did not confirm the hypothesized improvement in self-efficacy, neither across the pooled population nor in the individual schools. Qualitative findings may to some extent suggest an indirect impact on self-efficacy (via the impact on coping and emotion regulation), yet are not sufficiently unequivocal to question the statistical results. As with depression, this result echoes some of the inconsistencies reported by studies of MBIs among teachers (Lomat et al., 2017), however still calls for further explanation. Interestingly, the group comparisons of self-efficacy (both general and teacher-specific) indicate that the lack of effects may not be due to the absence of change at large, but rather result from similar patterns in both intervention and waitlist groups that prevented differential effects (see figure 10 and 11). This similarity in response patterns suggests that systemic factors likely influenced the results. As evident in many of the qualitative findings, concurrent stress often impacted course experience and outcome. The data suggests that perhaps the stress load on teachers decreases over the first half of the school year, thus resulting in the uniform improvement across both intervention and waitlist group. While the precise reasons can only be roughly conjectured, it is possible that preparing for a new school year, settling into fresh routines and getting to know new cohorts of students are among the more stressful phases of the school cycle for teachers. By this logic, teachers have a firmer grasp on their classes and curricula and feel more familiar with individual students and class dynamics later in the school year, which arguably entails a less stressful daily routine (though this is not evinced as such in the data and remains speculative). In all events, it would seem that on one hand, the school setting is a dominant influence on teacher well-being, and that individual-centered approaches such as MBIs can only be considered of secondary impact compared to systemic constraints and factors. These data moreover suggest that participants may reap more meaningful benefits from MBIs if and whenever the overall context facilitates positive course experiences. Indeed, the continued improvements of the intervention group at follow-up (as tentatively suggested by within-group comparisons) indicate that mindfulness benefits may often remain dormant until activated by more conducive circumstances.

### 6.1.3.4 Self-Regulation

Like self-efficacy, self-regulation did not respond to the present intervention. Quantitative analyses offer little explanation for this result, although figure 9 suggests that a trend in the hypothesized direction took place in the pooled intervention group, yet may have been obscured by baseline differences between the intervention and waitlist group<sup>49</sup>. While it is conceivable that teachers in the waitlist group showed noticeably higher self-regulation levels prior to the intervention than those in the intervention group, thereby preventing differential effects, baseline comparisons do not confirm this hypothesis on a significant level. Moreover, qualitative results show little impact on attentional self-regulation. Therefore, it must be concluded that the hypothesized effects on the self-regulation of attention and motivation could not be confirmed.

Here too it is possible that a ceiling effect ties into the present results, since self-regulation constitutes an area which healthy working adults in general and teachers in particular normally master in the course of their education and career. Teachers arguably spend years cultivating these competencies in the pursuit of their challenging profession, whose specific stressors (as outlined in section 1.5.1) require precisely these aptitudes.

Another explanation may be drawn from the qualitative results, which suggest that aspects of attention and focus were not perceived as a dominant theme in course participation. In fact, none of the individually formed mindfulness concepts or described mechanisms reflects any emphasis on concentration or attention. Likewise, the interviews with the instructors revealed that this was not a major area of focus (see section 5.10). As described in section 1.4.1, even within standardized MBSR interventions, the emphasis on the different components varies (Schmidt, 2014). It stands to reason that the present intervention did not credit the self-regulation of attention and focus as a cognitive endeavor with sufficiently explicit importance to bring about palpable effects in this respect. Rather, presence as an attitude that exceeds the cognitive regulation of concentration was considered a core component (this will be further addressed in section 6.2).

<sup>&</sup>lt;sup>49</sup> The non-significant results of the ANCOVA should moreover be interpreted with caution since the homogeneity of regression assumption was violated for this analysis.

#### 6.1.3.5 Engagement

Engagement is yet another variable that did not respond as hypothesized. On the contrary, engagement levels were reduced in the intervention group after course participation, albeit non-significantly. Several aspects ought to be considered when interpreting this finding. First, this variable was assessed in the first school only <sup>50</sup>: as a result, sample size, power and implications of this analysis are limited. Second, in the qualitative narratives, participants described in great detail how the acquisition of a mindful attitude helped them detach from pressure to perform and dis-identify with persistent demands of achievement and efficiency, rather than strengthen their work commitment. As discussed in section 1.5.1, engagement is a desirable and protective factor only when accompanied by resilience and a capacity to distance oneself from stressors. Arguably, teachers in the first school did not lack in commitment and engagement, but rather in distancing ability<sup>51</sup>. Accordingly, qualitative results point to increases in self-care and decreases in perfectionism and identification with work tasks and achievements. Similar findings were described by Walach et al. (2007), who report that mindfulness can prompt employees to be more critical of their work conditions and to distance themselves from trying work situations.

As has been argued before, it is possible that MBIs, rather than induce uniform effects, respond to particular needs and deficits, in which case an impact on engagement among already highly committed teachers is unlikely. It bears repeating however, that in light of the small sample and non-significant result, these considerations are purely speculative.

#### 6.1.4 Creativity and Openness

Both creativity measures did not yield the hypothesized results, but rather display unexpected and puzzling patterns. The verbal measure of creativity in particular warrants consideration. In the pooled intervention group, within-group analyses across time points revealed significant changes in creativity scores ( $\eta^2 = .05$ ), whereby creativity levels decreased between t1 and t2, and increased between t2 and t3 (pairwise comparisons reveal both changes to be significant). This pattern was echoed by trend in the individual schools as well as in the waitlist group. By contrast, the drawing measure of creativity conformed to the hypothesized direction at a non-significant level. One possible explanation for these startling

<sup>&</sup>lt;sup>50</sup> As explained in section 3.6, after the intervention was completed at the first pilot school, the test battery was revised shortened and simplified, which resulted in the omission of the instrument assessing engagement.

<sup>&</sup>lt;sup>51</sup> This is somewhat supported by the researchers' subjective impression that the teachers in the first project school were particularly cooperative and dedicated.

differences may be the time point of assessment: relative to the drawing measure (and indeed all other instruments), the verbal creativity instrument requires more cognitive exertion. As discussed above, the earlier phases of the school year may be more stressful for teachers and thus less conducive to improved performance on demanding tasks. However, this explanation does not address the singular pattern of this variable (i.e. significant decrease followed by significant increase) and must therefore remain tentative.

The instrument measuring openness likewise at no point responded to the intervention in either group. While some of the qualitative narratives allude to processes that are related to openness (especially passages pertaining to increased acceptance of oneself and others), they demarcate a concept of openness more akin to inspiration and personal growth than the strictly operationalized openness to experience that was assessed by this instrument.

The lacking results on creativity and openness may in part be due to the nature of these variables. Creativity and openness represent solid structures that have typically developed over a long time and are thus robust traits rather than malleable soft skills or transient states. Other mindfulness-based interventions likewise achieved only marginal results on trait-level outcome variables. Thus, the meta-analysis by Sedlmeier et al. (2012), for instance, reported the lowest effect size for neutral personality variables (r = 0.03). By contrast, outcome variables that tend to reflect a skill or state and that are relevant in the light of teachers' daily lives and work realities, such as stress, anxiety interpersonal skills and emotional regulation, were easier to impact.

#### 6.2 Processes and Mechanisms

While the extrapolated changes and benefits described in the qualitative findings echo quantitative results that were indicated by significant group differences and/or medium effect sizes, the opposite is not the case. In other words, the cognitive and emotional processes that teachers illustrated in the interviews extend beyond the scope of impact visible in the quantitative results. In our opinion, this has two equally important implications:

- a) The qualitative findings tend to depict processes and changes that should not be overstated in meaning and consequence, especially in light of the limited transformative impact of this intervention on quantitative indicators of overall mental health and well-being.
- b) Much of the actual impact of this mindfulness-based intervention took place on a procedural level that is too subtle to capture through questionnaire-based group differences,

yet nonetheless valuable from the participants' subjective perspective and as an avenue of future development and changes.

It is arguably difficult for pre-post comparisons of group means to reflect tentative new insight into one's own behavioral patterns or automatically held assumptions, for instance yet awareness processes and burgeoning behavioral and attitudinal modifications are nonetheless keys to greater overall satisfaction and long-term outcomes. This assumption is lent some support by within-group comparisons of the pooled intervention group, which reveal significant improvement occurring between baseline and follow-up for mindfulness, stress, anxiety, self-efficacy, teacher-specific self-efficacy, emotion regulation and interpersonal problems. Moreover, the course instructors confirm that MBSR targets not so much concrete outcomes, but rather the process level (see section 5.10). Therefore, and as mentioned previously in the qualitative results section, the mechanisms described on a process level should be considered vital benefits in and of themselves as well as important elucidations of other described effects. Mindfulness researchers who are interested in outcomes as well as mechanisms underlying those outcomes in fact tend to state that the two categories are intertwined and overlapping, and that the directionality of mechanism and outcome is often interchangeable (e.g. Kuyken et al., 2010; Shapiro, Carlson, Astin, & Freedman, 2006).

With that in mind, the qualitative findings point to four central areas where meaningful processes and mechanisms of change took place: Awareness and Insight; Distancing, Presence; and Acceptance, Nonjudgment and Self-Compassion. In the following, these mechanisms will be discussed in terms of existing theory and findings.

The four main processes reported by participants mirror many of the theories of change proposed to date for MBIs, as illustrated in the theoretical background of this dissertation. Almost all theoretical frameworks of mindfulness mechanisms proffer elements of emotion regulation, attention regulation, body awareness, and self-awareness (Esch, 2014; Hölzel, Carmody, et al., 2011; Shapiro et al., 2006; Vago & Silbersweig, 2012) <sup>52</sup>. How then do the present findings fit in with existing models and empirical results?

<sup>&</sup>lt;sup>52</sup> As is often the case with explanations of mindfulness mechanisms (Shapiro, Carlson, Astin, & Freedman, 2006), the involved processes are closely interrelated and non-linear.

#### 6.2.1 Emotion Regulation

The literature on mindfulness mechanisms suggests that emotion regulation and related changes constitute a consistently reported trajectory of impact (Bohus & Huppertz, 2006; Esch, 2014; Hölzel, Lazar, et al., 2011; Kadziolka et al., 2016; Shapiro et al., 2006; Vago & Silbersweig, 2012). The meta-analysis of validated mechanisms by Gu et (2015) likewise states that aside from increased mindfulness, decreased reactivity and negative repetitive thinking are the only mechanisms supported by adequate empirical indicators (mediational studies). Two of the central processes described by the present study's participants can be reasonably considered modes of emotion regulation: deliberately detaching from stressors (*Distancing*) or meeting them with nonjudgmental acceptance (*Acceptance, Nonjudgment and Self-Compassion*), as they both represent efforts to regulate one's reactivity and emotionality. Similarly, some of the reported effects on coping with stress and negative emotions, including decreased rumination and worrying and the improved management of acute stress and conflict (see section 5.5.1), directly mirror the decreases in reactivity and negative repetitive thinking outlined by Gu et al. (2015).

Existing theories suggest that mindfulness may induce practitioners to *reappraise* stressors in a more positive light (reappraisal; eg. Hölzel, Lazar, et al., 2011) or defuse their impact through the *exposure* of open observation (e.g. Shapiro et al. (2006). The qualitative data presented here is in line with these propositions, yet suggest a slightly different angle. Instead of appraising stressors more positively, interviewees repeatedly described that they reappraised the *importance* of these stressors. According to Lazarus and Folkman (1987), an individual's first response to a stressor is a basic appraisal of its *self-relevance*, i.e. the degree to which it matters to the experience and identity of the person in question. In a second step, the individual then appraises his or her coping capacities. In the interviews discussed here, mindfulness may modulate both of those processes, firstly by questioning and relativizing the self-relevance of stressors which is otherwise often automatically assumed or needlessly magnified, and secondly by bolstering individual's appraisal of their coping ability through dis-identifying and detaching.<sup>53</sup> The observation that mindfulness influences the self-relevance of situations and stressors can also be interpreted in terms of the lessened ego-involvement in more mindful states. Schultz and Ryan (2015) argue that mindfulness is

<sup>&</sup>lt;sup>53</sup> In the first school, detachment and alteration of self-relevance may be tentatively supported by the post-intervention decrease on the engagement measure, whereby detachment from work demands and stressors and a prioritization of well-being may have led to a decreased sense of identification and perfectionism, which in turn resulted in relativized work commitment.

associated with a self-concept that is fluid and process-like in nature (I-Self) rather than one that strongly draws on identification with roles, ascriptions and demands (Me-Self):

"For highly mindful people, rejections or successes do not involve their self-worth and are not destabilizing, rather, are simply seen as part of the "I" self. As a result, this "quieting of the ego" allows them do behave volitionally and without the need to prove, maintain or stay attached to conceptions of the Me-self" (p.88).

In a similar vein, while the concept of exposure implies a reduced impact of stressors due to habituation and extinction tendencies, the findings here point to a more proactive pathway: acceptance (see 5.3.4). Often tying into ethical or spiritual stances, acceptance is arguably a more radical coping technique than exposure. The exposure effect repeatedly mentioned in the literature (Bohus & Huppertz, 2006; Hölzel, Lazar, et al., 2011; Shapiro et al., 2006) may thus be more comprehensively understood within the framework of a less aversion-prone, open attitude at large. Few authors explicitly and elaborately address acceptance, non-judgment and self-compassion as main mechanisms of change. Hölzel, Lazar et al. (2011) indeed recommend further investigation into self-compassion as a feasible construct in understanding the effects of mindfulness and relate it to emotion regulation and individual self-concepts. Similarly, Kuyken et al. (2010) report only tentative support for self-compassion as a mediational variable in a mindfulness intervention. The findings presented here suggest that self-compassion is indeed an important aspect, yet cannot be understood in isolation from the equally influential mindfulness components of non-judgment and acceptance. This is consistent with the observations made by Bohus and Huppertz (2006), who advocate the central role of acceptance in their theory of possible mindfulness mechanisms.

#### 6.2.2 Attention regulation

As has been noted in the discussion of impacts and benefits, little effect on a purely cognitive level was reported, since both quantitative and qualitative results did not indicate a higher capacity for regulating one's focus or concentration. However, the teachers did describe *presence* as a mechanism (see 5.3.3). Orienting one's focus to present experience can be regarded as one possible mode of attention regulation, although attention regulation as commonly described in the literature on mindfulness seems to involve a more cognitive, task-oriented process than the one reported in the present data. Among the teachers of this study, mindfulness was seldom regarded as a tool to deepen one's concentration on a specific object in a top-down manner that monitors conflicts and eliminates distractions (Hölzel, Lazar, et al., 2011). Rather, attention regulation towards the present experience manifested as a consciously

more gathered and collected state of mind, that is less dominated by haste, time considerations and worries, thus veering the concept into the vicinity of  $Mu\beta e$  as opposed to a single-minded and productive focus. This is reminiscent of the understanding of mindfulness advocated by Grossman (2014):

"Cultivation of mindfulness may be more about repeatedly coming into contact with those, perhaps merely brief, moments when our awareness is inhabited by peace, calm, and acceptance, than it is about learning merely to be more *attentive* [sic] to moment-to-moment experience" (p.21).

Presence in this sense does not appear to beget change through its effect on attention regulation; it is a powerful mechanism in its own right. Much like Kadziolka et al. (2016) state, "In the mindful state, the mind is occupied only with what is present, and there is no need to deal with the anxiety of past or future concerns, such as worrying about how a difficult situation may develop or regretting past errors." (p.243). Presence as the more viable aspect of attention regulation was also reported by Sharp and Jennings (2016) in a qualitative evaluation of the aforementioned CARE program, which concludes that *present-centered* awareness is one of the central mechanisms at play.

### 6.2.3 Self-Awareness

Another common mindfulness component theorized by many authors has been labeled *meta-awareness of the self* (Holas & Jankowski, 2013), *changes in one's perspective on oneself* (Hölzel, Lazar, et al., 2011), *self-awareness* (Vago & Silbersweig, 2012), *self-perception* (Esch, 2014), and *reperceiving* (Shapiro et al., 2006). While the different terminologies may convey subtle variations in nuance, they nonetheless share a focus on an altered mode of relating to the self, such that the self becomes the object of awareness. For instance, Shapiro et al. (2006) postulate that self-regulation (which the authors define as processes whereby individuals unmask and recognize automatisms and unquestioned behaviors) and a clearer sense of values are among the auxiliary mechanisms of reperceiving. Similarly, the S-ART model put forth by Vago and Silbersweig (see section 1.4.5) argues that mindfulness may help individuals recognize and correct a distorted sense of self that is the root of many problematic attitudes and behaviors, and that is the direct result of ill-reflected, unconscious habits and automatized reactivity.

The awareness and insight processes (see. 5.3.1) that the interviewees of this project report are consistent with these suppositions. Specifically, teachers described sensitized awareness of performance pressures, own needs and limits, own patterns and behaviors, as well as own

values and priorities. These tendencies to examine one's thoughts, beliefs, behaviors, emotions and life consciously and deliberately, often leading to fresh and valuable insights, closely correspond to the above concepts. Along similar lines, the dis-identification with particular thoughts and emotions as part of ongoing distancing processes (see 5.3.2) can be conceived as a way of reperceiving the self<sup>54</sup>. These outcomes are further in line with the qualitative results reported by Jennings et al. (2013) in their evaluation of CARE mechanisms, whereby awareness of bodily stress, emotions, attitudes and the need for self-care was perceived as a central and helpful component of the intervention. In the subsequent qualitative investigation into CARE, Sharp and Jennings (2016) further conclude that emotional awareness as well as an ability to shift perspective were among the chief mechanisms reported by participants.

Insight and awareness processes can have far-reaching consequences on well-being. Based on the premises of the Self-Determination Theory put forth by Ryan and Deci (2000), Schultz and Ryan (2015) explain how mindfulness, via attentive awareness, impacts both the autonomy and congruence of self-regulatory processes as well as the degree to which one's objectives are intrinsically motivated:

> "Mindfulness, through awareness and attention, pulls people closer to what is currently taking place, without judgmental or evaluative attachments, this awakened state allows consciousness to become clear and fresh, which, in turn, acts as a liberating agent of conditioned responses, and allows people to better reflect upon the "why" of actions, thus promoting more self-endorsed autonomous behavior" (Schultz & Ryan, 2015, p.86)

The authors cement this relation between mindfulness and autonomy through research that points to correlations between dispositional mindfulness and autonomous activity in daily life (Brown & Ryan, 2003).

#### 6.2.4 Body Awareness

While a number of authors propose body awareness as an additional distinct mechanism of change (Esch, 2014; Hölzel, Lazar, et al., 2011), the data presented here suggests that it plays a secondary role in several superordinate processes. Body awareness, perception of bodily states and zeroing in on the body through the breath are all integral to processes of presence,

<sup>&</sup>lt;sup>54</sup> While reperceiving, i.e. changing one's perspective so as to subject the self to awareness, is clearly relevant to these processes, the interviews analyzed here cannot support the notion that this concept is a central, superordinate commonality of all mindfulness mechanisms, as argued by Shapiro et al. (2006).

distancing and a number of awareness areas. However, descriptions of participating teachers show that body awareness, especially the breath, is better understood as a behavioral tool that facilitates the initiation of helpful processes rather than a mechanism in itself. In its capacity to center and ground individuals, body awareness may establish presence, support detachment from stressors and render accessible information about one's state, needs and limits. The pervasiveness of the breath in a multitude of processes was well-captured by Grossman and Van Dam (2011):

"Respiration is the one vital physiological function continuously accessible to sensation and perception during awake states. Although people rarely pay attention to their breathing during ordinary, healthy states, it is both experientially and empirically apparent that [..] we are able to turn attention to the breath in all situations and at all times, until respiration is finally extinguished at death. The breath is available to all the core senses—taste, touch, smell, sound, and vision—as well as to other internal perceptual processes tightly bound to conscious experience of the self [..]. Additionally, the lungs represent the largest and most powerful pumping system (and physiological oscillator) in the body. As a consequence, other vital functions [..] often synchronize with the rhythm of the breath [..]. The breath is also exquisitely sensitive to numerous emotional, cognitive behavioural activities [..]. Furthermore, breathing alternatively function almost entirely under unconscious control or almost completely under conscious control [..], placing this physiological process precisely at the juncture of conscious and unconscious experience. For all these reasons and more [..], awareness of the breath can put us in touch with experiences below the threshold of usual conscious experience and may serve as a powerful tool to refine and broaden understanding of one's own thoughts, feelings, and other mental states." (p. 224)

Overall, many of the processes identified here are roughly equivalent to the mechanisms prevailing in the literature, yet the emphasis in the present data is often somewhat altered. Thus, meta-awareness of the self is part of a larger conglomerate of awareness and insight processes that tend to include wide-ranging meditations and intellectual contemplation as well as self-related aspects. Likewise, acceptance, non-judgment and self-compassion appear more central to this intervention than existing theories would suggest, while body awareness is better conceptualized as part of other processes than a mechanism in its own right. Finally, attention regulation in a strictly cognitive and performance-oriented sense gives way to an attentive mode of deliberate orientation towards present experience. One interpretation of the processes identified here through qualitative, first-person exploration of participants' experience suggests that they provide insight into a deeper stratum of mechanisms than commonly found in the literature: self- and emotion regulation, meta-awareness, body

awareness and attention regulation by that token would constitute intermediary outcomes rather than the primary originators of change. The conglomerate of processes identified here closely echoes the qualitative findings by Sharp & Jennings (2016), who conclude in their qualitative investigation of CARE (see section 1.5.2) that emotional awareness, decreased emotional reactivity, present-centered awareness and reappraisal as well as an ability to shift perspective are central benefits. The review by Lomas et al (2017) likewise mirrors our results on underlying mechanisms, since they identify mindfulness and emotion regulation as the most consistently reported changes across the reviewed studies. In this regard, they propose the following trajectory, while acknowledging that further research into specific causal chains is recommended:

"(a) mindfulness involves introspective practices that facilitate the development of attention and awareness skills; (b) the development of these skills leads to enhanced emotional regulation (including abilities such as reperceiving); and (c) emotional regulation is a meta-skill that subserves multiple health and wellbeing outcomes" (p.137).

We submit that our present results conform to this trajectory, while providing a more in-depth understanding of the exact nature of the involved awareness and emotion regulation processes.

# 6.3 Contextual and Implementational Influences

Several aspects point to the importance of contextual and implementational influences on the present intervention. First, the often lacking quantitative effects imply that mitigating factors must have played a role in course impact. Second, the schools involved in this study responded differently to the same MBSR-intervention, which in turn likely contributed to the sparse results of the comparison of the pooled intervention and waitlist groups. Especially the third school barely reported any benefits in terms of group comparisons. Third, qualitative data repeatedly describe the subjective impact of context and implementation both as positive course characteristics and as difficulties. A few concluding notes on this dimension are therefore necessary.

With respect to the conspicuously poor results obtained in the third school, a number of potential explanations can be inferred, albeit not definitively pinpointed. For one, the principal of the third school participated in the intervention group of the respective MBSR course. While this was also the case in the second school, teachers there did not describe this circumstance as a hindrance, yet in the third school, it was pointed out as uncomfortable.

Secondly, the feedback sheets and the interview with the course instructor and school principal of the third school suggested that the percentage of participant teachers who expressed skepticism towards the concepts and feasibility of mindfulness and/or the manner of instruction was higher than in the two other schools, which explicitly vexed a few of the more engaged teachers. Thirdly, both the principal and the course instructor described a remarkably goal-oriented approach to course objectives among participating teachers and little frustration tolerance when those objectives (usually quick and noticeable stress reduction) were not met. Together, these indicators may shed some light on the specific mechanisms at play in the third school. Arguably, this group of teachers seems to have harbored greater reservations about the course's feasibility. In light of continual criticisms of both contents and exercises, repeated articulations of frustration and the presence of the school principal, this may have culminated in an overall unpropitious course atmosphere that can be assumed to have affected even the more receptive teachers.

Another possible influence on differential course effects may be related to prior deficits or problem-areas that the intervention may address to different extents. Thus, the first school, which showed significantly more interpersonal problems and the lowest scores on emotion regulation, benefitted precisely in those area, while the third school, which reported the lowest (i.e. least problematic) baseline scores on health variables<sup>55</sup> showed the least effect on stress and anxiety. By contrast, the second and third school - which scored higher on stress and anxiety at baseline - responded with moderate effect sizes in those areas. In the previous illustration of qualitative findings, the interesting statements regarding the impact of concurrent stress levels on course acceptance suggested that mindfulness may prove most helpful if individuals are stressed enough to feel some need for a counter-measure, yet not so stressed that they completely lack the necessary capacity to engage with the process. This is in line with findings suggesting that individuals with higher risk of psychological strain tend to benefit more from MBIs than entirely healthy and functioning target groups. Integrating both quantitative and qualitative findings seems to confirm this hypothesis, yet it also implies that time availability may be another essential factor in this equation. Thus, the results of the third school indicate that less acute stress accompanied by fuller schedules may possibly explain the relative lack in results. This is supported by the principal's observation on scarce time resources among her staff. Even though this explanation of mindfulness mechanisms is

<sup>&</sup>lt;sup>55</sup> Interestingly, the third school reported the largest workload per week, suggesting that the perceived stress levels are due to more complex reasons than solely the amount of work.

intriguing, no definitive statements can be made based on the data presented here, and further exploration of how this model may be conceptualized is necessary.

Other factors may have tied into the often lacking quantitative effects across schools. Even though motivation did not emerge as a salient theme in the interviews, it is conceivable that unlike typical MBSR courses, where participants have a vested emotional and financial interest in benefitting from a practice they sought out independently and of their own initiative (often due to concrete and tangible distress), teachers in this intervention were less invested in making full use of the course. Because the course sought out participants, not the reverse, and because it was clearly dependent on the staff's interest and offered for free, the stakes and motivation to reap a reward may have been lower. This is likely related to the generally low levels of independent practice, which may likewise have contributed to the limited effects.

The difficulties described in detail in sections 5.7 and 5.9 are similarly relevant to the lacking statistical results. Thus, individual teachers recurrently voiced different conceptual doubts either with respect to mindfulness as a concept or to single exercises. On a less fundamental but perhaps equally bothersome level, some participants across all three schools criticized a number of context-related problems, such as difficult group dynamics, unpleasant locations, disagreeable aspects of the manner of instruction and the overall rather stressful and hectic daily life in schools. These concerns were not individually central to the overall intervention, yet together contributed to the degree teachers were able to engage with and benefit from the course sessions (see also section 5.7 and 5.10).

# 6.4 Mindfulness and Muße

Muβe and its relationship to mindfulness were solely addressed through qualitative data. Analysis of this data revealed Muβe concepts, features and the relationship to mindfulness concepts and experiences as vital aspects. While these themes are discussed at length in section 5.8 and 5.10, the following extracts central findings and implications pertaining to this research question.

Participants expressed  $Mu\beta e$  concepts that fell somewhere on a spectrum between a radical view of  $Mu\beta e$  that considers it a rare and desirable "State of Self-Determination and Liberation", and a more common approach to the phenomenon that regards pleasurable recreation and rest as daily manifestations of  $Mu\beta e$  (" $Mu\beta e$  as Leisure, Pleasure and

Recreation"). While the former places great emphasis on autonomy, non-functionality and the complete absence of stressors and constraints, the latter revolves around meaningful pleasure and joyful experiences. Participants often described hybrid  $Mu\beta e$  concepts and experiences, yet tended to veer more in the direction of one of those poles.

The relationship that this dissertation hypothesized between mindfulness and  $Mu\beta e$  was largely confirmed by teachers in the qualitative interviews. Indeed, most interviewees believed that mindfulness is likely to enhance and facilitate the experience of  $Mu\beta e$ , yet this effect was described in terms of several different mechanisms. Thus, some considered the self-care practices that mindfulness promoted conducive to  $Mu\beta e$ , while others found the altered and detached attitude towards stressors a helpful prerequisite to experience  $Mu\beta e$ . Yet others regarded mindful qualities such as openness, presence and awareness as key in understanding how mindfulness may bring about  $Mu\beta e$ . It is essential to point out, however, that mindfulness cannot be claimed to be causally and linearly related to  $Mu\beta e$ . Rather, the data indicates that the two concepts mutually reinforce one another, and are often better understood as correlated by-products of a reflective, wholesome and congruent lifestyle. Therefore, some participants felt that mindfulness is impossible without some degree of  $Mu\beta e$  rather than the opposite.

Because participants tended to describe a more complex relationship between the two concepts than simple causal linearity, they often resorted to narrating commonalities and distinctions between mindfulness and  $Mu\beta e$ . Common experiential qualities, such as presence, relaxation and reflectiveness, repeatedly constituted the link between the constructs. By contrast, the fact that mindfulness is arguably compatible with demanding stressful states and may be "utilized" in a functional and performance-enhancing manner was the main described difference to  $Mu\beta e$ .

This distinction is consistent with the psychological sketch of  $Mu\beta e$  presented in the theoretical background (Heger, 2014) whereby the emotional valence of  $Mu\beta e$  is necessarily positive. However, the remaining characteristics that Heger distills as determinants of  $Mu\beta e$  appear to circumscribe only those concepts that regard  $Mu\beta e$  as a state of self-determination and liberation. The full manifestation of  $Mu\beta e$  as an experience that is a) emotionally gratifying and pleasing; b) intrinsically motivated and self-determined; c) personally meaningful and rewarding; d) characterized by self-reflective attentiveness and presence and e) subject to altered time perception is not described by all participants, usually giving way to

a "light" *Muße* variant that debatably falls short of the critical and transformative potential of the concept put forth by the CRC.

The connection between  $Mu\beta e$  and mindfulness is likewise closely associated with the type of concepts participants entertain of  $Mu\beta e$ . Thus, participants who conceived of  $Mu\beta e$  in terms of "Leisure, Pleasure and Recreation" were likelier to consider a mindful, distanced attitude towards stressors and a calm, equanimous approach to daily life helpful in creating time and space for experiences of  $Mu\beta e$ . Similarly, those participants who felt that the importance of self-care in mindfulness practice lends legitimacy to  $Mu\beta e$  as a way of regenerating productive capacity also implicitly expressed a  $Mu\beta e$  concept on the recreational end of the spectrum. On the other hand, participants who stated that mindfulness enables  $Mu\beta e$  through an awareness of own needs, priorities and lifestyles and a profound openness to oneself and one's surroundings thereby implied a notion of Muße that is inherently more drastic.<sup>56</sup> Interestingly, narratives of subjective concepts indicated that mindfulness may pave the way for the more radical type of  $Mu\beta e$  among the few participants who consider mindfulness a farreaching and all-encompassing life attitude, while its more practical and stress-oriented applications may be more conducive to  $Mu\beta e$  as a recreational concept. Schultz and Ryan (2015) touch upon several theoretical pathways from mindfulness to Muße in the following statement:

"When awareness of inner and outer circumstances is heightened, so are people's abilities to attend to prompts arising from basic needs, and to consciously self-regulate their actions in a manner fulfilling such needs. Consequently, one is more likely to focus on and attain intrinsic life goals, living more eudaimonically<sup>57</sup> in the process." (Schultz & Ryan, 2015, p.90).

Taken together, the different experiences of mindfulness practice as descried in the interviews may reflect an "otiose"  $Mu\beta e$ -Dimension inasmuch as a) awareness processes that support individuals in consciously choosing lifestyles and attitudes they find wholesome can constitute a form of self-determination; b) a focus on present experience may facilitate rich, enjoyable and fulfilling experiences; and c) acceptance and non-judgement may neutralize stressors and demands that are incompatible with  $Mu\beta e$ .

<sup>&</sup>lt;sup>56</sup> This polarity in  $Mu\beta e$  concepts mirrors a similar pattern in the effects ascribed to mindfulness: here too, changes range from far-reaching insights into own needs and attitudes, to improved daily coping and relaxation. As with  $Mu\beta e$ , narratives recounting more profound changes are far rarer.

Incidentally, living eudaimonically, an Aristotelian term, has been associated with happiness, leading a good life and flourishing (Kraut, 2016), and can be considered the very purpose of  $Mu\beta e$ .

The issues discussed under 'Digressions and Reflections' (section 5.11) demonstrate another vital consequence of discussing mindfulness in terms of  $Mu\beta e$ . As the reflections expressed throughout the interviews intimate, situating the MBI delivered by this project within the larger discourse and debate around  $Mu\beta e$  helped educe the relevance of MBIs beyond mere stress management as an alternative approach to the excessive demands of modern life. The comments that many teachers made with respect to systemic pressures on teachers and students and the need for an individual-oriented approach within larger collective structures such as schools support the assumptions of the at-hand project and outline the vital role that MBIs can play under the right circumstances. Viewing mindfulness in the context of  $Mu\beta e$  may furthermore protect the potential of MBIs against the danger of their exploitation in the name of improved performance and heightened functionality. Thus, the subversive potential inherent in a radically mindful attitude was the subject of many reflections on the part of participants, and seems to have impacted mindfulness concepts and related processes. The sensitized awareness of needs, priorities, limits and the concurrent self-care and detachment likely mirror this dimension of both MBIs and  $Mu\beta e$ .

# 6.5 Limitations of the Present Study

The results of the present dissertation must be understood in light of several significant limitations that are for the larger part due to either fieldwork constraints or limited resources and capacities.

First and foremost, the quantitative findings of the individual schools must be interpreted with caution, since these analyses relied on relatively small sample sizes. Likewise, the power calculations preceding this study do not apply to the comparisons conducted in the separate schools. As has been mentioned before, this methodological concession was made due to the observed differences across schools. While exploratory analyses of baseline differences on demographic data and target variables did not yield significant effects, this relative homogeneity applies to the individual characteristics of the teacher populations and does not necessarily extend to the systemic influences operating within each of the schools. It was found that prevalent dynamics and attitudes differed across the necessarily distinct schools: an all-girl catholic school, a mixed public school in a somewhat marginalized area of town, and yet another smaller mixed public school in an arguably more privileged part of Freiburg. This dissertation assumes that the different quantitative results across populations is partly due to these variations and therefore deems it legitimate to consider the results of the individual schools as a complement to those of the pooled sample. Other studies investigating MBIs for

teachers have similarly sufficed themselves with comparable sample sizes (e.g. Jennings et al., 2013; Taylor et al., 2016).

Another issue closely related to sample size pertains to generalizability: the results presented here reflect the impact and processes induced by an MBSR in German secondary schools with more or less distinct characteristics, as explained above. These results cannot be automatically extended to different types of German schools, some more and some less privileged, with unique contexts and systemic influences (these include alternative academic tracks such as *Realschule* and *Hauptschule*<sup>58</sup> or different approaches to education altogether, such as Waldorf-schools<sup>59</sup>).

An additional considerable shortcoming of this investigation is the failure to randomly assign participants to either the intervention or waitlist group. While the lack of baseline differences between the intervention and waitlist group(s) indicates that this limitation did not meaningfully confound results, it remains a methodological weakness that must be taken into account. As was stated before, the busy schedules of participant teachers prevented random assignment, since the sample would have suffered substantial drop-out rates if the teachers' preference of school term had not been acknowledged.

The predominance of self-report instruments in the quantitative part of this investigation constitutes yet another noteworthy limitation. Even though the creativity measures constituted a more objective evaluation approach, most targeted variables were nonetheless assessed through "subjective" self-report questionnaires. Especially the lack of neuro-biological parameters is regrettable, since promising results in this area of investigation have been reported. Several arguments ought to be cited with respect to this deficit. Firstly, extensive neurobiological research (for instance of brain activation patterns) exceeds the resources of this project and is logistically difficult, if not impossible, to integrate in a field approach to the educational context. Second, as has been argued before, this dissertation considers mindfulness processes and impacts (as well as  $Mu\beta e$ -related outcomes) as subtle, heavily dependent on one's subjective approach and exceedingly experiential; complementing quantitative assessments with a first-person approach was therefore deemed a more suitable means of expanding and triangulating our findings. Indeed, qualitative investigation has been repeatedly recommended for the study of mindfulness (e.g. Paul Grossman & Van Dam, 2011; Sharp & Jennings, 2016). Finally, the research interest guiding this project did not

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<sup>&</sup>lt;sup>58</sup> Lower-ranking secondary school variants available in the German school system.

<sup>&</sup>lt;sup>59</sup> Alternative schools that implement anthroposophical pedagogy.

necessitate "objective" data, since the effectiveness, feasibility and mechanisms of an MBI are arguably best captured from the respective participants' point of view. Existing literature does in fact suggest that while physiological parameters often yield mixed results (e.g. Roeser et al., 2013) the path to further and deeper understanding of the potential of MBIs, especially pertaining to mechanisms and theories of change, may rest with qualitative explorations.

Two further limitations stand out with respect to the evaluation process. First, no long-term follow-up was conducted. Second, no assessment of potential systemic impacts was carried out. While the former shortcoming is due to logistic capacities and somewhat compensated by a medium-term four-month follow up, the fact that mindfulness effects and processes often unfold and ripen over years of practice (Paul Grossman & Van Dam, 2011) nonetheless renders it significant. Similarly, in light of the systemic aspirations of MBIs in the school setting, evaluations that exceed the specific target group are particularly valuable. Whereas other studies have indeed pointed to systemic impacts on teaching skills and student relations for instance (Jennings, 2015; Kemeny et al., 2012; Napoli, 2004; Singh et al., 2013; see also 1.5.3), such inquiries exceed the scope of this dissertation. MBIs for teachers in the German context have received little attention to date; the present project constitutes one of the first large-scale interventions in this respect and as such focused on immediate feasibility, effectiveness and mechanisms. Nonetheless, as illustrated in the introduction, a dual approach to both students and teachers was adopted in an effort to catalyze potential synergistic effects. Indeed, the results described in the qualitative findings confirm the interactional potential of MBI for schools specifically.

Yet another limitation of the presented results stems from the impediments and challenges inherent in field research. The school context, which is highly complex and dynamic, created a number of confounding variables (as discussed in section 5.7, and 5.9) that influenced course experience and outcomes. These include the location of the course (since school premises are heavily associated with daily stress and hardly provide an ideal space for an introduction to a mindful way of life); recurrent phases of intense job strain (for instance during examination and grading periods), group dynamics that result from previous relationships among participants (antipathies, guardedness) and, in the case of the second and third school, the presence of the school principal. These adverse influences could largely not be anticipated and often would have been inevitable; yet wherever possible a recommendation based on these experiences was extracted and presented as such in section 6.7.

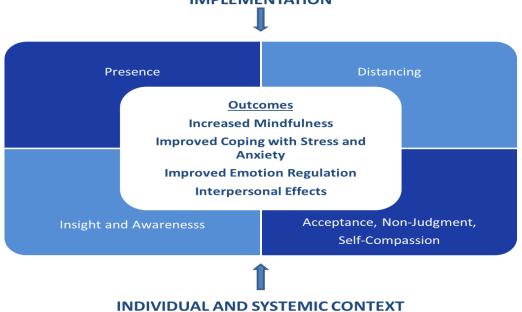
# 6.6 Conclusion and Implications

Synthesizing the presented findings and their discussion into an overall impression of the present intervention's feasibility and impact is necessarily a challenging task. Figure 20 shows the impact on participating teachers that can be concluded from the integrated quantitative and qualitative results. The figure illustrates how the underlying mechanisms that teachers described in the interviews (*Insight and Awareness, Presence, Distancing* as well as *Acceptance, Non-Judgment and Self-Compassion*) in joint influence brought about changes in self-reported mindfulness, coping with stress, emotion regulation and interpersonal experiences. Notably, factors pertaining to the implementation of the project and the respective individual and systemic context should be understood as overarching parameters modulating course benefits and experience.

Underlying Mechanisms

IMPLEMENTATION

Figure 17: Integrated Quantitative and Qualitative Findings on Outcomes and



However, while the above summarizes promising impact areas, it is important to bear in mind that many hypotheses that this research project assumed could not be confirmed. Thus, two central conclusions must be drawn from the at-hand results. On the one hand, MBIs seem to hold considerable promise in coping with stress and difficult emotions, sensitizing awareness as well as furthering subjective well-being and interrelational satisfaction. On the other hand, MBIs cannot be considered a sufficient or exclusively effective measure in addressing the serious issues facing teacher health. Our data, to varying degrees, support the assumption that

awareness and a subjective sense of self-determination and change are feasible avenues for MBIs. Relief from strain and stress may be mediated outcomes that MBIs can indeed support and solidify. However, systemic influences and structural constellations cannot be compensated or outweighed by individual mindfulness coping efforts - nor, indeed, should they, if mindfulness is to retain its potential. The importance of structural influences and potential systemic stressors are echoed by Lomas et al. (2017) in their recent review of teacher MBIs, since they diagnose systemic pressures as part of teacher stress and warn against considering mindfulness an alternative to "a sustainable remedy for education systems that pose such stressors to begin with." (p. 139).

With that in mind, a few final comments may still be ventured with respect to the often lacking or unexpected results. As the qualitative analysis of interviews recurrently implied, it is possible that quantitative assessment of mindfulness-induced changes is inherently a problematic endeavor. Bearing in mind the many effects that took place on a non-behavioral, process-oriented level, the results reported here to some extent challenge the feasibility of quantitative evaluations of mindfulness interventions in capturing these changes. This consideration does not refuse to acknowledge that research to date has reportedly and successfully assessed mindfulness effects with quantitative means; it merely argues that much of the actual impact might go unnoticed in this evaluation paradigm and that qualitative approaches should therefore serve as more than a mere complement of questionnaire assessments, rather constituting a focal area of evaluation. Indeed, many authors raise similar arguments and point to the difficulty in disentangling mindfulness-specific, discreet components and outcomes through traditional assessment (Paul Grossman & Van Dam, 2011, p. 220). Conclusions in this respect tend to recommend a focus on processes, associations and interview-generated data (e.g. Grossman & Van Dam, 2011). Qualitative approaches of this kind may also prove a fruitful path in deepening our understanding of mindfulness mechanisms, since even methodically rigorous studies consistently conclude that further research remains necessary.

On a different note, it can be argued that eight weeks of exposure to mindfulness is insufficient to deeply and fully root the concept in participants' lives. Perhaps a sustainable long-term practice is necessary to impact variables that remained unresponsive at post-measurement. This possibility is indicated by the within-group comparisons described above, and has often been argued by experienced meditators and researchers, who consider mindfulness practice a decidedly gradual and incremental development (Grossman & Van

Dam, 2011). In a similar vein, the lack of impact on many of the targeted variables could be due to participants' reluctance to establish an independent regular formal practice. Most practitioners indeed insist that a regular dedicated practice is crucial. This explanation seems all the more plausible when bearing in mind the lengthy descriptions of impediments to individual practice described in the qualitative results section.

Moreover, the difficulties reported by teachers in the interviews constitute further implementation limits that in all probability curtailed the course's potential. In this respect, the location of the course and the occasional objections to the manner of instruction were arguably the most relevant challenges in the first two schools, while deep-seated skepticism and unclear course objectives (that in turn were related to mismatched expectations) seem to have affected the third.

Taken together, the clear lack of impact in many hypothesized target areas suggests that MBIs for teachers should not be hailed too enthusiastically or uncritically. Rather, the supremacy of context factors and systemic influences should always be actively taken into account. In all likelihood, areas that did in fact respond to the intervention in spite of the aforementioned considerations, did so due to a) their subtle, process-oriented nature; b) possible deficits reflected in those areas that the course was able to address and c) the larger potential of mindfulness in impacting areas more inherently related to awareness, presence and acceptance. In section 1.5.1, the specific nature of stressors in the teaching profession as well as inherent resources was illustrated. Bearing in mind the overall limits of the present MBI's impact, this research surmises that mindfulness is relevant both as a protective factor and resource as well as an effort to lessen job strain. Teachers' stress in large parts stems from challenging students and classroom environments as well as difficult interactions with colleagues and parents (Bauer, 2009; Bauer et al., 2006; Schussler et al., 2015). Other authors have also discussed the exhaustion that is likely to result from Emotional Labor involved in managing the teaching situation and the teacher's persona (Keller et al., 2014). The presented results permit the assumption that mindfulness may be helpful with those factors, since it allows for alternative management of one's own emotions and reactivity in teaching contexts as well as improved relational capacities. Mindfulness, then, may contribute to teachers' stress resilience, supporting them in employing coping strategies such as those recommended by Klusmann et al. (2008) and Schaarschmidt et al. (1999). As illustrated in section 1.5.1, these authors recommend a regulatory coping style that is characterized by high engagement and commitment as well as high distancing abilities. Teachers who display these tendencies not only report favorable mental health and satisfaction levels, but are also likelier than teachers with other regulatory coping styles to identify and seek out social resources and support, and regard stressors as less debilitating. This mutually reinforcing relationship between regulation style and the impact of stressors and resources was also pointed out by Pietarinen, Pyhältö, Soini, and Salmela-Aro (2013). The authors illustrated that coping techniques directly influence the fit between teachers and their working environment and further state that proactive coping that seeks out social resources - a tendency they label co-regulation - is particularly beneficial. The results presented here suggest that mindfulness may improve coping strategies, help teachers acquire a stable balance of engagement and detachment / self-care and positively impact interpersonal relations and the utilization of social resources.

In our opinion, much of the potential of modern, secular applications of mindfulness is contingent upon the spirit and context in which they are delivered. It was mentioned repeatedly throughout this document that MBSR often runs high risks of being misunderstood and abused as a way to render individuals more adaptable, productive and efficient. Framing mindfulness as an embodied rejection of precisely this kind of unquestioned heteronomy is therefore essential. The qualitative data analyzed in this thesis clearly suggests that this message could be successfully delivered to many teachers. The mechanisms labeled here as *Awareness and Insight* and *Distancing* as well as the rich narratives reported in section 5.11 (Excursion: Digression and Reflections) attest to this fact. Similarly, the close relationship that teachers noted between mindfulness and  $Mu\beta e$  indicates that by and large, this project's affiliation to the CRC effectively invoked the intervention's critical capacity 60. Schultz and Ryan recognize this capacity, and unknowingly describe the very reason a CRC about  $Mu\beta e$  found itself delivering an MBI to teachers:

"In the chaotic, often rushed environment of modern society, where people strive to accomplish something every minute and where multitasking is the normal mode of operation, there is consequently little time for contemplation of one's experience, and little inclination to turn off the cruise control in order to reflect on the present moment. In this lifestyle of speed and production, with its increasing commercial, social and political attention capturing messages and pressures, mindfulness emerges as a pivotal tool for autonomous, vital living (Schultz & Ryan, 2015, p. 90-91).

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<sup>&</sup>lt;sup>60</sup>Many of the reflections in section 5.11 explicitly revolve around the subversive potential of mindfulness and highly critical evaluations of the education system.

### 6.7 Recommendations and Future Directions

Based on the field research conducted within the framework of this project as well as the analysis of outcomes and individual experience, we wish to submit a number of recommendations for MBIs targeting teachers and evaluation studies in this area. These "Lessons Learned" may serve to maximize the benefit of future mindfulness interventions in the school setting and advance our understanding of central processes and outcome contingencies.

### Explicitly addressing ethical implications:

While MBIs generally and MBSR specifically undoubtedly benefit from their secular orientation, this should not prevent initiatives from overtly and explicitly tackling questions of ethics, spirituality and related concerns. A transparent approach to a secular commitment of MBIs that nonetheless upholds a particular value system may motivate and assuage participants on either side of the dilemma: those cherishing a non-religious, doctrine-free input as well as those who hope to infuse their own practice with spiritual undertones. Avoiding this issue due to its admittedly sensitive nature in the long run risks alienating interested individuals from both camps. Similarly, completely eliminating more ethical components and implications from the conversation among participants and instructor may ultimately reduce the effectiveness of MBI in establishing alternative subversive attitudes towards heteronomous and exploitative demands or an over-identification with performance standards and work issues.

Greenberg and Mitra (2015) in fact posit that current mindfulness practices and interventions in the west ought to reconsider their ethical basis. Recognizing mindfulness as part of the eightfold path posed by Buddhist thought, they propose a rationale and framework for a secular ethical basis for "right mindfulness". Thus, the authors consider the target of spiritual teaching the benefit of humans over and beyond the individual level and argue that wholesome actions are personal, interpersonal and social in nature, thereby placing the desire for happiness and the end of suffering in a global context. Based on these premises, mindfulness in terms of awareness and attention is merely a gateway to mindfulness as right speech and actions. It exceeds nonjudgmental stances to evaluate and act, following "a direction and purpose". The authors credit this approach to mindfulness with particular importance wherever entire communities - of which schools are an example - are targeted.

In order to arrive at an ethical scaffolding of secular mindfulness practice, the authors argue that the awareness cultivated in mindfulness may "enable us to disengage from conceptual attachments, discursive scripts and automatic reactions that are the root of suffering" (p. 76), which can then guide individual intentionality and discernment. In a plea for a more explicitly normative approach to mindfulness practice, they propose three principles for a secular yet ethical point of departure: non-harming, interdependence and the Golden Rule<sup>61</sup>. The authors also warn against current MBSR mindfulness concepts that, in their focus on acceptance, could foster passivity and oppression ("Contemporary practices that invoke a prohibition against wanting things to be other than what they are - that limit the role of remembrance, discernment and intentionality- may restrict us to a mode of unquestioning acceptance of whatever oppressive forms are dominant in the present moment" p.77). By contrast, right mindfulness through the emphasis on interdependence enables individuals to imagine alternatives and exercise criticism and debate. Accordingly, mindfulness teachers should either explicitly formulate a prescriptive ethics or actively refer individuals back to their intentions and values in their practice. On a similar note, Davis, (2014) states that

"the point should not be to establish as true some one traditional Buddhist vision of ethics. Rather, questions about the transmission of mindfulness across cultural contexts make clear the need to engage in a dialogue that can challenge all of us, from every cultural tradition, to carefully examine our deepest convictions about how it is best for human beings to be, and thus how it is best for each of us to train our minds" (p.48).

While the framework proposed by Greenberg and Mitra (2015) constitutes the far end of a consciously ethical secularity in MBIs and need not, in our opinion, be followed in all aspects, the fundamental acknowledgement of ethical guidelines in mindfulness, a transparent formulation of the intervention's attitude with regard to these guidelines, and an active focus on non-passivity and non-conformity may be useful rules of thumb for teachers' MBIs. <sup>62</sup> Such an approach would counter the difficulties many teachers voiced in this respect (see section 5.7.1.5). As has been mentioned before, in the at-hand project the debate around *Muße* has proven a useful instrument to this end.

#### Clarifying goals and objectives in detail:

As it is, most MBSR instructors address the individual course objectives of participants in one form or another. So too, the teachers in the present study were encouraged to formulate specific goals at the beginning of the course. However, many of the conducted interviews reveal that this aspect warrants a more intensive focus. For the larger part, specific objectives

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<sup>&</sup>lt;sup>61</sup> Do unto others as you would have them do unto you.

<sup>&</sup>lt;sup>62</sup> The thoughts formulated and propagated by the authors may indeed serve as a point of departure for a larger conversation that instructors may choose to engage in with aspiring practitioners.

were neither discussed and examined in the group nor very actively pondered on throughout the course. This has likely contributed to the relative lack of individual practice across all schools, the frustration expressed by many participants in the third school and the limited impact in general. We therefore recommend that a clarification of individual goals and objectives should not only occur pro forma at the beginning of each course, but should rather be a matter of ongoing debate and as such revisited repeatedly as the course progresses. This debate should proactively address whether goals are a) realistic (i.e. not overly ambitious, seeking in the MBI remedies it cannot offer), b) in line with the intervention's rationale and essence (i.e. not confounded by misconceptions of what the course sets out to achieve or tendencies to consider the course a performance-enhancing tool) and c) continuously present and reexamined so as to sharpen intention and solidify practice (i.e. questioning goals throughout the course units, examining changes in attitude and intention, formulating congruent objectives afresh, etc.). In this context, it is also advisable to maintain an active focus on the functionality paradox outlined in section 1.4.3 and explicated as a course difficulty in section 5.7.1.6, so as to assist participants in the challenging task of engaging with mindfulness with an open attitude that truly manages to relinquish purpose and outward striving. A rich discussion of these subjects may finally help participants who struggle with fundamental unease and ambivalence about mindfulness and its potential.

#### Tailoring the intervention to the school setting:

In the present study, implications of the delivered MBI for the teaching profession were not deliberately incorporated, though whenever the discussion veered in this direction, the instructors engaged with the opinions and experiences that the teachers voiced. A large portion of the interviewees, however, stated that they would have benefitted from a more explicit focus on the integration of mindfulness in the teaching profession. We recommend that future interventions for teachers fully take into account their target group's reality by incorporating one or all of the following:

- Input on mindful teaching, or the implication of MBSR for the classroom situation and interactions with agents in the school setting
- Specific assistance and instructions on how best to root mindfulness practice in the busy daily routines of teachers
- Potentially supporting participants in organizing continued, self-reliant practice groups
- Tips and pointers for teachers with mindfulness experience and a regular practice who wish to transport mindfulness to their students

### Anticipating and countering implementational impediments:

This project revealed the extent to which contextual and implementational aspects may color course experience or impede impact and benefits. Among other things, future interventions for teachers would be wise to take into account:

- The importance of an agreeable and well-equipped location, preferably outside of school premises
- The possible group dynamics that may arise between participants who have prior relationships, antipathies and bonds (for instance, instructors may be particularly mindful of this aspect during sessions and address conspicuous dynamics if they occur, or approach participants individually if they notice a palpably adverse attitude)
- The discomfort and inhibited atmosphere that the presence of superordinate individuals, such as school principals, may cause in the group.

#### Working towards Sustainability:

As the in-depth narratives in section 5.11 point out, many systemic and often insurmountable impediments prevent a full structural integration of mindfulness in the school setting and culture. The sustainability of whatever results an MBI hopes to achieve in schools is therefore largely dependent on remedying at least some of these impediments. For this reason, close cooperation with and genuine interest on part of the school administration should be of high priority. Drawing on some of the suggestions that the teachers volunteered (see section 5.11), MBIs may be well-advised to discuss more permanent arrangements with the respective school, such as providing quiet spaces for meditation and freeing time slots in the busy schedules of teachers that may decelerate their daily lives and allow for more self-care and Muβe. More radical adjustments are arguably difficult to target, but should remain part of the debate as potential institutional changes that would facilitate more mindful schools. These include - but are not limited to - lighter workloads, smaller classes, more flexible curricula that directly or indirectly incorporate mindfulness or similar traditions, regular training courses for the entire staff, project-based (rather than exam-oriented) teaching and peer consulting or similar structures that support teachers in upholding mindful attitudes in the school context.

#### Recommendations for Future Studies:

While our findings in many ways confirm the benefit of mindfulness for teachers, they also raise several questions that could constitute the focus of future research initiatives. First, more research is necessary to replicate the present results, ideally having remedied some or all of

the limitations mentioned in section 6.5. Second, the generalizability of our results to different types of schools remains difficult to gauge, even though similar patterns can be reasonably assumed. Third, further exploration of the discrepancy between the relatively limited impact on health parameters in our study and the medium effect size across the same areas in current meta-analyses is recommended. The at hand-dissertation indicates that the impact of MBIs in demanding contexts and within closed systems may be contingent upon system-specific variables, yet to our knowledge little research to date investigates the conditions that may render MBIs more or less effective. Fourth, methods whereby the systemic potential of MBIs may be fully utilized so as to influence the culture of the entire targeted school should be developed, implemented and evaluated. Fifth, teacher-specific MBI curricula that incorporate implications for the teaching profession, strategies to integrate mindfulness in daily life at school and, potentially, approaches to conveying mindfulness to students should likewise be conceptualized and appraised. Finally, we believe that an extensive, serious and unapologetic emphasis on qualitative research methods is inadmissible to a full understanding of what mindfulness can and cannot achieve in the school setting.

Mindfulness and MBIs are at a pivotal juncture in the Western world. They are considered by many an exceedingly powerful technique, if not a meaningful answer to the existential ailments of modern human beings. Fierce advocates of mindfulness consider it wildly liberating (Schultz & Ryan, 2015), a central part of a far-reaching 'transitional path' (Grossman & Van Dam, 2011). Equally loud voices are denouncing it - not without cause - as 'McMindfulness': the free market's newest fad, capitalism's sardonic answer to a disturbed and alienated society, a soft skill, a commodity or a self-exploitative negation of systemic injustice (Schmidt, 2015; Stephan, 2015). It is essential that practitioners and researchers alike remain dedicated, yet continuously self-critical. If we are to deepen our understanding of what this practice has to offer modern society, where its true value, potential and dangers lie - for teachers, schools and at large - we must cultivate a relentlessly appreciative yet questioning approach: beyond market-fueled frenzy, beyond the complacency of fanatically devoted enthusiasts, and beyond inexperienced cynicism.

### 7 References

- Albrecht, N., Albrecht, P., & Cohen, M. (2012). Mindfully teaching in the classroom: A literature review. *Australian Journal of Teacher Education*, *37*(12), 1–14.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10(2), 125–143. https://doi.org/10.1093/clipsy/bpg015
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment*, 11(3), 191–206.
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., ... Williams, J. M. G. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, 15(3), 329–342.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359–373.
- Barner, C. P., & Barner, R. W. (2011). Mindfulness, openness to experience, and transformational learning. Retrieved from http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199736300.001.0001/oxfor dhb-9780199736300-e-018?&mediaType=Article
- Bauer, J. (2009). Burnout bei schulischen Lehrkräften. *PiD Psychotherapie im Dialog*, 10(03), 251–255. https://doi.org/10.1055/s-0029-1223327
- Bauer, J., Stamm, A., Virnich, K., Wissing, K., Müller, U., Wirsching, M., & Schaarschmidt, U. (2006). Correlation between burnout syndrome and psychological and psychosomatic symptoms among teachers. *International Archives of Occupational and Environmental Health*, 79(3), 199–204. https://doi.org/10.1007/s00420-005-0050-y
- Bauer, J., Unterbrink, T., Hack, A., Pfeifer, R., Buhl-Grießhaber, V., Müller, U., ... Wirsching, M. (2007). Working conditions, adverse events and mental health problems in a sample of 949 German teachers. *International Archives of Occupational and Environmental Health*, 80(5), 442–449. https://doi.org/10.1007/s00420-007-0170-7
- Bauer, J., Unterbrink, T., & Zimmermann, L. (2007). Gesundheitsprophylaxe für Lehrkräfte, Manual für Lehrer-Coachinggruppen nach dem Freiburger Modell. *Handlungsanleitungen* Zur Erhaltung Und Förderung Der Gesundheit von Lehrerinnen Und Lehrern. Selbstverlag Der Technischen Universität Dresden, Dresden.
- Bellingrath, S., Rohleder, N., & Kudielka, B. M. (2010). Healthy working school teachers with high effort—reward-imbalance and overcommitment show increased pro-inflammatory immune activity and a dampened innate immune defence. *Brain, Behavior, and Immunity*, 24(8), 1332–1339. https://doi.org/10.1016/j.bbi.2010.06.011
- Benn, R., Akiva, T., Arel, S., & Roeser, R. W. (2012). Mindfulness training effects for parents and educators of children with special needs. *Developmental Psychology*, 48(5), 1476–1487. https://doi.org/10.1037/a0027537
- Berking, M., & Znoj, H. (2008). Entwicklung und Validierung eines Fragebogens zur standardisierten Selbsteinschätzung emotionaler Kompetenzen (SEK-27). Zeitschrift Für Psychiatrie, Psychologie Und Psychotherapie, 56(2), 141–153.

- Beshai, S., McAlpine, L., Weare, K., & Kuyken, W. (2015). A non-randomised feasibility trial assessing the efficacy of a mindfulness-based intervention for teachers to reduce stress and improve well-being. *Mindfulness*. https://doi.org/10.1007/s12671-015-0436-1
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... others. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241.
- Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale: an updated literature review. *Journal of Psychosomatic Research*, 52(2), 69–77.
- Böhme, T. (2015, October 10). Kreativität durch Achtsamkeit in der Schule? Evaluation einer MBSR-Intervention mit Schüler\_innen und Lehrkräften (Unpublished Master's Thesis). Humboldt-Universität zu Berlin.
- Bohus, M., & Huppertz, M. (2006). Wirkmechanismen achtsamkeitsbasierter Psychotherapie. *Zeitschrift Für Psychiatrie, Psychologie Und Psychotherapie*, *54*(4), 265–276. https://doi.org/10.1024/1661-4747.54.4.265
- Borkenau, P., & Ostendorf, F. (1994). *Das NEO Fünf-Faktoren-Inventar (NEO-FFI): Handanweisung (1)*. Göttingen: Hogrefe. Retrieved from http://pub.uni-bielefeld.de/pub?func=drec&id=1902849
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822.
- Burke, C. A. (2010). Mindfulness-based approaches with children and adolescents: A preliminary review of current research in an emergent field. *Journal of Child and Family Studies*, 19(2), 133–144.
- Carmody, J., Baer, R. A., LB Lykins, E., & Olendzki, N. (2009). An empirical study of the mechanisms of mindfulness in a mindfulness-based stress reduction program. *Journal of Clinical Psychology*, 65(6), 613–626.
- Chang, V. Y., Palesh, O., Caldwell, R., Glasgow, N., Abramson, M., Luskin, F., ... Koopman, C. (2004). The effects of a mindfulness-based stress reduction program on stress, mindfulness self-efficacy, and positive states of mind. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 20(3), 141–147. https://doi.org/10.1002/smi.1011
- Chesney, M. A., Neilands, T. B., Chambers, D. B., Taylor, J. M., & Folkman, S. (2006). A validity and reliability study of the coping self-efficacy scale. *British Journal of Health Psychology*, 11(3), 421–437.
- Chwalisz, K., Altmaier, E. M., & Russell, D. W. (1992). Causal attributions, self-efficacy cognitions, and coping with stress. *Journal of Social and Clinical Psychology*, 11(4), 377–400. https://doi.org/10.1521/jscp.1992.11.4.377
- Coffey, K. A., Hartman, M., & Fredrickson, B. L. (2010). Deconstructing Mindfulness and Constructing Mental Health: Understanding Mindfulness and its Mechanisms of Action. *Mindfulness*, *1*(4), 235–253. https://doi.org/10.1007/s12671-010-0033-2
- Cullen, M., & Wallace, L. (2010). Stress management and relaxation techniques in education (SMART) training manual. *Unpublished Manual, Impact Foundation: Aurora, Colorado*.
- Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., ... Sheridan, J. F. (2003). Alterations in Brain and Immune Function Produced by Mindfulness Meditation: *Psychosomatic Medicine*, *65*(4), 564–570. https://doi.org/10.1097/01.PSY.0000077505.67574.E3

- Davis, J. H. (2014). Facing Up to the Question of Ethics in Mindfulness-Based Interventions. *Mindfulness*, 6(1), 46–48. https://doi.org/10.1007/s12671-014-0374-3
- Deckersbach, T., Hölzel, B. K., Eisner, L. R., Stange, J. P., Peckham, A. D., Dougherty, D. D., ... Nierenberg, A. A. (2012). Mindfulness-Based Cognitive Therapy for Nonremitted Patients with Bipolar Disorder. *CNS Neuroscience & Therapeutics*, *18*(2), 133–141. https://doi.org/10.1111/j.1755-5949.2011.00236.x
- Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. (2014). Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology*, 106(2), 569.
- Dollinger, S. J., Urban, K. K., & James, T. A. (2004). Creativity and Openness: Further Validation of Two Creative Product Measures. *Creativity Research Journal*, 16(1), 35–47.
- Duden | Mu-ße | Rechtschreibung, Bedeutung, Definition, Synonyme, Herkunft. (n.d.). Retrieved September 12, 2016, from http://www.duden.de/rechtschreibung/Musze
- Eberth, J., & Sedlmeier, P. (2012). The effects of mindfulness meditation: A meta-analysis. *Mindfulness*, 1–16.
- Erisman, S. M., & Roemer, L. (2010). A preliminary investigation of the effects of experimentally induced mindfulness on emotional responding to film clips. *Emotion*, *10*(1), 72–82. https://doi.org/10.1037/a0017162
- Esch, T. (2014). Die neuronale Basis von Meditation und Achtsamkeit. *SUCHT*, *60*(1), 21–28. https://doi.org/10.1024/0939-5911.a000288
- Feagans Gould, L., Dariotis, J. K., Greenberg, M. T., & Mendelson, T. (2015). Assessing fidelity of implementation (foi) for school-based mindfulness and yoga interventions: A systematic review. *Mindfulness*. https://doi.org/10.1007/s12671-015-0395-6
- Fliege, H., Rose, M., Arck, P., Levenstein, S., & Klapp, B. F. (2001). Validierung des "Perceived Stress Questionnaire" (PSQ) an einer deutschen Stichprobe. *Diagnostica*, 47(3), 142–152. https://doi.org/10.1026//0012-1924.47.3.142
- Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. *Mind, Brain, and Education*, 7(3), 182–195. https://doi.org/10.1111/mbe.12026
- Fox, K. C., Nijeboer, S., Dixon, M. L., Floman, J. L., Ellamil, M., Rumak, S. P., ... Christoff, K. (2014). Is meditation associated with altered brain structure? A systematic review and meta-analysis of morphometric neuroimaging in meditation practitioners. *Neuroscience & Biobehavioral Reviews*, 43, 48–73.
- Franco, C., Mañas, I., Cangas, A. J., Moreno, E., & Gallego, J. (2010). Reducing teachers' psychological distress through a mindfulness training program. *The Spanish Journal of Psychology*, *13*(2), 655–666. https://doi.org/10.1017/S1138741600002328
- Friedman, I. A. (2000). Burnout in teachers: Shattered dreams of impeccable professional performance. *Journal of Clinical Psychology*, *56*(5), 595–606. https://doi.org/10.1002/(SICI)1097-4679(200005)56:5<595::AID-JCLP2>3.0.CO;2-Q
- Garland, E. L., Gaylord, S. A., & Fredrickson, B. L. (2011). Positive Reappraisal Mediates the Stress-Reductive Effects of Mindfulness: An Upward Spiral Process. *Mindfulness*, 2(1), 59–67. https://doi.org/10.1007/s12671-011-0043-8

- Gimmel, J., Keiling, T., Bauer, J., Figal, G., Gouda, S., Gourdain, S., ... Vollstädt, M. (2016). *Konzepte der Muβe* (1st ed.). Mohr Siebeck.
- Gold, E., Smith, A., Hopper, I., Herne, D., Tansey, G., & Hulland, C. (2010). Mindfulness-based stress reduction (MBSR) for primary school teachers. *Journal of Child and Family Studies*, 19(2), 184–189.
- Goldin, P. R., & Gross, J. J. (2010). Effects of mindfulness-based stress reduction (MBSR) on emotion regulation in social anxiety disorder. *Emotion*, *10*(1), 83–91. https://doi.org/10.1037/a0018441
- Goodall, K., Trejnowska, A., & Darling, S. (2012). The relationship between dispositional mindfulness, attachment security and emotion regulation. *Personality and Individual Differences*, 52(5), 622–626. https://doi.org/10.1016/j.paid.2011.12.008
- Gouda, S., Luong, M. T., Schmidt, S., & Bauer, J. (2016). Students and teachers benefit from Mindfulness-Based Stress Reduction in a school-embedded pilot study. *Frontiers in Psychology*, 7. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4845593/
- Greenberg, M. T., & Mitra, J. L. (2015). From mindfulness to right mindfulness: the intersection of awareness and ethics. *Mindfulness*, 6(1), 74–78.
- Gross, J. J. (1998). Antecedent-and response-focused emotion regulation: divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, 74(1), 224.
- Gross, J. J. (1999). Emotion regulation: Past, present, future. Cognition & Emotion, 13(5), 551–573.
- Grossman, P. (2014). Mindfulness: Awareness Informed by an Embodied Ethic. *Mindfulness*, *6*(1), 17–22. https://doi.org/10.1007/s12671-014-0372-5
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits-A meta-analysis. *Journal of Psychosomatic Research*, *57*(1), 35–44.
- Grossman, P., & Van Dam, N. T. (2011). Mindfulness, by any other name...: trials and tribulations of sati in western psychology and science. *Contemporary Buddhism*, *12*(1), 219–239. https://doi.org/10.1080/14639947.2011.564841
- Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of mediation studies. *Clinical Psychology Review*, *37*, 1–12. https://doi.org/10.1016/j.cpr.2015.01.006
- Harris, A. R., Jennings, P. A., Katz, D. A., Abenavoli, R. M., & Greenberg, M. T. (2015). Promoting stress management and wellbeing in educators: Feasibility and efficacy of a school-based yoga and mindfulness intervention. *Mindfulness*. https://doi.org/10.1007/s12671-015-0451-2
- Heger, B. (2014, July 2). *Muße als psychologisches Konstrukt. Eine theoretische und empirische Annäherung* (Unpublished Master's Thesis). Albert-Ludwigs-Universität Freiburg.
- Heppner, W. L., Spears, C. A., Vidrine, J. I., & Wetter, D. W. (2015). Mindfulness and emotion regulation. In *Handbook of Mindfulness and Self-Regulation* (pp. 107–120). Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-1-4939-2263-5\_9
- Hermann-Lingen, C., Buss, U., & Snaith, R. P. (2005). *HADS-D Hospital Anxiety and Depression Scale*. Bern: Huber.
- Hill, C. L. M., & Updegraff, J. A. (2012). Mindfulness and its relationship to emotional regulation. *Emotion*, 12(1), 81–90. https://doi.org/10.1037/a0026355

- Hillert, A., Koch, S., & Lehr, D. (2013). Das Burnout-Phänomen am Beispiel des Lehrerberufs. *Der Nervenarzt*, 84(7), 806–812.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory. *Applied Psychology*, *50*(3), 337–421.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78(2), 169–183. https://doi.org/10.1037/a0018555
- Holas, P., & Jankowski, T. (2013). A cognitive perspective on mindfulness. *International Journal of Psychology*, 48(3), 232–243. https://doi.org/10.1080/00207594.2012.658056
- Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. *Personality and Individual Differences*, 50(2), 222–227.
- Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., & Lazar, S. W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, *191*(1), 36–43.
- Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How Does Mindfulness Meditation Work? Proposing Mechanisms of Action From a Conceptual and Neural Perspective. *Perspectives on Psychological Science*, 6(6), 537–559. https://doi.org/10.1177/1745691611419671
- Horowitz, L. M., Strauß, B., & Kordy, H. (2000). Inventar zur Erfassung Interpersonaler Probleme: Deutsche Version (2. überarbeitete und neunormierte Auflage). Göttingen: Beltz Test.
- Howell, A. J., & Buro, K. (2011). Relations among mindfulness, achievement-related self-regulation, and achievement emotions. *Journal of Happiness Studies*, *12*(6), 1007–1022. https://doi.org/10.1007/s10902-010-9241-7
- Hülsheger, U. R., Alberts, H. J. E. M., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of mindfulness at work: The role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology*, 98(2), 310–325. https://doi.org/10.1037/a0031313
- Jankowski, T., & Holas, P. (2014). Metacognitive model of mindfulness. *Consciousness and Cognition*, 28, 64–80.
- Jedrczak, A., Beresford, M., & Clements, G. (1985). The TM-Sidhi program, pure consciousness, creativity and intelligence. *The Journal of Creative Behavior*, 19(4), 270–275.
- Jennings, P. A. (2015). Early childhood teachers' well-being, mindfulness, and self-compassion in relation to classroom quality and attitudes towards challenging students. *Mindfulness*. https://doi.org/10.1007/s12671-014-0312-4
- Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving classroom learning environments by Cultivating Awareness and Resilience in Education (CARE): Results of a randomized controlled trial. *School Psychology Quarterly*, 28(4), 374–390. https://doi.org/10.1037/spq0000035
- Jha, A. P., Krompinger, J., & Baime, M. J. (2007). Mindfulness training modifies subsystems of attention. *Cognitive, Affective, & Behavioral Neuroscience*, 7(2), 109–119.
- Jimenez, S. S., Niles, B. L., & Park, C. L. (2010). A mindfulness model of affect regulation and depressive symptoms: Positive emotions, mood regulation expectancies, and self-acceptance as regulatory mechanisms. *Personality and Individual Differences*, 49(6), 645–650. https://doi.org/10.1016/j.paid.2010.05.041

- Kabat-Zinn, J. (1984). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *ReVISION*, 7(1), 71–72.
- Kabat-Zinn, J. (2003a). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156. https://doi.org/10.1093/clipsy/bpg016
- Kabat-Zinn, J. (2003b). Mindfulness-based stress reduction (MBSR). *Constructivism in the Human Sciences*, 8(2), 73–107.
- Kadziolka, M. J., Di Pierdomenico, E.-A., & Miller, C. J. (2016). Trait-like mindfulness promotes healthy self-regulation of stress. *Mindfulness*, 7(1), 236–245.
- Keller, M. M., Chang, M.-L., Becker, E. S., Goetz, T., & Frenzel, A. C. (2014). Teachers' emotional experiences and exhaustion as predictors of emotional labor in the classroom: an experience sampling study. *Frontiers in Psychology*, *5*. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263074/
- Kemeny, M. E., Foltz, C., Cavanagh, J. F., Cullen, M., Giese-Davis, J., Jennings, P., ... Ekman, P. (2012). Contemplative/emotion training reduces negative emotional behavior and promotes prosocial responses. *Emotion*, *12*(2), 338–350. https://doi.org/10.1037/a0026118
- Khoury, B., Lecomte, T., Fortin, G., Masse, M., Therien, P., Bouchard, V., ... Hofmann, S. G. (2013). Mindfulness-based therapy: A comprehensive meta-analysis. *Clinical Psychology Review*, *33*(6), 763–771.
- Kieschke, U., & Schaarschmidt, U. (2008). Professional commitment and health among teachers in Germany: A typological approach. *Learning and Instruction*, *18*(5), 429–437. https://doi.org/10.1016/j.learninstruc.2008.06.005
- Klassen, R., Wilson, E., Siu, A. F. Y., Hannok, W., Wong, M. W., Wongsri, N., ... Jansem, A. (2013). Preservice teachers' work stress, self-efficacy, and occupational commitment in four countries. *European Journal of Psychology of Education*, 28(4), 1289–1309. https://doi.org/10.1007/s10212-012-0166-x
- Klusmann, U., Kunter, M., Trautwein, U., Lüdtke, O., & Baumert, J. (2008). Teachers' occupational well-being and quality of instruction: The important role of self-regulatory patterns. *Journal of Educational Psychology*, 100(3), 702.
- Kraut, R. (2016). Aristotle's Ethics. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Spring 2016). Metaphysics Research Lab, Stanford University. Retrieved from https://plato.stanford.edu/archives/spr2016/entries/aristotle-ethics/
- Kuyken, W., Hayes, R., Barrett, B., Byng, R., Dalgleish, T., Kessler, D., ... Byford, S. (2015). Effectiveness and cost-effectiveness of mindfulness-based cognitive therapy compared with maintenance antidepressant treatment in the prevention of depressive relapse or recurrence (PREVENT): a randomised controlled trial. *The Lancet*, *386*(9988), 63–73. https://doi.org/10.1016/S0140-6736(14)62222-4
- Kuyken, W., Watkins, E., Holden, E., White, K., Taylor, R. S., Byford, S., ... Dalgleish, T. (2010). How does mindfulness-based cognitive therapy work? *Behaviour Research and Therapy*, 48(11), 1105–1112.
- Lau, M. A., Bishop, S. R., Segal, Z. V., Buis, T., Anderson, N. D., Carlson, L., ... Devins, G. (2006). The Toronto mindfulness scale: Development and validation. *Journal of Clinical Psychology*, 62(12), 1445–1467.

- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1(3), 141–169. https://doi.org/10.1002/per.2410010304
- Lomas, T., Medina, J. C., Ivtzan, I., Rupprecht, S., & Eiroa-Orosa, F. J. (2017). The impact of mindfulness on the wellbeing and performance of educators: A systematic review of the empirical literature. *Teaching and Teacher Education*, *61*, 132–141.
- Luberto, C. M., Cotton, S., McLeish, A. C., Mingione, C. J., & O'Bryan, E. M. (2013). Mindfulness Skills and Emotion Regulation: the Mediating Role of Coping Self-Efficacy. *Mindfulness*. https://doi.org/10.1007/s12671-012-0190-6
- McCormick, J., & Barnett, K. (2011). Teachers' attributions for stress and their relationships with burnout. *International Journal of Educational Management*, 25(3), 278–293. https://doi.org/10.1108/09513541111120114
- McCrae, R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, 120(3), 323–337. https://doi.org/10.1037/0033-2909.120.3.323
- Mindfulness In Schools For the flourishing of young minds. (n.d.). Retrieved August 24, 2016, from https://mindfulnessinschools.org/
- *Muße*. Konzepte, Räume, Figuren otium.pdf. (n.d.). Retrieved from http://www.sfb1015.uni-freiburg.de/downloads/otium.pdf
- Napoli, M. (2004). Mindfulness training for teachers: A pilot program. *Complementary Health Practice Review*, 9(1), 31–42.
- Napoli, M., Krech, P. R., & Holley, L. C. (2005). Mindfulness Training for Elementary School Students: The Attention Academy. *Journal of Applied School Psychology*, 21(1), 99–125. https://doi.org/10.1300/J370v21n01\_05
- Ostafin, B. D., & Kassman, K. T. (2012). Stepping out of history: Mindfulness improves insight problem solving. *Consciousness and Cognition*, 21(2), 1031–1036. https://doi.org/10.1016/j.concog.2012.02.014
- Pietarinen, J., Pyhältö, K., Soini, T., & Salmela-Aro, K. (2013). Reducing teacher burnout: A sociocontextual approach. *Teaching and Teacher Education*, *35*, 62–72.
- Poulin, P. A., Mackenzie, C. S., Soloway, G., & Karayolas, E. (2008). Mindfulness training as an evidenced-based approach to reducing stress and promoting well-being among human services professionals. *International Journal of Health Promotion and Education*, 46(2), 72–80.
- Puhakka, K. (2015). Encountering the psychological research paradigm: How Buddhist practice has fared in the most recent phase of its western migration. In *Buddhist Foundations of Mindfulness* (pp. 217–242). Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-3-319-18591-0\_11
- Robins, C. J., Keng, S., Ekblad, A. G., & Brantley, J. G. (2012). Effects of mindfulness-based stress reduction on emotional experience and expression: A randomized controlled trial. *Journal of Clinical Psychology*, 68(1), 117–131. https://doi.org/10.1002/jclp.20857
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., ... Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology*, *105*(3), 787–804. https://doi.org/10.1037/a0032093
- Rosa, H. (2016). Achtsamkeit und Selbstbezogenheit (video file). Retrieved from https://ethik-heute.org/achtsamkeit-und-selbstbezogenheit/

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68.
- Schaarschmidt, U. (2005). *Halbtagsjobber?: Psychische Gesundheit im Lehrerberuf Analyse eines veränderungsbedürftigen Zustandes* (Auflage: 2., neu ausgestattete Aufl.). Beltz.
- Schaarschmidt, U., & Fischer, A. (1997). AVEM ein diagnostisches Instrument zur Differenzierung von Typen gesundheitsrelevanten Verhaltens und Erlebens gegenüber der Arbeit. Zeitschrift für Differentielle und Diagnostische Psychologie, 18(3), 151–163.
- Schaarschmidt, U., & Fischer, A. W. (2001). Bewältigungsmuster im Beruf:

  Persönlichkeitsunterschiede in der Auseinandersetzung mit der Arbeitsbelastung.

  Vandenhoeck & Ruprecht.
- Schaarschmidt, U., Kieschke, U., & Fischer, A. W. (1999). Beanspruchungsmuster im Lehrerberuf. *Psychologie in Erziehung und Unterricht*, 46(4), 244–268.
- Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, *3*(1), 71–92.
- Schmidt, A. T. (2016). The ethics and politics of mindfulness-based interventions. *Journal of Medical Ethics*, medethics–2015–102942. https://doi.org/10.1136/medethics-2015-102942
- Schmidt, S. (2004). Mindfulness and healing intention: concepts, practice, and research evaluation. *Journal of Alternative & Complementary Medicine*, *10*(Supplement 1), 7–14.
- Schmidt, S. (2011). Mindfulness in east and west–is it the same? In *Neuroscience, consciousness and spirituality* (pp. 23–38). Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-94-007-2079-4\_2
- Schmidt, S. (2014). Was ist Achtsamkeit? Herkunft, Praxis und Konzeption. *SUCHT*, 60(1), 13–19. https://doi.org/10.1024/0939-5911.a000287
- Schmidt, S. (2015, February). Vom Meditieren in der beschleunigten Leistungsgesellschaft. Kulturveränderung oder Konsumprodukt? *Buddhismus aktuell*, Retrieved from http://buddhismus-aktuell.de/artikel/ausgaben/20152/vom-meditieren-in-der-beschleunigtenleistungsgesellschaft-kulturveraenderung-oder-konsumprodukt.html
- Schultz, P. P., & Ryan, R. M. (2015). The "why," "what," and "how" of healthy self-regulation: Mindfulness and well-being from a self-determination theory perspective. In *Handbook of Mindfulness and Self-Regulation* (pp. 81–94). Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-1-4939-2263-5\_7
- Schussler, D. L., Jennings, P. A., Sharp, J. E., & Frank, J. L. (2015). Improving teacher awareness and well-being through care: A qualitative analysis of the underlying mechanisms. *Mindfulness*. https://doi.org/10.1007/s12671-015-0422-7
- Schwarz, C. (2014, December 18). *Das Konzept der Achtsamkeit in der Arbeit als Lehrer. Erfahrungen und Integrationsmöglichkeiten* (Unpublished Qualification Thesis). Albert-Ludiwigs-Universität Freiburg.
- Schwarzer, R., & Hallum, S. (2008). Perceived Teacher Self-Efficacy as a Predictor of Job Stress and Burnout: Mediation Analyses. *Applied Psychology*, *57*(s1), 152–171. https://doi.org/10.1111/j.1464-0597.2008.00359.x
- Schwarzer, R., & Jerusalem (Eds.). (1999). Skalen zur Erfassung von Lehrer- und Schülermerkmalen. Dokumentation der psychometrischen Verfahren im Rahmen der Wissenschaftlichen Begleitung des Modellversuchs Selbstwirksame Schulen [Scales for the

- assessment of teacher and student characteris- tics]. Berlin, Germany: Freie Universität Berlin.
- Sedlmeier, P., Eberth, J., Schwarz, M., Zimmermann, D., Haarig, F., Jaeger, S., & Kunze, S. (2012). The psychological effects of meditation: A meta-analysis. Retrieved from http://psycnet.apa.org/psycarticles/2012-12792-001.pdf
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62(3), 373–386.
- Sharp, J. E., & Jennings, P. A. (2016). Strengthening teacher presence through mindfulness: What educators say about the Cultivating Awareness and Resilience in Education (CARE) program. *Mindfulness*, 7(1), 209–218. https://doi.org/10.1007/s12671-015-0474-8
- Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., & Peter, R. (2004). The measurement of effort–reward imbalance at work: European comparisons. *Social Science & Medicine*, *58*(8), 1483–1499. https://doi.org/10.1016/S0277-9536(03)00351-4
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Karazsia, B. T., & Singh, J. (2013). Mindfulness training for teachers changes the behavior of their preschool students. *Research in Human Development*, 10(3), 211–233. https://doi.org/10.1080/15427609.2013.818484
- So, K.-T., & Orme-Johnson, D. W. (2001). Three randomized experiments on the longitudinal effects of the Transcendental Meditation technique on cognition. *Intelligence*, 29(5), 419–440.
- Sonderforschungsbereich *Muße*. (2012, April 2). *Muße*. Konzepte, Räume, Figuren. Antrag auf Einrichtung und Förderung des Sonderforschungsbereichs 1015 für die Jahre 2013 2014 2015 2016. Albert-Ludwigs-Universität Freiburg.
- Stanley, S. (2015). Sīla and Sati: An exploration of ethics and mindfulness in Pāli Buddhism and their implications for secular mindfulness-based applications. In *Buddhist Foundations of Mindfulness* (pp. 89–113). Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-3-319-18591-0\_6
- Stephan, F. (2015, September 22). McMindfulness: Reguliere dich selbst. *Die Zeit*. Hamburg. Retrieved from http://www.zeit.de/kultur/2015-09/mcmindfulness-silicon-valley-kapitalismus-buddhismus
- Tang, Y.-Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, *16*(4), 213–225.
- Taylor, C., Harrison, J., Haimovitz, K., Oberle, E., Thomson, K., Schonert-Reichl, K., & Roeser, R. W. (2016). Examining ways that a mindfulness-based intervention reduces stress in public school teachers: A mixed-methods study. *Mindfulness*, 7(1), 115–129.
- Travis, F. (1979). The Transcendental Meditation technique and creativity: A longitudinal study of Cornell University undergraduates. *The Journal of Creative Behavior*, *13*(3), 169–180.
- Unterbrink, T., Hack, A., Pfeifer, R., Buhl-Grießhaber, V., Müller, U., Wesche, H., ... Bauer, J. (2007). Burnout and effort—reward-imbalance in a sample of 949 German teachers. *International Archives of Occupational and Environmental Health*, 80(5), 433–441. https://doi.org/10.1007/s00420-007-0169-0
- Unterbrink, T., Zimmermann, L., Pfeifer, R., Rose, U., Joos, A., Hartmann, A., ... Bauer, J. (2010). Improvement in school teachers' mental health by a manual-based psychological group program. *Psychotherapy and Psychosomatics*, 79(4), 262–264.
- Urban, K. K., & Jellen, H. G. (1995). Test zum schöpferischen Denken-Zeichnerisch (TSD-Z). Swets.

- Vago, D. R., & Silbersweig, D. A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): a framework for understanding the neurobiological mechanisms of mindfulness. *Frontiers in Human Neuroscience*, *6*, 296.
- Von Känel, R., Bellingrath, S., & Kudielka, B. M. (2008). Association between burnout and circulating levels of pro- and anti-inflammatory cytokines in schoolteachers. *Journal of Psychosomatic Research*, 65(1), 51–59. https://doi.org/10.1016/j.jpsychores.2008.02.007
- Walach, H., Buchheld, N., Buttenmüller, V., Kleinknecht, N., & Schmidt, S. (2006). Measuring mindfulness—the Freiburg mindfulness inventory (FMI). *Personality and Individual Differences*, 40(8), 1543–1555.
- Weare, K. (2014). Evidence for Mindfulness. Retrieved from http://mindfulnessinschools.org/wp-content/uploads/2014/10/Evidence-for-Mindfulness-Impact-on-school-staff.pdf
- Williams, J. M. G. (2010). Mindfulness and psychological process. *Emotion*, 10(1), 1–7. https://doi.org/10.1037/a0018360
- Yoon, J. S. (2002). Teacher Characteristics as Predictors of Teacher-Student Relationships: Stress, Negative Affect, and Self-Efficacy. *Social Behavior & Personality: An International Journal*, 30(5), 485–493.
- Yu, X., Wang, P., Zhai, X., Dai, H., & Yang, Q. (2014). The effect of work stress on job burnout among teachers: The mediating role of self-efficacy. *Social Indicators Research*. https://doi.org/10.1007/s11205-014-0716-5

### 8 Appendices

### 8.1 Exemplary Recruiting Letter

Prof. Dr. med. Joachim Bauer

Prof. Dr. phil. Stefan Schmidt, Dipl. Psych.

#### UNIVERSITÄTSKLINIKUM FREIBURG

Klinik für Psychosomatische Medizin und Psychotherapie Hauptstraße 8, D-79104 Freiburg

### An die Lehrer/innen des Theodor-Heuß-Gymnasiums

Wir leben in einer Zeit, die für immer mehr Menschen starken Arbeitsdruck, fortwährende Ablenkungen und Hetze mit sich bringt. Die dadurch hervorgerufene Stressbelastung, die nicht nur Erwachsene, sondern auch junge Leute betrifft, ist mittlerweile auch Gegenstand der Gesundheitsforschung.

Anfang 2013 hat die Deutsche Forschungsgemeinschaft – sie ist die wichtigste staatliche Institution für Forschungsförderung in Deutschland – an der Universität Freiburg einen Sonderforschungsbereich zum Thema "Muße" gestartet. Zweck dieses Verbundes ist nicht nur die Erforschung der Gründe für die überall zunehmende Stressbelastung, sondern auch die Erarbeitung konkreter Hilfestellungen zur besseren Stressbewältigung.

Ein von uns geleitetes Teilprojekt im Rahmen des Sonderforschungsbereiches macht den Lehrer/innen des Theodor-Heuß-Gymnasiums ein besonderes Angebot: Sie erhalten die Möglichkeit, an einem Stressbewältigung" (englisch: "Achtsamkeitsbasierte Mindfulness-Based Stress Reduction", abgekürzt MBSR) teilzunehmen. MBSR ist ein in der amerikanischen Medizin entwickeltes Verfahren, welches erwiesenermaßen Stress reduziert und das Wohlbefinden erhöht. MBSR ist weder Therapie noch Psychotherapie, sondern findet weltweit bei Managern und anderweitig beanspruchten Menschen Anklang.

Der den Lehrer/innen des Theodor-Heuß-Gymnasiums angebotene Kurs ist freiwillig. Zusätzlich wird der Kurs auch der elften Klasse des Theodor-Heuß-Gymnasiums angeboten. Das Vorhaben wird von der Schulleitung unterstützt. Der Kurs wird von erfahrenen MBSR-Lehrer/innen, dem Arzt Herr Dr. Med. K. K. sowie der Ärztin Frau S.B. (Freiburg), geleitet. Wir wollen das Vorhaben wissenschaftlich begleiten, weshalb alle Teilnehmer/innen gebeten werden, vor und nach dem Kurs einige Fragebögen auszufüllen.

Unser Projekt wird Sie nicht zusätzlich belasten, sondern soll sie unterstützen und helfen, Zugang zu ihren Ressourcen zu finden. Der Kurs erstreckt sich über einen Zeitraum von acht Wochen mit einem zweistündigen Termin pro Woche (Dienstag: 17:30 – 19:30) sowie einem ganztägigen Workshop an einem Wochenende in den Räumlichkeiten des Theodor-Heuß-Gymnasiums.

Wir freuen uns auf Ihre Anmeldungen!

Mit freundlichen Grüßen,

Prof. Dr. med. Joachim Bauer

Prof. Dr. phil. Stefan Schmidt, Dipl. Psych.

Für Rückfragen stehen Ihnen die beiden Projektmitarbeiterinnen zur Verfügung:

Dipl.-Psych. Minh Tam Luong (minh.tam.luong@sfb1015.uni-freiburg.de)

M.Sc.-Psych. Sarah Gouda (sarah.gouda@sfb1015.uni-freiburg.de)

Homepage des Sonderforschungsbereichs "Muße":

http://www.sfb1015.uni-freiburg.de/

### 8.2 Exemplary Consent Form

Ort, Datum

Prof. Dr. med. Joachim Bauer Prof. Dr. phil. Stefan Schmidt, Dipl. Psych. UNIVERSITÄTSKLINIKUM FREIBURG Klinik für Psychosomatische Medizin und Psychotherapie Hauptstraße 8, D-79104 Freiburg Liebes Mitglied des Lehrerkollegiums, wir freuen uns, dass Sie Interesse an dem vom Muße-Projekt angebotenen MBSR-Kurs haben. Im Falle einer verbindlichen Teilnahme bitten wir Sie, die untenstehende Einwilligungserklärung zu unterschreiben und bis xx, den xx.xx.xx am Sekretariat abzugeben. Mit freundlichen Grüßen Prof. Dr. med. Joachim Bauer Prof. Dr. phil. Stefan Schmidt, Dipl. Psych. ...... Einwilligungserklärung Ich habe die Informationen über die Studie gelesen und erkläre mich einverstanden, an einem MBSR-Kurs im Rahmen eines von Prof. Bauer und Prof. Schmidt geleiteten Projektes teilzunehmen. Ich bin damit einverstanden, dass die im Rahmen des Forschungsprojektes erhobenen Fragebogendaten in anonymisierter Form (also ohne Nennung von Namen) für Forschungszwecke verwendet werden. Name:

Unterschrift

## 8.3 Test Battery

The following test battery comprises inquiries into personal data as well as all used psychometric instruments and is presented here in the appearance and order of actual use in the field. Material that was added to the battery at a later point later is attached subsequently as supplements (version B of the Test for Creative Thinking – Drawing Production; Short Version of the Self-Efficacy Scale; Verbal Creativity Test in the two used versions; Visual Analogue Scales and textual inquiry for expectation and motivation).

# Persönliche Angaben

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1. Geschlecht:							
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3. Familienstand:							
verheiratet und verheiratet und verwitwet geschieden ledig	leben getrenn	t					
4. Lebenssituation	n:						
alleine lebend mit Partner /Ehe in Wohngemein bei den Eltern le	epartner leben schaft lebend	d			] ] ]		
5. Wie viele Perso Kinder und Sie se				Haushal	t,		
	son(en) insges ahl der Kinde						
6. Wie viele Stund Überstunden)?	len pro Woch	ne arbeite	n Sie no	rmalerwe	eise in ih	rem Hauptbert	uf (einschließlich
L,	Stund	en					
7. Über wie viele	Jahre Berufs	erfahrung	ı verfüge	en Sie?			
,	Jahre						

Meditation Achtsamkeit Autogenem Training Yoga Anderen Praktiken:	
Falls ja, über wie viele Jahre Erfahrung verfü	gen Sie?

8. Haben Sie vorherige Erfahrung mit

<sup>63</sup>Im Folgenden finden Sie eine Reihe von Feststellungen. Bitte lesen Sie jede durch und wählen Sie aus den vier Antworten diejenige aus, die angibt, wie häufig die Feststellung auf Ihr Leben **in den letzten 4 Wochen** zutrifft. Kreuzen Sie bitte bei jeder Feststellung das Feld unter der von Ihnen gewählten Antwort an. Es gibt keine richtigen oder falschen Antworten. Überlegen Sie bitte nicht lange und lassen Sie keine Frage aus.

	fast nie	manch- mal	häufig	meistens
01. Sie fühlen sich ausgeruht.	1	2	3	4
02. Sie haben das Gefühl, dass zu viele Forderungen an Sie gestellt werden.	1	2	3	4
03. Sie haben zuviel zu tun.	1	2	3	4
04. Sie haben das Gefühl, Dinge zu tun, die Sie wirklich mögen.	1	2	3	4
05. Sie fürchten, Ihre Ziele nicht erreichen zu können.	1	2	3	4
06. Sie fühlen sich ruhig.	1	2	3	4
07. Sie fühlen sich frustriert.	1	2	3	4
08. Sie sind voller Energie.	1	2	3	4
09. Sie fühlen sich angespannt	1	2	3	4
10. Ihre Probleme scheinen sich aufzutürmen.	1	2	3	4
11. Sie fühlen sich gehetzt.	1	2	3	4
12. Sie fühlen sich sicher und geschützt.	1	2	3	4
13. Sie haben viele Sorgen.	1	2	3	4
14. Sie haben Spaß.	1	2	3	4
15. Sie haben Angst vor der Zukunft.	1	2	3	4
16. Sie sind leichten Herzens.	1	2	3	4
17. Sie fühlen sich mental erschöpft.	1	2	3	4
18. Sie haben Probleme, sich zu entspannen.	1	2	3	4
19. Sie haben genug Zeit für sich.	1	2	3	4
20. Sie fühlen sich unter Termindruck.	1	2	3	4

<sup>&</sup>lt;sup>63</sup> Perceived Stress Questionnaire (PSQ; Fliege, Rose, Arck, Levenstein, & Klapp, 2001)

<sup>64</sup>Bitte beantworten Sie die folgenden Fragen spontan, indem Sie die Antwort aussuchen und ankreuzen, die Ihnen am passendsten erscheint.

,	stimmt nicht	stimmt kaum	stimmt eher	stimmt genau
Ich weiß, dass ich es schaffe, selbst den problematischsten Schülern den prüfungsrelevanten Stoff zu vermitteln.	1	2	3	4
Ich weiß, dass ich zu den Eltern guten Kontakt halten kann, selbst in schwierigen Situationen.	1	2	3	4
Ich bin mir sicher, dass ich auch mit den problematischen Schülern in guten Kontakt kommen kann, wenn ich mich darum bemühe.	1	2	3	4
Ich bin mir sicher, dass ich mich in Zukunft auf individuelle Probleme der Schüler noch besser einstellen kann.	1	2	3	4
Selbst wenn mein Unterricht gestört wird, bin ich mir sicher, die notwendige Gelassenheit bewahren zu können.	1	2	3	4
Selbst wenn es mir mal nicht so gut geht, kann ich doch im Unterricht immer noch gut auf die Schüler eingehen.	1	2	3	4
Auch wenn ich mich noch so sehr für die Entwicklung meiner Schüler engagiere, weiß ich, dass ich nicht viel ausrichten kann.	1	2	3	4
Ich bin mir sicher, dass ich kreative Ideen entwickeln kann, mit denen ich ungünstige Unterrichtsstrukturen verändere.	1	2	3	4
Ich traue mir zu, die Schüler für neue Projekte zum Modellversuch zu begeistern.	1	2	3	4
Ich kann Veränderungen im Rahmen des Modellversuchs auch gegenüber skeptischen Kollegen durchsetzen.	1	2	3	4

<sup>&</sup>lt;sup>64</sup> Self-Efficacy Scale for Teachers (SES-T; Schwarzer & Schmitz, 1999)

<sup>65</sup>Im Folgenden finden Sie eine Reihe von Aussagen zu Ihrem Umgang mit problematischen Gefühlen **in der letzten Woche**. Bitte beantworten Sie die Fragen spontan, indem Sie die Antwort aussuchen und ankreuzen, die Ihnen am passendsten erscheint.

In dei	r letzten Woche	überhaupt nicht	selten	manchmal	oft	(fast) immer
1.)	achtete ich auf meine Gefühle	Ο <sub>0</sub>	01	02	O <sub>3</sub>	04
2.)	konnte ich positivere Gefühle gezielt herbei führen.	00	01	O2	Оз	04
3.)	verstand ich meine emotionalen Reaktionen	Ο <sub>0</sub>	01	O <sub>2</sub>	O <sub>3</sub>	04
4.)	fühlte ich mich auch intensiven, negativen Gefühlen gewachsen	00	01	O <sub>2</sub>	O <sub>3</sub>	$O_4$
5.)	konnte ich auch negative Gefühle annehmen.	00	01	02	O <sub>3</sub>	04
6.)	hätte ich klar benennen können, wie ich mich gerade fühle.	00	01	$O_2$	O <sub>3</sub>	04
7.)	hatte ich eine gute körperliche Wahrnehmung meiner Gefühle.	00	01	02	O <sub>3</sub>	04
8.)	machte ich, was ich mir vorgenommen hatte, auch wenn ich mich dabei unwohl oder ängstlich fühlte.	00	01	02	Ο <sub>3</sub>	04
9.)	versuchte ich, mir in belastenden Situationen selber Mut zu machen.	00	01	O <sub>2</sub>	Ο <sub>3</sub>	04
10.)	konnte ich meine negativen Gefühle beeinflussen.	Oo	Ο1	$O_2$	O <sub>3</sub>	04
11.)	wusste ich, was meine Gefühle bedeuten	00	01	02	O <sub>3</sub>	04
12.)	schenkte ich meinen Gefühlen Aufmerksamkeit.	00	01	$O_2$	O <sub>3</sub>	$O_4$
13.)	war mir klar, was ich gerade fühlte.	00	01	02	O <sub>3</sub>	04
14.)	merkte ich gut, wenn mein Körper auf emotional bedeutende Situationen besonders reagierte.	00	01	02	Ο <sub>3</sub>	04
15.)	versuchte ich mich in belastenden Situationen selber aufzumuntern.	00	01	02	O <sub>3</sub>	04
16.)	konnte ich trotz negativer Gefühle das machen, was ich mir vorgenommen hatte.	Ο <sub>0</sub>	01	02	Ο <sub>3</sub>	04
17.)	konnte ich zu meinen Gefühlen stehen	Ο <sub>0</sub>	Ο1	02	O <sub>3</sub>	04
18.)	war ich mir sicher, auch intensive, unangenehme Gefühle aushalten zu können.	00	01	02	O <sub>3</sub>	04
19.)	setzte ich mich mit meinen Gefühlen auseinander.	00	01	02	O <sub>3</sub>	04
20.)	war mir bewusst, warum ich mich so fühlte, wie ich mich fühlte.	00	01	$O_2$	O <sub>3</sub>	$O_4$
21.)	war mir klar, dass ich meine Gefühle beeinflussen kann.	00	01	02	O <sub>3</sub>	04
22.)	konnte ich wichtige Ziele verfolgen, auch wenn ich mich dabei manchmal unwohl oder unsicher fühlte.	Ο <sub>0</sub>	01	02	Ο <sub>3</sub>	04
23.)	akzeptierte ich meine Gefühle.	Ο <sub>0</sub>	01	O <sub>2</sub>	O <sub>3</sub>	04
24.)	waren meine körperlichen Reaktionen ein gutes Signal dafür, wie ich mich fühlte.	O <sub>0</sub>	01	02	Ο <sub>3</sub>	04
25.)	wusste ich gut, wie es mir gerade geht.	00	01	02	O <sub>3</sub>	04
26.)	fühlte ich mich stark genug, auch belastende Gefühle aushalten zu können.	00	01	02	Ο <sub>3</sub>	04
27.)	stand ich mir in belastenden Situationen selbst zur Seite.	00	0,	02	O <sub>3</sub>	04

<sup>65</sup> Emotion Regulation Skills Questionnaire (ERSQ; Berking & Znoj, 2008)

 $^{66}$ Bitte beantworten Sie die folgenden Fragen spontan, indem Sie die Antwort aussuchen und ankreuzen, die Ihnen am passendsten erscheint.

		stimmt nicht	stimmt kaum	stimmt eher	stimmt genau
1.	Ich kann mich lange Zeit auf eine Sache konzentrieren, wenn es nötig ist.				<b>4</b>
2.	Wenn ich von einer Sache abgelenkt werde, komme ich schnell wieder zum Thema zurück.				
3.	Wenn ich bei einer Tätigkeit zu aufgeregt werde, kann ich mich so beruhigen, dass ich bald wieder weitermachen kann.				
4.	Wenn bei einer Tätigkeit eine sachliche Haltung nötig ist, kann ich meine Gefühle unter Kontrolle bringen.				
5.	Wenn störende Gedanken auftreten, kann ich sie nur schwer von mir wegschieben.				
6.	Ich kann es verhindern, dass die Gedanken ständig von meiner Aufgabe abschweifen.				
7.	Wenn ich Sorgen habe, kann ich mich nicht auf eine Tätigkeit konzentrieren.				
8.	Nach einer Unterbrechung finde ich problemlos zu einer konzentrierten Arbeitsweise zurück.				
9.	Alle möglichen Gedanken oder Gefühle lassen mir einfach keine Ruhe zum Arbeiten.				
10.	Ich halte mein Ziel im Auge und lasse mich nicht vom Weg abbringen.			<b>□</b> 3	

 $<sup>^{66}</sup>$  Self-Regulation Scale (SRS; Schwarzer & Jerusalem, 1999)

 $^{67}$ Kreuzen Sie bitte bei jeder Frage die Antwort an, die am besten auf Sie zutrifft. Bitte beziehen Sie dabei die Aussagen auf die **letzten sieben Tage.** 

		fast nie	eher selten	relativ oft	fast immer
1.	Ich bin offen für die Erfahrung des Augenblicks.				
2.	Ich spüre in meinen Körper hinein, sei es beim Essen, Kochen, Putzen, Reden.				
3.	Wenn ich merke, dass ich abwesend war, kehre ich sanft zur Erfahrung des Augenblicks zurück.				
4.	Ich kann mich selbst wertschätzen.				
5.	Ich achte auf die Motive meiner Handlungen.				
6.	Ich sehe meine Fehler und Schwierigkeiten, ohne mich zu verurteilen.				
7.	Ich bin in Kontakt mit meinen Erfahrungen, hier und jetzt.	<b>-</b>			
8.	Ich nehme unangenehme Erfahrungen an.				
9.	Ich bin mir selbst gegenüber freundlich, wenn Dinge schief laufen.				
10.	Ich beobachte meine Gefühle, ohne mich in ihnen zu verlieren.				
11.	In schwierigen Situationen kann ich innehalten.				
12.	Ich erlebe Momente innerer Ruhe und Gelassenheit, selbst wenn äußerlich Schmerzen und Unruhe da sind.				
13.	Ich bin ungeduldig mit mir und meinen Mitmenschen.				
14.	Ich kann darüber lächeln, wenn ich sehe, wie ich mir manchmal das Leben schwer mache.				

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<sup>&</sup>lt;sup>67</sup> Freiburg Mindfulness Inventory (FMI; Walach, Buchheld, Buttenmüller, Kleinknecht, & Schmidt, 2006)

<sup>68</sup>Nachfolgend finden Sie eine Liste von Schwierigkeiten, die im Zusammenhang mit Beziehungen zu anderen berichtet werden. Bitte lesen Sie diese Liste durch und überlegen Sie, ob die einzelnen Schwierigkeiten für Sie ein Problem darstellten und zwar bezogen auf **irgendeine** Person, die in Ihrem Leben eine bedeutsame Rolle spielte. Kreuzen Sie bitte für jedes Problem die Ziffer an, die beschreibt, wie sehr Sie darunter gelitten haben.

Beispiel: Wie sehr haben Sie unter diesem Problem gelitten?

Es fällt mir schwer ...

Es fällt mir schwer ...

		nicht	wenig	mittelmäß	ziemlich	sehr	_
0.	mit meinen Angehörigen zurechtzukommen	0	1	2	3	4	

Teil I. Die nachstehenden Aspekte können im Umgang mit anderen schwierig sein.

		ht	wenig	mittelmäßig	ziemlich	Έ	
		nicht	Š			sehr	-
1.	anderen Menschen zu vertrauen	0	1	2	3	4	
2.	anderen gegenüber "Nein" zu sagen	0	1	2	3	4	
3.	mich Gruppen anzuschließen	0	1	2	3	4	
4.	bestimmte Dinge für mich zu behalten	0	1	2	3	4	
5.	andere wissen zu lassen, was ich will	0	1	2	3	4	
6.	jemandem zu sagen, dass er mich nicht weiter belästigen soll	0	1	2	3	4	
7.	mich fremden Menschen vorzustellen	0	1	2	3	4	
8.	andere mit anstehenden Problemen zu konfrontieren	0	1	2	3	4	
9.	mich gegenüber jemand anderem zu behaupten	0	1	2	3	4	
10.	andere wissen zu lassen, dass ich wütend bin	0	1	2	3	4	
11.	eine langfristige Verpflichtung gegenüber anderen einzugehen	0	1	2	3	4	
12.	jemandem gegenüber die "Chef-Rolle" einzunehmen	0	1	2	3	4	
13.	anderen gegenüber aggressiv zu sein, wenn die Lage es erfordert	0	1	2	3	4	
14.	mit anderen etwas zu unternehmen	0	1	2	3	4	
15.	anderen Menschen meine Zuneigung zu zeigen	0	1	2	3	4	

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<sup>&</sup>lt;sup>68</sup> Inventory of Interpersonal Problems (IIP-D; Horowitz, Strauß, & Kordy, 2000)

	Es fällt mir schwer	icht	/enig	ittelmäßig	iemlich	əhr
16.	mit anderen zurechtzukommen	0	1	2	3	4
17.	die Ansichten eines anderen zu verstehen	0	1	2	3	4
18.	meine Gefühle anderen gegenüber frei heraus zu äußern	0	1	2	3	4
19.	wenn nötig, standfest zu sein	0	1	2	3	4
20.	ein Gefühl von Liebe für jemanden zu empfinden	0	1	2	3	4
21.	anderen Grenzen zu setzen	0	1	2	3	4
22.	jemand anderen in seinen Lebenszielen zu unterstützen	0	1	2	3	4
23.	mich anderen nahe zu fühlen	0	1	2	3	4
24.	mich wirklich um die Probleme anderer zu kümmern	Λ	1	2	3	4
25.	mich mit jemand anderem zu streiten	0	1	2	3	4
26.	alleine zu sein	0	1	2	3	4
27.	jemandem ein Geschenk zu machen	0	1	2	3	4
28.	mir auch gegenüber den Menschen Ärger zu gestatten, die ich mag	0	1	2	3	4
29.	die Bedürfnisse eines anderen über meine eigenen zu stellen	0	1	2	3	4
30.	mich aus den Angelegenheiten anderer herauszuhalten	0	1	2	3	4
31.	Anweisungen von Personen entgegenzunehmen, die mir vorgesetzt sind	0	1	2	3	4
32.	mich über das Glück eines anderen Menschen zu freuen	0	1	2	3	4
33.	andere zu bitten, mit mir etwas zu unternehmen	0	1	2	3	4
34.	mich über andere zu ärgern	0	1	2	3	4
35.	mich zu öffnen und meine Gefühle jemand anderem mitzuteilen	0	1	2	3	4
36.	jemand anderem zu verzeihen, nachdem ich ärgerlich war	0	1	2	3	4
37.	mein eigenes Wohlergehen nicht aus dem Auge zu verlieren, wenn jemand anderes in Not ist	0	1	2	3	4
38.	fest und bestimmt zu bleiben, ohne mich darum zu kümmern, ob ich die Gefühle anderer verletzte	0	1	2	3	4
39	selbstbewusst zu sein, wenn ich mit anderen zusammen bin	O	1	2	3	4

Teil II. Die nachstehenden Aspekte kann man im Übermaß tun.

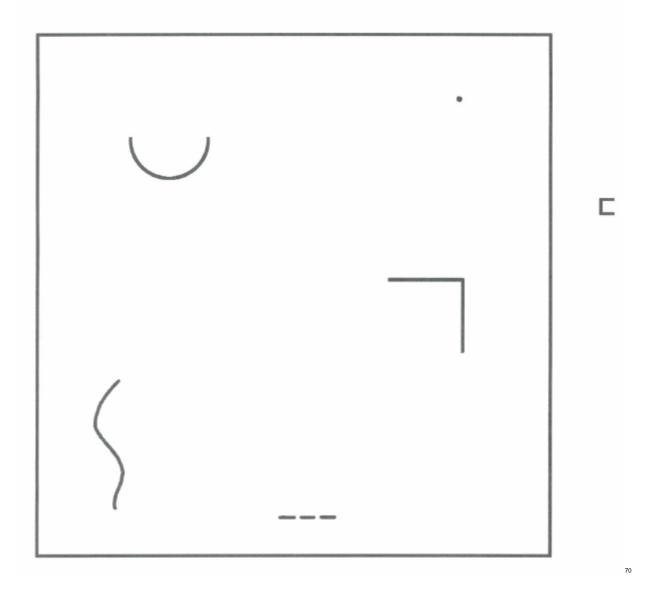
reni	i. Die nachstenenden Aspekte kann man im Obermais tun.					
		nicht	wenig	mittelmäßig	ziemlich	sehr
40.	Ich streite mich zu viel mit anderen	0	1	2	3	4
41.	Ich fühle mich zu sehr für die Lösung der Probleme anderer verantwortlich	0	1	2	3	4
42.	Ich lasse mich zu leicht von anderen überreden	0	1	2	3	4
43.	Ich öffne mich anderen zu sehr	0	1	2	3	4
44.	Ich bin zu unabhängig	0	1	2	3	4
45.	Ich bin gegenüber anderen zu aggressiv	0	1	2	3	4
46.	Ich bemühe mich zu sehr, anderen zu gefallen	0	1	2	3	4
47.	Ich spiele zu oft den Clown	0	1	2	3	4
48.	Ich lege zu viel Wert darauf, beachtet zu werden	0	1	2	3	4
49.	Ich vertraue anderen zu leicht	0	1	2	3	4
50.	Ich bin zu sehr darauf aus, andere zu kontrollieren	0	1	2	3	4
51.	Ich stell zu oft die Bedürfnisse anderer über meine eigenen	0	1	2	3	4
52.	Ich versuche zu sehr, andere zu verändern	0	1	2	3	4
53.	Ich bin zu leichtgläubig	0	1	2	3	4
54.	Ich bin anderen gegenüber zu großzügig	0	1	2	3	4
55.	Ich habe vor anderen zu viel Angst	0	1	2	3	4
56.	Ich bin anderen gegenüber zu misstrauisch	0	1	2	3	4
57.	Ich beeinflusse andere zu sehr, um zu bekommen, was ich will	0	1	2	3	4
58.	Ich erzähle anderen zu oft persönliche Dinge	0	1	2	3	4
59.	Ich streite zu oft mit anderen	0	1	2	3	4
60.	Ich halte mir andere zu sehr auf Distanz	0	1	2	3	4
61.	Ich lasse mich von anderen zu sehr ausnutzen	0	1	2	3	4
62.	Ich bin vor anderen Menschen zu verlegen	0	1	2	3	4
63.	Die Not eines anderen Menschen berührt mich zu sehr	0	1	2	3	4
64.	Ich möchte mich zu sehr an anderen rächen	0	1	2	3	4

trifft trifft trifft trifft nicht eher kaum genau zu zu zu zu Wenn sich Widerstände auftun, finde ich Mittel und Wege, mich durchzusetzen.  $\square_3$ 2. Die Lösung schwieriger Probleme gelingt mir immer, wenn ich mich darum bemühe.  $\square_3$ 3. Es bereitet mir keine Schwierigkeiten, meine ۵ ء Absichten und Ziele zu verwirklichen. In unerwarteten Situationen weiß ich immer, wie  $\square_3$ ich mich verhalten soll. 5. Auch bei überraschenden Ereignissen glaube ich, dass ich gut mit ihnen zurechtkommen werde. Schwierigkeiten sehe ich gelassen entgegen, weil 6.  $\square_2$ ich meinen Fähigkeiten immer vertrauen kann. 7. Was auch immer passiert, ich werde schon  $\square_3$ klarkommen. Für jedes Problem kann ich eine Lösung finden.  $\square_3$ Wenn eine neue Sache auf mich zukommt, weiß 3 ich, wie ich damit umgehen kann. 10. Wenn ein Problem auf mich zukommt, habe ich meist mehrere Ideen, wie ich es lösen kann.  $\square_3$ 

<sup>69</sup>Hier geht es um Ihre persönlichen Einschätzungen und Gefühle. Bitte kreuzen Sie das Kästchen

an, das am ehesten zutrifft.

<sup>&</sup>lt;sup>69</sup> General Self-Efficacy Scale, (Jerusalem and Schwarzer,1999)



70 Test for Creative Thinking- Drawing Production (TSD-DP; Urban & Jellen, 1995)

 $^{71}$ Dieser Fragebogen enthält Aussagen, welche sich zur Beschreibung Ihrer eigenen Person eignen könnten. Lesen Sie bitte jede dieser Aussagen aufmerksam durch und überlegen Sie, ob diese Aussage auf Sie persönlich zutrifft oder nicht. Zur Bewertung jeder der Aussagen steht Ihnen eine fünffach abgestufte Skala zur Verfügung. Kreuzen Sie bitte an:

		Starke Ablehnung	Ablehnung	Neutral	Zustimmung	Starke Zustimmung
1.	Ich mag meine Zeit <b>nicht</b> mit Tagträumereien verschwenden					
2.	Ich finde philosophische Diskussionen langweilig					
3.	Mich begeistern die Motive, die ich in der Kunst und in der Natur finde					
4.	Ich glaube, dass es Schüler oft nur verwirrt und irreführt, wenn man sie Rednern zuhören lässt, die kontroverse Standpunkte vertreten					
5.	Poesie beeindruckt mich wenig oder gar nicht					
6.	Ich probiere oft neue und fremde Speisen aus					
7.	Ich nehme nur selten Notiz von den Stimmungen oder Gefühlen, die verschiedene Umgebungen hervorrufen					
8.	Ich glaube, dass wir bei ethischen Entscheidungen auf die Ansichten unserer religiösen Autoritäten achten sollten					
9.	Wenn ich Literatur lese oder ein Kunstwerk betrachte, empfinde ich manchmal ein Frösteln oder eine Welle der Begeisterung					
10.	Ich habe wenig Interesse, über die Natur des Universums oder die Lage der Menschheit zu spekulieren					
11.	Ich bin sehr wissbegierig					
12.	Ich habe oft Spaß daran, mit Theorien oder abstrakten Ideen zu spielen					

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 $<sup>^{71}</sup>$  Openness to Experience Scale of the NEO Five-Factor Inventory (NEO-FFI; Borkenau & Ostendorf, 1994)

Dieser Fragebogen bezieht sich auf Ihr **Befinden in der vergangenen Woche**. Wir bitten Sie, jede Frage zu beantworten und zwar so, wie es für Sie persönlich in der letzten Woche am ehesten zutraf.

Machen Sie bitte nur ein Kreuz pro Frage. Lassen Sie bitte keine Frage aus!

Ich fühle mich angespannt oder überreizt	8. Ich fühle mich in meinen Aktivitäten gebremst					
3 ☐ meistens 2 ☐ oft 1 ☐ von Zeit zu Zeit (gelegentlich) 0 ☐ überhaupt nicht	3  fast immer 2  sehr oft 1 manchmal 0  überhaupt nicht					
<ul><li>2. Ich kann mich heute noch so freuen wie früher</li><li>0 ganz genau so</li></ul>	9. Ich habe manchmal ein ängstliches Gefühl in der Magengegend					
1  nicht ganz so sehr 2  nur noch ein wenig 3  kaum oder gar nicht  3. Mich überkommt eine ängstliche	0					
Vorahnung, dass etwas Schreckliches passieren könnte	10. Ich habe das Interesse an meiner äußeren Erscheinung verloren					
<ul> <li>3 □ ja, sehr stark</li> <li>2 □ ja, aber nicht zu stark</li> <li>1 □ etwas, aber es macht mir keine Sorgen</li> <li>0 □ überhaupt nicht</li> </ul>	<ul> <li>3 □ ja, das stimmt genau</li> <li>2 □ ich kümmere mich nicht so darum wie ich sollte</li> <li>1 □ evtl. kümmere ich mich zu wenig darum</li> </ul>					
4. Ich kann lachen und die lustigen Dinge sehen	0 d ich kümmere mich so viel darum wie immer					
0  ja, so viel wie immer 1  nicht mehr ganz so viel 2  inzwischen viel weniger 3  überhaupt nicht	<ul> <li>11. Ich fühle mich rastlos, muss immer in Bewegung sein</li> <li>3  ja, tatsächlich sehr</li> <li>2  ziemlich</li> <li>1  nicht sehr</li> </ul>					
5. Mir gehen beunruhigende Gedanken durch den Kopf	0 🗖 überhaupt nicht					
3 ☐ einen Großteil der Zeit 2 ☐ verhältnismäßig oft 1 ☐ von Zeit zu Zeit, aber nicht zu oft 0 ☐ nur gelegentlich/nie	<ul> <li>12. Ich blicke mit Freude in die Zukunft</li> <li>0 □ ja, sehr</li> <li>1 □ eher weniger als früher</li> <li>2 □ viel weniger als früher</li> <li>3 □ kaum bis gar nicht</li> </ul>					
6. Ich fühle mich glücklich 3 □ überhaupt nicht 2 □ selten 1 □ manchmal 0 □ meistens 7. Ich kann behaglich dasitzen und mich	13. Mich überkommt plötzlich ein panikartiger Zustand 3 □ ja, tatsächlich sehr oft 2 □ ziemlich oft 1 □ nicht sehr oft 0 □ überhaupt nicht					
entspannen	14. Ich kann mich an einem guten Buch, einer Radio- oder Fernsehsendung					
0 ☐ ja, natürlich 1 ☐ gewöhnlich schon 2 ☐ nicht oft 3 ☐ überhaupt nicht	freuen  0 □ oft 1 □ manchmal 2 □ eher selten 3 □ sehr selten					
	3 - 3 Jelli 3 etteli					

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 $<sup>^{72}</sup>$  Hospital Anxiety and Depression Scale (HADS; Hermann-Lingen, Buss, & Snaith, 2005)

<sup>73</sup>In der folgenden Liste finden Sie Aussagen dazu, wie man die Arbeit erleben kann. Kreuzen Sie bitte das für Sie Zutreffende an. Bitte beachten Sie, dass Sie hier sieben Antwortmöglichkeiten haben.

0		3	4		5	 6 T	
Nie	ein paar Mal im einmal im e Jahr oder Monat oder weniger weniger	ein paar Ma Monat	alim einm W	al in der oche	ein paar Ma in der Woch	en Tag	
		nie		fast nie	ab und zu	regelmäßig	
1.	Bei meiner Arbeit bin ich voll überschäumender Energie.		0 • 1		2 3	<b></b> 5	
2.	Meine Arbeit ist nützlich und sinnvoll.		0 • 1		2 <b></b> 3		
3.	Während ich arbeite, vergeht die Zeit wie Fluge.	e im	0 • 1		2 <b>3</b>		
4.	Beim Arbeiten fühle ich mich fit und tatkräftig.	0	0 • 1		2  3	<b></b> 5	
5.	Ich bin von meiner Arbeit begeistert.		0 • 1		<sub>2</sub>		
6.	Während ich arbeite, vergesse ich alles u mich herum.	ım 🗆	0 • 1		2 <b></b> 3		
7.	Meine Arbeit inspiriert mich.		0 • 1		<sub>2</sub>		
8.	Wenn ich morgens aufstehe, freue ich mi auf meine Arbeit.	ich 🗖	0 • 1		<sub>2</sub>		
9.	Ich fühle mich glücklich, wenn ich intensarbeite.	siv	0 • 1		2 <b></b> 3		
10.	Ich bin stolz auf meine Arbeit.		0 • 1		<sub>2</sub>	<b></b> 5	
11.	Ich gehe völlig in meiner Arbeit auf.		0 • 1		2 <b></b> 3		
	Wenn ich arbeite, kann ich für sehr lange dran bleiben.	ш	0 • 1		<sub>2</sub>		
13.	Meine Arbeit ist eine Herausforderung fü mich.	ir 🗖	0 • 1		2 <b></b> 3		
14.	Meine Arbeit reißt mich mit.		0 • 1		2 <b></b> 3		
	Bei meiner Arbeit bin ich geistig sehr widerstandsfähig.		0 • 1		<sub>2</sub>		
16.	Ich kann mich nur schwer von meiner Arlösen.	rbeit 🗖	0 • 1		2		
17.	Bei meiner Arbeit halte ich immer durch wenn es mal nicht so gut läuft.	, auch	0 • 1		<sub>2</sub>		

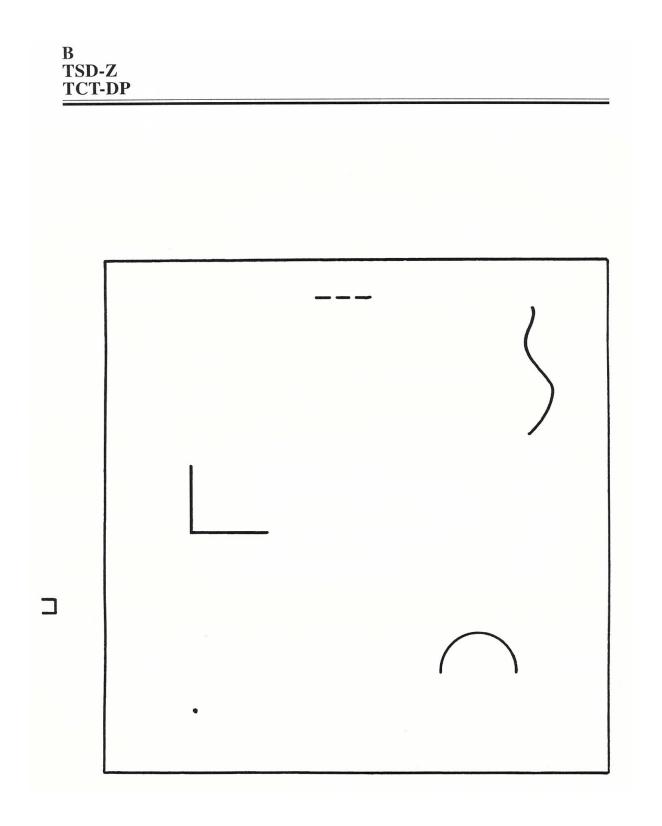
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<sup>&</sup>lt;sup>73</sup> Utrecht Work Engagement Scale (UWES; Schaufeli, Salanova, González-Romá, & Bakker, 2002)

# Vielen Dank für das Ausfüllen!



Supplement a: Version B of the Test for Creative Thinking- Drawing Production (TSD-DP; Urban & Jellen, 1995)



# Supplement b: Short Version of the Self-Efficacy Scale (Beierlein, Kovaleva, Kemper, & Rammstedt, 2014)

Die folgenden Aussagen können mehr oder weniger auf Sie zutreffen. Bitte geben Sie bei jeder Aussage an, inwieweit diese auf Sie persönlich zutrifft.

	Trifft	Trifft	Trifft	Trifft	Trifft
	gar	wenig	etwas	ziemlich	voll und
	nicht zu	zu	zu	zu	ganz zu
(1) In schwierigen Situationen kann ich	□1	$\Box_2$	□з	□4	□5
mich auf meine Fähigkeiten verlassen.					
(2) Die meisten Probleme kann ich aus	□1	$\Box_2$	□з	□4	□5
eigener Kraft gut meistern.					
(3) Auch anstrengende und	□1	$\Box_2$	□3	□4	□5
komplizierte Aufgaben kann ich in der					
Regel gut lösen.					

#### **Supplement c: Unusual Uses of the Verbal Creativity Test (Schoppe, 1975)**

# "Ungewöhnliche Verwendungsarten"

Zu einem alltäglichen Gegenstand, der Ihnen genannt wird, sollen Sie sich möglichst viele *ungewöhnliche* Verwendungsarten einfallen lassen.

<u>Falsch:</u> Schreiben Sie nicht auf, was man normalerweise damit tut. Notieren Sie auch nicht, was ein praktischer Mensch damit alles anfangen würde.

Solche Antworten werden nicht bewertet.

Richtig: Denken Sie vielmehr an ganz neue, ungewöhnliche, originelle

Verwendungsarten, die zumindest im Prinzip möglich sein müssen. Sie sollen dabei keine Hemmungen haben und alle Einfälle aufschreiben.

Verzichten Sie auf Begründungen und umständliche Erklärungen. Schreiben Sie Ihre Einfälle im Telegrammstil einzeilig untereinander auf.

Warten Sie bitte auf das Zeichen zum Umblättern und Testbeginn!

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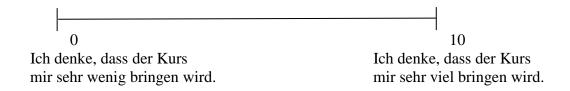
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#### Supplement d: Visual Analogue Scales and text inquiry for motivation and expectation

• Wie hoch ist Ihre Motivation, beim Achtsamkeitskurs mitzumachen? Bitte setzen Sie an der entsprechenden Stelle ein Kreuz.



Wie hoch sind Ihre Erwartungen, dass Ihnen der Achtsamkeitskurs etwas bringen kann?
 Bitte setzen Sie an der entsprechenden Stelle ein Kreuz.



• Was erwarten Sie sich vom Achtsamkeitskurs?

#### Supplement e: Feedback sheet included in the follow-up test battery of the third school

Auf der folgenden Seite haben Sie sofern Sie wünschen die Möglichkeit, Rückmeldung zum Projekt zu geben. Sehr gerne dürfen Sie auch Ihr Kurserleben schildern oder Kritik äußern.

## 8.4 Interview Guides

# **Participant Interview Guide**

Leitfrage/	Inhaltliche Aspekte	Aufrechtserhaltungsfragen	Konkrete Nachfragen
Erzählaufforderung/Stimulus			
Zu Beginn möchte ich Sie/dich gerne fragen, wieso Sie sich /du dich entschieden haben/hast, am Kurs teilzunehmen?	<ul> <li>Erwartungen</li> <li>Vorverständnis</li> <li>Persönliche Zielsetzung</li> </ul>	<ul> <li>Was hat Sie/dich sonst motiviert?</li> <li>Hatten Sie/hattest du andere Überlegungen?</li> </ul>	<ul> <li>Welche Erwartungen         <ul> <li>hatten Sie/hattest du an den Kurs?</li> </ul> </li> <li>Was waren deine/Ihre         <ul> <li>Ziele, Gefühle und</li> <li>Gedanken, als Sie/du vom Projekt gehört haben/hast?</li> </ul> </li> <li>Hatten Sie/hattest du denn konkrete Vorstellungen?</li> </ul>
Was haben Sie/du im Kurs erlebt?	<ul> <li>Subjektives Kurserleben</li> <li>Freie Schilderung der Ereignisse</li> <li>Einblick in wichtige Elemente aus Sicht der Teilnehmer</li> <li>Evtl. Highlights und Schwierigkeiten</li> <li>Reaktionen des Umfelds</li> </ul>	<ul> <li>Was war sonst für Sie/dich wichtig?</li> <li>Was ist Ihnen/dir noch in Erinnerung geblieben?</li> <li>Fällt Ihnen/dir noch was dazu ein?</li> <li>Wenn Sie/du so den Kurs Revue passieren lassen/lässt</li> </ul>	<ul> <li>Was bleibt Ihnen/dir deutlich in Erinnerung?</li> <li>Wenn Sie sich/du dich an einen konkreten Kurs erinnern/erinnerst, wie ging es Ihnen/dir vor, während und nach dem Kurs?</li> <li>Wie hat dein/Ihr Umfeld darauf reagiert, dass du/Sie den Kurs machst/machen?</li> </ul>
Was hat sich durch den Kurs bei Ihnen/bei dir verändert?	<ul> <li>Veränderungen in den unterschiedlichen Lebensbereichen (Schule, Beziehungen, Familie, etc.)</li> </ul>	- Haben Sie andere Veränderungen bemerkt?	- Inwieweit hat der Kurs Ihr/dein <b>Denken oder</b> auch dein Verhalten im Unterricht beeinflusst

	<ul> <li>Veränderungen in der Wahrnehmung von anderen Teilnehmer/innen</li> <li>Wirkmechanismen des Kurses</li> <li>Mögliche Inspiration oder neue Impulse (Kreativität)</li> </ul>		oder verändert?  Inwieweit hat der Kurs Ihr/dein Erleben im Umgang mit anderen beeinflusst oder verändert?  Haben Sie /hast du Veränderungen bei anderen bemerkt?  Haben Sie/hast du etwas in Ihrem/deinem Leben verändert?  Gab es durch den Kurs neue Impulse oder Inspirationsmomente?  Haben Sie sich/hast du dich durch den Kurs mit neuen Themen beschäftigt?  Falls Veränderung beschrieben wird: Wie erklären Sie sich/erklärst du dir diese Veränderung (diesen Impuls)?
Was ist Achtsamkeit für Sie/für dich?	<ul> <li>Subjektives Verständnis vom Konzept</li> <li>Persönliche Assoziationen (was verbindet die Person mit Achtsamkeit)</li> <li>Grad der Aneignung einer achtsamen Haltung durch den Kurs</li> </ul>	<ul> <li>Was verbinden Sie         /verbindest du mit dem         Wort?</li> </ul>	<ul> <li>Woran erkennen Sie/erkennst du, dass Sie/du achtsamer sind /bist?</li> <li>Wann sind Sie/bist du achtsam?</li> <li>Wo haben Sie/hast du Achtsamkeit integriert?</li> </ul>
	- Übertragung der Kursinhalte in das Leben		Was ließ sich in Ihr/dein Leben/ Alltag integrieren?

	der Teilnehmer  - Was für Gedanken hat sich die Person gemacht, wie sehr hat der Kurs sie beschäftigt		<ul> <li>Inwiefern können Sie Achtsamkeit in ihren Berufsalltag integrieren?</li> <li>Inwiefern hat Ihnen/dir Achtsamkeit etwas gebracht, oder auch nicht?</li> </ul>
Wie häufig haben Sie /hast du die Achtsamkeitsübungen zu Hause gemacht?	<ul> <li>Compliance mit den Übungen</li> <li>Gründe für Compliance/non-compliance</li> <li>Übertragung der Kursinhalte in den Alltag</li> </ul>		<ul> <li>Was hat Ihnen/dir dabei geholfen?</li> <li>Was hat Sie/dich daran gehindert?</li> <li>Fiel es Ihnen/dir schwer/leicht?</li> <li>Wieso ging es Ihnen/dir so damit?</li> </ul>
Finden Sie/findest du es sinnvoll, dass der Kurs an der Schule angeboten wird? Oder auch nicht?	<ul> <li>Inwiefern ist der Kurs im Schulkontext angebracht?</li> <li>Möglichkeiten der Nachhaltigkeit</li> </ul>		<ul> <li>Wieso oder wieso nicht?</li> <li>Was denkst du/ denken Sie darüber: kann und soll man so etwas mehr oder permanenter in der Schule verankern?</li> </ul>
Nun waren wir ja als das Muße- Projekt bekannt und haben aber einen Achtsamkeitskurs angeboten: Wieso denken Sie/denkst du, dass ein Projekt zur Muße einen Achtsamkeitskurs anbietet?	<ul> <li>Stellen die         Teilnehmer/innen Muße         und Achtsamkeit in         Zusammenhang? Wie?         Offen explorieren.</li> <li>Schafft Achtsamkeit einen         Zugang zur Muße?</li> </ul>		- Falls eine Art von Zusammenhang erläutert wird: Was sind Unterschiede oder Schnittstellen?
Welche Schwierigkeiten hatten	- Unangenehme Anteile	- Fiel Ihnen/dir sonst etwas	

Sie/ hattest du mit dem Kurs?	<ul> <li>Rezeption des Kurses</li> <li>Schwierigkeiten die evtl.</li> <li>spezifisch für die jeweilige</li> <li>Gruppe sind</li> </ul>	schwer? - Womit kamen Sie /kamst du noch nicht zurecht?	
Was denken Sie/denkst du sind	- Prioritätensetzung der		
weitere wichtige Themen, die wir	Teilnehmer/innen - Unvorhergesehene Themen		
besprechen können?	- Onvomergesenene memen		

#### **Instructor Interview Guide**

Leitfrage/	Inhaltliche Aspekte	Aufrechtserhaltungsfragen	Konkrete Nachfragen
Erzählaufforderung/Stimulus			
Was waren deine	- Erwartungen	- Was hat Sie/dich sonst	- Welche Erwartungen
Erwartungen/Vorstellungen bevor	- Kursdarstellung für Teilnehmer/innen,	motiviert? - Hatten Sie/hattest du	hattest du an den Kurs? - Was wolltest du den
du den Kurs begonnen hast?	Motivierung	andere Überlegungen?	Teilnehmer/innen mitgeben
	- Persönliche Zielsetzung		bzw. wobei wolltest du
			Ihnen Unterstützung anbieten?
			- Hattest du denn konkrete
			(gruppenspezifische)
			Vorstellungen?
			<ul> <li>Hast du konkrete</li> </ul>
			Schwierigkeiten erwartet?
			- Hast du dir im Vorfeld
			gruppenspezifische
			Gedanken gemacht (z.B.

			Wie erreiche ich Schülerinnen)?
Was hast du im Kurs erlebt?  Was ist Achtsamkeit für dich?	<ul> <li>Subjektives Kurserleben</li> <li>Freie Schilderung der Ereignisse</li> <li>Einblick in wichtige Elemente aus Sicht der Kursleiterin</li> <li>Evtl. Highlights und Schwierigkeiten</li> <li>Unterschiede Lehrer/innen und Schülerinnen</li> <li>Subjektives Verständnis vom Konzept</li> <li>Persönliche Assoziationen (was verbindet die Person mit Achtsamkeit)</li> <li>Wie äußert sich die Aneignung einer achtsamen Haltung bei erfahrenen Practitioners?</li> <li>Einschätzung der Achtsamkeitskonzepte der Teilnehmer/innen</li> </ul>	<ul> <li>Was war sonst für dich wichtig?</li> <li>Was ist dir noch in Erinnerung geblieben?</li> <li>Fällt dir noch was dazu ein?</li> <li>Wenn du so den Kurs Revue passieren lässt</li> <li>Was verbindest du mit dem Wort?</li> </ul>	<ul> <li>Was bleibt dir deutlich in Erinnerung?</li> <li>Wenn du dich an einen konkreten Kurs erinnerst, wie ging es dir vor, während und nach dem Kurs?</li> <li>Wie hast du die Gruppe/Gruppendynamik erlebt?</li> <li>Woran erkennst du, dass du achtsamer bist?</li> <li>Wann bist du achtsam?</li> <li>Wo hast du Achtsamkeit integriert? Was ließ sich in dein Leben/ Alltag integrieren?</li> <li>Inwiefern kannst du Achtsamkeit in deinen Berufsalltag integrieren?</li> <li>Wie sehr konntest du dein Achtsamkeitskonzept den Teilnehmer/innen übermitteln?</li> </ul>
Was hat sich durch den Kurs bei	- Selbstberichtete	- Hast du andere	- Was hast du für
den Teilnehmer/innen verändert?	Veränderungen - Beobachtete Veränderungen (in der	Veränderungen bemerkt?	Veränderungen bei den Schülerinnen bemerkt? - Was hast du für

	Interaktion, im Verhalten während des Kurses, in der Gruppendynamik) - Vermutete Wirkmechanismen des Kurses bei Schülerinnen und Lehrer/innen		Veränderungen bei den Lehrer/innen bemerkt?  - Welche Veränderungen wurden berichtet?  - Unterscheiden sich die Veränderungen bei Schülerinnen und Lehrer/innen?  - Wie hat sich das Verhalten in der Gruppe verändert?  - Hast du Veränderungen im Umgang während des Kurses bemerkt?  - Fällt dir bei den Lehrerinnen etwas auf/ bei den Schülerinnen etwas auf?  - Was könnte die Ursache für die Veränderung sein?
Wie häufig haben die	<ul> <li>Compliance mit den Übungen</li> </ul>		<ul> <li>Was könnte aus deiner Sicht dazu verhelfen)</li> </ul>
Teilnehmer/innen die	- Vermutete sowie berichtete		- Was ist aus deiner Sicht
Achtsamkeitsübungen zu Hause	Gründe für		hinderlich?
gemacht?	Compliance/Non- compliance		<ul> <li>Wie sollen Übungsimpulse bzw. "Hausaufgaben" am</li> </ul>
	- Grad der Verbindlichkeit		besten vermittelt werden?
	von Übungselementen		
	bzw. Haltung der Kursleiterin bezüglich		
	"Hausaufgaben"		
Was ist für dich Muße?	- Subjektives Verständnis	- Was verbindest du mit dem	- Wie geht es dir, wenn du

Haben Muße und Achtsamkeit für dich etwas miteinander zu tun?	vom Konzept - Subjektives Erleben der Muße - Subjektiv wahrgenommene Ferne/Nähe zur Achtsamkeit - Durch Achtsamkeit bedingtes Erleben der Muße  - Hat Muße während des Kurses eine Rolle gespielt? - Schafft Achtsamkeit einen Zugang zur Muße?	Wort? - Woran denkst du, wenn du an Muße denkst?	Muße hast?  - Wie sieht ein Tag aus, an dem du Muße hast?  - Unter welchen Bedingungen erlebst du Muße?  - Was verhindert bei dir Muße?  - Haben hast du das Gefühl, dass du mit Hilfe von Achtsamkeit mehr Momente der Muße erleben/erlebst?  - Was sind Unterschiede oder Schnittstellen  - Hatte die Einbettung des Achtsamkeitskurses in einen formellen Mußekontext Einfluss auf den Kurs?
Welche Schwierigkeiten hattest du mit dem Kurs?	<ul> <li>Unangenehme Anteile</li> <li>Rezeption des Kurses</li> <li>Schwierigkeiten die evtl.</li> <li>spezifisch für die jeweilige</li> <li>Gruppe sind</li> </ul>	<ul><li>Fiel dir sonst etwas schwer?</li><li>Womit kamst du noch nicht zurecht?</li></ul>	den Kurs? - Was würdest du anders machen?
Was denken denkst du sind weitere wichtige Themen, die wir besprechen können?	- Unvorhergesehene Themen		

#### 8.5 Statistical Outputs

#### **Analyses of Covariance with School as Factor**

As referenced in section 4.2.1. (Analysis of Covariance with School as Factor), the following lists the central SPSS output table (Between-Subject Effects including the interaction term of group and school) for each variable.

#### Mindfulness

Table 27: 2x3 ANCOVA comparing self-reported mindfulness scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	Df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	1682,244 <sup>a</sup>	6	280,374	15,938	,000	,535
Intercept	293,718	1	293,718	16,697	,000	,167
Baseline	1336,626	1	1336,626	75,983	,000	,478
Group	177,348	1	177,348	10,082	,002	,108
School	39,145	2	19,572	1,113	,334	,026
Group * School	39,666	2	19,833	1,127	,329	,026
Error	1460,058	83	17,591			
Total	140137,985	90				
Corrected Total	3142,302	89				

a. R squared = ,535 (Adjusted R Squared = ,502)

#### **Perceived Stress**

Table 28: 2x3 ANCOVA comparing perceived stress scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	2473,876 <sup>a</sup>	6	412,313	8,743	,000	,387
Intercept	694,727	1	694,727	14,732	,000	,151
Baseline	1961,327	1	1961,327	41,591	,000	,334
	148,597	1	148,597	3,151	,080,	,037
Group						
School	96,200	2	48,100	1,020	,365	,024
Group * School	86,458	2	43,229	,917	,404	,022
Error	3914,108	83	47,158			
Total	189246,966	90				
Corrected Total	6387,984	89				

a. R Squared = ,387 (Adjusted R Squared = ,343)

#### Anxiety

Table 29: 2x3 ANCOVA comparing perceived anxiety scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	270,321 <sup>a</sup>	6	45,053	8,115	,000	,370
Intercept	68,300	1	68,300	12,302	,001	,129
Baseline	224,058	1	224,058	40,357	,000	,327
Group	8,795	1	8,795	1,584	,212	,019
School	7,714	2	3,857	,695	,502	,016
Group * School	11,842	2	5,921	1,067	,349	,025
Error	460,802	83	5,552			
Total	4825,000	90				
Corrected Total	731,122	89				

a. R Squared = ,370 (Adjusted R Squared = ,324)

#### **Depression**

Table 30: 2x3 ANCOVA comparing depression scores post-intervention with school as a factor (Test of Between-Subjects Effects)

	inctol (1 cst	or Beene	en Bubjects i	ziicets)		
Source	Typ III Sum	df	Mean Square	F	Sig.	Partial Eta
	of Squares					Squared
Corrected Model	427,299 <sup>a</sup>	6	71,217	22,290	,000	,617
Intercept	18,055	1	18,055	5,651	,020	,064
Baseline	375,145	1	375,145	117,414	,000	,586
Group	,074	1	,074	,023	,879	,000
School	4,844	2	2,422	,758	,472	,018
Group * School	14,181	2	7,090	2,219	,115	,051
Error	265,190	83	3,195			
Total	2506,000	90				
Corrected Total	692,489	89				
1						

a. R Squared = ,617 (Adjusted R Squared = ,589)

#### **Emotional Competencies**

Table 31: 2x3 ANCOVA comparing emotional competencies scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	6,233 <sup>a</sup>	6	1,039	5,418	,000	,281
Intercept	7,527	1	7,527	39,260	,000	,321
Baseline	5,231	1	5,231	27,287	,000	,247
Group	,268	1	,268	1,397	,241	,017
School	,289	2	,145	,754	,474	,018
Group * School	,578	2	,289	1,506	,228	,035
Error	15,913	83	,192			
Total	763,194	90				
Corrected Total	22,145	89				

a. R Squared = ,281 (Adjusted R Squared = ,229)

#### **Self-Efficacy**

Table 32: 2x3 ANCOVA comparing self-efficacy scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	7,660 <sup>a</sup>	4	1,915	8,743	,000	,384
Intercept	2,119	1	2,119	9,674	,003	,147
Baseline	5,860	1	5,860	26,753	,000	,323
Group	,470	1	,470	2,147	,148	,037
School	,008	1	,008	,037	,847	,001
Group * School	,051	1	,051	,234	,631	,004
Error	12,266	56	,219			
Total	1107,553	61				
Corrected Total	19,926	60				

a. R Squared = ,384 (Adjusted R Squared = ,340)

#### Self-Regulation

Table 33: 2x3 ANCOVA comparing perceived self-regulation scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	7,122 <sup>a</sup>	6	1,187	15,600	,000	,530
Intercept	2,361	1	2,361	31,037	,000	,272
Baseline	5,711	1	5,711	75,064	,000	,475
Group	,146	1	,146	1,924	,169	,023
School	,455	2	,227	2,989	,056	,067
Group * School	,023	2	,011	,148	,863	,004
Error	6,315	83	,076			
Total	830,050	90				
Corrected Total	13,437	89				

a. R Squared = ,530 (Adjusted R Squared = ,496)

#### **Interpersonal Problems**

Table 34: 2x3 ANCOVA comparing interpersonal problems scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	9,197 <sup>a</sup>	6	1,533	24,003	,000	,634
Intercept	,171	1	,171	2,683	,105	,031
Baseline	8,204	1	8,204	128,467	,000	,608
Group	,080,	1	,080,	1,259	,265	,015
School	,014	2	,007	,107	,899	,003
Group * School	,217	2	,108	1,698	,189	,039
Error	5,300	83	,064			
Total	174,998	90				
Corrected Total	14,498	89				

a. R Squared = ,634 (Adjusted R Squared = ,608)

#### **Openness**

Table 35: 2x3 ANCOVA comparing openness scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	1911,834ª	6	318,639	32,705	,000	,703
Intercept	17,390	1	17,390	1,785	,185	,021
Baseline	1817,713	1	1817,713	186,569	,000	,692
Group	,037	1	,037	,004	,951	,000
School	27,915	2	13,958	1,433	,245	,033
Group * School	11,324	2	5,662	,581	,562	,014
Error	808,656	83	9,743			
Total	119748,892	90				
Corrected Total	2720,489	89				

a. R Squared = ,703 (Adjusted Squared = ,681)

#### **Drawing Creativity**

Table 36: 2x3 ANCOVA comparing drawing creativity scores post-intervention with school as a factor (Test of Between-Subjects Effects)

bene	school as a factor (1 est of Between Subjects Lifects)										
Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta					
	Squares					Squared					
Corrected Model	2367,870 <sup>a</sup>	6	394,645	6,528	,000	,321					
Intercept	1287,013	1	1287,013	21,290	,000	,204					
Baseline	2112,010	1	2112,010	34,937	,000	,296					
Group	153,978	1	153,978	2,547	,114	,030					
School	280,359	2	140,180	2,319	,105	,053					
Group * School	58,932	2	29,466	,487	,616	,012					
Error	5017,581	83	60,453								
Total	68394,706	90									
Corrected Total	7385,452	89									

a. R Squared = ,321 (Adjusted R Squared = ,272)

#### Verbal Creativity

Table 37: 2x3 ANCOVA comparing verbal creativity scores post-intervention with school as a factor (Test of Between-Subjects Effects)

Source	Typ III Sum of	df	Mean Square	F	Sig.	Partial Eta
	Squares					Squared
Corrected Model	298,444 <sup>a</sup>	4	74,611	4,804	,002	,255
Intercept	150,705	1	150,705	9,703	,003	,148
Baseline	213,808	1	213,808	13,765	,000	,197
Group	11,937	1	11,937	,769	,384	,014
School	,407	1	,407	,026	,872	,000
Group * School	22,379	1	22,379	1,441	,235	,025
Error	869,818	56	15,532			
Total	6420,000	61				
Corrected Total	1168,262	60				

a. R Squared = ,255 (Adjusted R Squared = ,202)

#### Exploratory analysis of within-Group effects on depression

As referenced in section 7, an exploratory within group comparison of a subset of teachers in the intervention group (those with scores above 7 on the depression scale at baseline measurement; n = 12) was conducted. The central SPSS output table is below.

Table 38: Paired samples t-test comparing depression score at baseline and post-intervention among a subset of intervention group participants (n = 12)

			I	Paired Differe		- P   Puzzzz	Т	df	Sig. (2-
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the difference				tailed)
					Lower	Upper			
Pair 1	HADS_Depression _gesamt - HADS_Depression _gesamt_t2	1,5000 0	1,62369	,46872	,46836	2,53164	3,200	11	,008

#### 8.6 Original German Version of Cited Passages

The following includes all German originals of cited passages.. The text is presented as transcribed; the following transcription guidelines should therefore be noted:

- Transcriptions are case insensitive since capitalized syllables reflect emphasis by the participant.
- The text is presented in its unedited version so as to render transparent the editorial process; repetitions, mid-word interruptions and stutters, sounds (such as "äh" and "ähm") and explanatory parentheses by the transcriber (such as indications of interruptions or laughter) are maintained.
- Transcriptions mostly followed a phonetic approach; i.e. words were transcribed as pronounced even if this corresponded to incorrect spelling. The English version does not reflect these variations in accent and dialect.
- Pauses in the respective participant's narration are expressed by the following symbols: (.) for micro-pauses up to one second; (-) for pauses up to three seconds; and (x) for pauses three seconds or longer, whereby x is the duration in number of seconds.
- Question marks (?) indicate rising intonation at the end of a sentence, while a period (.) indicates falling intonation. The transcription includes no other punctuation that may clarify sentence structure or intent.
- "I" is short for interviewer.
- Periods in square parentheses ([..]) reflect omissions, while text in square parentheses quotes an earlier part of the respective passage not shown here to render statements comprehensible.

#### **Passages from Interviews with Participant Teachers**

The following table lists quoted passages from interviews with participants in the order of their appearance.

Table 39: German originals of passages cited from participants' interviews

Table 57. German originals of passages effect from participants meet views		
Page	Participant	Original German Version of Quoted Passage
117	102	"[Achtsamkeit heißt] dass man halt seine seine gefühle und em - also seine empfindungen beachtet und auch darauf reagiert das heißt wenn eim irgendetwas zu viel is dass man dann weniger macht und sich ausruht und dass man seinen körper nich überstrapaziert."
117-118	108	"achtsamkeit is (.) würde ICH sagen (.) dass ich äh (.) MICH wahrnehme (.) also eben auch (.) meinen körper wahrnehme (.) äh (.) und aber auch meine gefühlslage (.) beWUSST wahrnehme also äh (.) auch (.) vielleicht (.) sagen kann ok jetzt (.) bin ich gestresst (.) vielleicht auch äh (.) soGAR sagen kann warum aber vor allen dingen aber auch erst mal zu erkennen dass ich sag ok (.) das ist jetzt tatsächlich (.) stress (.) ich merke ich (.) drück die zähne zusammen oder ich (.) fange an mit den (.) fingern zu welden oder irgendwie dass ich des einfach bewusst wahrnehme (.) um dann (.) eben ACHTsam zu sein und zu sagen ich (.) atme jetzt mal tief durch (.) also (.) dies atmen ist einfach bei mir (.) es hilft wirklich GUT (.) wenn ich merke ich (.) dreh son bisschen auf (.) und mir dann ganz bewusst sage ok (.) STOPP (.) diese übung mit dem stopp und dann (.) jetzt tief durchatmen und einfach nur mal gucken wo der atem hinfließt äh (-) das (.) das ist son bisschen (.) MEINE achtsamkeit im augenblick."
118	105	"[Achtsamkeit ist] vielleicht (.) so ein bewusster umgang mit mir (.) und (.) leben um mich herum in vielfältiger hinsicht (.) des hat was mit bewusstheit zu tun (-) des hat auch was mit entschEldung zu tun. [] des passiert nich einfach so (.) also ich muss das auch WOLLen [] also manchmal ist es so (.) diese Stop-äh Dingens also sodass ich schon manchmal so momente hab auch im alltag obwohl ichs da ja nich so sehr praktizier (.) aber dass ich da

		schon manchmal auch so momente hab äh jetzt moment ja und eben ruhig durchatmen und raum geben uns so (.) und aber an sich ist es eher so dass ich nem bedürfnis auch folg und mich dann dem bedürfnis nachgeb und dann irgendwie nen raum such so (.) für dieses bedürfnis also mich entschEld dass ich jetzt meditieren will und dass ich mir überleg wann ich des jetzt mach und wo und so."
118	105	"[] dass ich bewusst [mit der Arbeit] umgeh (.) mich entscheid was ich mache (.) dass ich MICH wahrnehm (.) des ist auch was ganz wichtiges in dem ganzen (.) also nicht nur das außen (.) und die anforderungen von außen wahrnehmen sondern MICH selber wahrnehm in dem ganzen getriebe ja (.) des ist achtsam (.) achtsames arbeiten."
118-119	104	"dann hab ich auch entdeckt das is ja ne ganze HALTUNG (.) die uns da vermittelt wurde (-) [] also das tut mir sehr GUT (-) das man einfach dieses LIEBEvolle sich anschauen. es kam IMMER WIEDER und es fiel auch anderen auf (.) das bin ich so nicht gewohnt oder das ist für mich ne theoretische größe eigentlich (.) weiss net (.) ob ich so oft liebevoll mit mir umgeh ne? also da geht eher so praktisch der antreiber (-) und das is (.) für mich wirklich ne offenbarung [] was is darf sein? [] sich so was zusprechen zu lassen immer WIEDER ne? die frau s. hat ja praktisch bei der anleitung auch IMMER (.) immer WIEDER (.) das gesagt (-) das war also hat mich quasi in diesen grundstrom (.) der schon durch andere dinge auch ausgelöst wurde hat mich eigentlich bestärkt (.) was ist=darf sein (-) betrachte dich LIEBEVOLL ne? wenns jetzt nicht klappt (-) keine panik (.) ja? lass es einfach fliessen (.) ne? lass die gedanken kommen und gehen also praktisch dieses (-) dieses loslassen dieses eisernen GRIFFES den man (.) oder den ICH so n bisschen im alltag hab (.) so das muss jetzt noch und jenes noch (.) und jetzt aber effektiv und so (-) [] also die ganze haltung das is ne lebenshaltung (.) nicht nur ne technik."
119	119	"die basis (.) voraussetzung für die achtsamkeit ist ne selbstwahrnehmung dass ich merke wann ich gestresst wann der stress überhaupt los geht (.) dass ich EINschätzen kann wann es zu VIEL ist (I:mhm) und dann eben auch schon wenn man fortgeschrittener ist (lacht) im VORfeld also dass ich weiß (.) jetzt kommt (.) des könnt jetzt da noch rein als termin oder als aufgabe (.) dass ich im vorfeld merk das ist schon alles auf auf der agenda (.) des nehm ich jetzt (.) des muss man anders legen oder oder lassen (.) weils zu viel wird also dass ich des sozusagen überblicke und dafür sorge so (.) und auch ähm dieses (.) haben wir auch im kurs ähm sehr sehr gründlich besprochen dass wir (.) also man KANN stressige anstrengende phasen machen (.) das ist das ist kein problem (.) ABER danach braucht es dann auch die pause. [] aber die frage ist halt (.) wieviel mach ich. ja? also dieses dass ich das so einschätze (.) was ich so an meiner umgebung feststell ist (.) ich kenn mehrere leute (.) [] das stand auf dem ersten paper glaub ich von von diesem kurs (.) dass äh dieses sich selbst wahrnehmen UNd die umgebung glaub ich von von diesem kurs (.) und was ich oft immer wieder feststell ist dass die leute die auf diesem ACHtsamkeits trip sind (.) das mit dieser wahrnehmen mit der umgebung manchmal ein bisschen hapert (.) also die sind GANz toll bei sich angekommen (.) bis hier hin und nicht weiter und mehr tut mir nicht gut (.) aber drum rum äh ist es für MICh dann nicht mehr im guten und DES (.) diese WAAge zu halten ist für mich sehr wichtig. (I:mhm) also ich bin schon jemand der (.) nicht zuLETZT an sich denkt. aber ich möchts immer für die andern gut machen und sowas was mit kindern und so angeht hab ich immer schon (.) das wohl meiner kinder war mir immer schon WAHnsinnig wichtig und andere hätten einfachgesagt ey (.) das ist mir jetzt zu viel und ich schick das kind jetzt einfach DA und da hin und ich brauch jetzt auch meine zeit so [] diese WAAgschale zu halten (.) also was brauchen jetzt andere? aber wo komm jetz
119	213	"wenn es mir gut geht dann geht es auch (-) kann e- kann ich auch was geben und dann kann ich auch sozusagen für schÜler für kollEgium für schUle da sein zum beispiel []un insofern is natülich des achtsAm zu sich selbst sein der erste schritt ja."
119	222	"dass man sich dann nicht in seinem inneren (.) wut groll oder was auch immer oder traurigkeit wenns mal SOwas ist (.) da (.) reinsteigert sondern versucht sich diese situation

		anzuschauen und dann auch wirklich so STOPP (.) also des (.) für mich auch diese achtsamkeit dass man sagt stopp (.) erstmal (.) gucken oder eben erst mal betrachten (.) und dann (.) weiter reagieren."
120	114	"also für mich is es ganz EINfach zu beschreiben. (-) ähm (-) also ichs ich sag jetz einfach mal (.) wenn (.) wenn du ISst, dann ISS (-) wenn du arbeitest (.) dann ARbeite. mh wenn du wenn du keine ahnung ähm (-) äh (.) dich mit freunden triffst oder telefonierst dann telefoNIER (lacht) ja? (I: mhm) ja und das also das ist für mich achtsamkeit DA zu sein in dem moment und wirklich des zu machen was man gerade macht und nich ähm (-) zehntausend andere sachen im kopf haben (I: mhm) also des nur ein elemENT natürlich aber des is en element des für mich (.) GAnz besonders wichtig is."
120	224	"aso für mich is achtsamkeit (.) dieses ankommen im hIEr und jetzt und dies- diese vergAngenheit und zukunft wirklich sein zu lassen [] im hier und jetzt sein und des bedeutet für mich ne ne vertikale aso dieses wir sind sonst immer so in dieser horizontale zwischen vergangenheit und zukunft? [] und die achtsamkeit macht mich eher so vertikal und erdet mich so (I: mhm) und des des is dann auch wieder hat auch wieder was mit zeit zu tun find ich aso des is dieses dieser < <lachend> zeitstrAhl&gt; d- der immer so horizontal is und die achtsamkeit macht da son vertikaln (-) äh &lt;<lachend> pfOsten rein irgendwie."</lachend></lachend>
120-121	114	"[] achtsamkeit im sinne von wirkliches interesse (.) für (.) für (.) für die person (I: mhm) ähm (-) und NIcht schon bei der nächsten frage sein oder beim nächsten thema sein oder (-) irgendwo in eigenen gedanken oder so (.) sondern WIRKlich dabei sein (.) was mir die person gerade (.) im moment erzählt (I: mhm) oder wie sie sich grad fühlt (-) in gewisser weise auch so ne (-) hm (-) so MITfühlen mit dem was die person grad erlebt (-) und das (.) das hab ich das (.) also ich hab (.) das gefühl dass DAS der ausschlag is (.) äh dafür dass (.) dann halt einfach ne andere beziehung entsteht als (.) als es vorher (-) möglich wär und da (.) da seh ich die verbindung (.) zum (.) zu achtsamkeit (.) und das is im prinzip des was ich auch schon ganz zu anfang gesagt hab (.) wenn ich mich eben mit jemandem unterhalte (.) dann unterhalte ich mich also WIRklich mit DIEser person JETZT (.) in diesem moment."
121	103	"[in meinem Alltag ist Achtsamkeit] LOSlassen können also (-) ähm (.) das gefühl einfach (.) DANKBAR das leben so zu leben also äh () genießen zu können (.) ich glaub das sind so die momente (.) also achtsames essen heißt (.) essen genießen. warum genieße ich so oft essen nicht? weil man (.) eigentlich nebenher ist (.) selbst wenn man mit der familie am tisch isst wird vielleicht besprochen [] ABER da, DAS fand ich auch so wertvoll und gut so ich hab dann auch für mich gedacht eigentlich könnte man (.) was weiß ich an äh bei bei tisch könnte man auch ne minute des schweigens erstmal ein=FÜHrn ähm (.) bevor man dann auch wieder äh die gemeinsame mahlzeit als wertvoll des wertvolle zeit des=des austauschs (.) wahrnimmt (.) um (.) ja (.) wieder auf null zu stellen also die sinne auf null zu stellen. jetzt guckn wir mal was da ist wie wir hier DA sind."
122	120	"achtsamkeit für MICh (.) war wenn man [] also dass man einfach wirklich mit ner OFFenheit äh auf alles schaut (.) was IST. ja. auf die dinge (.) die dinge WAHRnimmt (.) denen dingen raum gibt die man IN sich verspürt die man äußerlich in der welt (.) in der wirklichkeit wahrnimmt (.) und dem mit aufmerksamkeit begegnet (.) und nicht sozusagen funktIONAl äh nur auf seinen job oder seine aufgabe oder des was man gerade sich vorgenommen hat ausgerichtet ist (.) sondern wirklich sagen wir mal BREIT auf die dinge schaut. und des also ich bin jetzt ein religiöser mensch und von dem her hab ich das schon so ein bisschen mit drin (.) dass man sagen wir mal mit ner gewissen (.) beWUSStheit die dinge tut. dass man das mit bewUSSTheit weiß ok (.) die lebenszeit ist geschenkt (.) dass ich hier sitzen darf (.) dass ich diese schöne arbeit hab (.) dass ich (.) wunderbare KInder hab. äh (.) dass ich hier leben darf. (.) sagen wir mal insofern LEB ich schon ne gewisse achtsamkeit aus meiner religiösität heraus. dass ich sage ja dass ich (.) ich bin mir beWUSSt dass all die dinge verdankt sind. und diese achtsamkeit (.) dieser achtsamkeitskurs hat mir nochmal geholfen das mehr zu vertiefen oder auch weiterzuentwickeln was ich schon sagen wir mal an an HAltung versuch zu leben auch von meiner religiösen erfahrung her und insofern ist achtsamkeit für mich wirklich etwas nochmal was den blick schärft (.) was äh ne OFFenheit schafft (.) was auch ne ne ideolOGisch ne offenheit schafft. also dass man nicht sozusagen immer nur nach bestimmten moRALISchen oder philosophischen ideologischen vorstellungen sich richtet

		(.) sondern sagt (.) die dinge sind wie sie sind. (.) die menschen sind verschieden (.) es gibt die und die dinge (.) das lassen wir erst mal alles gelten. [] die botschaft kam ja immer wieder [] und das hat mich sehr (-) berÜHRT oder (.) hat mir sehr gefallen und das ist das was ich auch mit achtsamkeit in verbindung bringe. die dinge ANschauen (.) so sein lassen wie sie sind (.) bei sich selber (.) wie bei anderen (.) in der wirklichkeit (.) und dem einfach mit aufmerksamkeit und neugierde und mit ner fragenden haltung (.) und nicht mit ner urteilenden oder schon die antwort vorweg nehmenden haltung begegnen."
122	203	"also für MICH wär achtsam (.) würde achtsamkeit oder be- (.) beDEUtet achtsamkeit auf alle fälle dass ich (.) halt zunächst mal (.) DIEjenigen mit denen ich zusammenarbeite ERNst nehme (.) dass es NICH äh (.) so is dass ich (.) m- (.) mit vorgefertigten urteilen in irgendwelche (.) veranstaltungen reingehe und gleich sag so und so machen wir das (.) sondern äh (.) ich würd meine rolle SO definieren dass ich sag (.) ähm (.) achtsam isses (.) wenn wir geMEINsam einen prozess (.) beschreiten ob das jetzt en prozess is der en SCHÜler betrifft (.) wenn der in einer schwierigen (.) äh (.) disziplin- (.) plinÄren situation is (.) oder ob des äh (.) en prozess ist mit nem kollegen (.) der (.) vielleicht (.) auch in der schwierigen situation is (.) das is erst mal gleichgültig (.) ähm (.) aber es ist ein prozess des MITeinanders (.) und nich ein prozess des gegeneinanders (.) und (.) des heißt ähm (-) achtsamkeit bedeutet für mich eben (.) dass ich e- (.) hauptsächlich erst mal ZUhören muss."
122-123	230	"achtsamkeit is dass ich auf mich (.) auf pass (.) undt (-) ähm den momEnt (-) so (.) wahrnimm wie er iss (-)versuch nich zu (.) verurteilen (.) sonders einfach zu sEhn wies tatsächlich iss (.) mit wie gesagt n stArken fOkus auf (.) des gegenwÄrtige (-) (I: mhm) und auch einfach (.) anzuhalten und mit einem sehr frischen blick (.) dinge anschauen und (-) vielleicht auch mal n neuen weg gehn und aus (.) alten mustern versuchen raus zu gehn (.) auch durch ganz kleine kleinigkeiten wie (.) n anderen heimweg nehmen mit dem fAhrrad als sonst."
126-127	103	"ja weil stress als das gegenteil von muße (-) durch sone achtsame haltung ausgeschaltet werden kann [] das wir da beurteilen und uns natürlich auch selber beurteilen das ist ja das was uns stress macht. also ich muss morgen (.) ne beurteilung formuliert haben die muss ich morgen abgeben. das macht MIR nur stress wenn ich mir sag (-) und wenn das nicht passiert dann ist das so dann denken die (.) der kriegt seine arbeit nicht richtig hin dass erwarten die andern von mir =ICH erwarts auch von mir dass ichs hinkrieg=also (.) diese erwartung dieses bewerten (.) wenn ichs jetzt nicht hinkrieg dann hab ich versagt dann mach ich was falsch dann komm ich äh den ansprüchen nicht nach und so weiter."
127	128	"[eine Sache die ich mitgenommen hab ist] überhaupt auch der gedanke (.) dinge zuzulassen (.) damit umzugehen dass mal was (.) mh (-) auch nich gelungen is (.) also diesen stress rauszunehmen aus diesem gefühl (.) erfolg haben zu müssen und alles muss gelingen und alles muss toll laufen (.) ja in dieser GRUNDeinstellung hat mich der mbsr kurs auch einfach noch mal (.) bestätigt."
127	211	"IM tagesablauf aber ich hab immer wieder momente im alltag wo ich merke (.) also wo ich ACHTsam mit meinem (.) mit meim HERZschlag mit meim (.) meiner Atmung mit meinen (.) körperlichen (.) äh (.) empfindungen umgehe und dann (.) INNEhalte und dann (.) un mir dann sage (.) also wirklich auch (.) um (.) stress zu reduzieren und dann sage ok ähm (.) durchatmen und (.) vielleicht (.) jetzt nicht SO weiter machen sondern SO (.) und das (.) mach ich f- (.) also (.) hab ich vorher AUCH schon gemacht in ner weise aber (.) noch nich SO bewusst vielleicht."
127-128	214	"also ich bin ja jetz schon n etwas Älterer erfAhrener lehrer (-) wie ich vorher flachsend (.) i- (.) zu ihnen gesagt hab mit den jungen kollegen die (I gleichzeitig: lacht>>)  sich da über alles mögliche aufregen also ich äh mich tangieren viele sachen nicht mehr so wie noch als junger lehrer da nimmt ma vieles wAhnsinnich wichtich und (.) äh sieht des Unglaublich ernst und äh womÖglich auch persÖnlich (-) dA bin ich ja schon (-) en stÜck weiter weg gottseidank hab ich das geschafft? (.) s schaffen auch älterere nich i- nich in- also nich alle äldere schaffen des auch (-) bei mIr würd ich sagen dass ichs ganz gud hinkrieg (-) aber des war einfach noch mal son baustein der mir hilft des auch dann tAtsächlich richtich einzuordnen. (.) und dann ruh ich mal (.) bevor ma sich jetz

		aufregt unnötigerweise wegen ner situation die vielleicht strEssig (I gleichzeitig: mhm) oder
		anstrengen is (-) ähm kann ich dann eher mal mich so auf mich besInnen und dann einfach wieder zur rUhe finden. (.) (I: mhm) und dA hab ich jetz einfach son paar techniken (-) mitgenommen. (-) (I: mhm) ode=r wErte des anders (-) indem ich dann halt mich vorAnstell und mein wohlbefinden (-) undt ähm (.) dann einfach sag (.) komm (-) bleib ruhich (.) is alles gut (I: mhm) (-) des hab ich schon (-) son bisschen besser jetz hingekriegt dadurch."
128	120	"also mitgenommen hab ich zumindest ne aufmerksamkeit oder ne sensibilisierung (.) auf mich selber (.) also dass man schon sensibler ist und drauf hört (.) ja wo sind jetzt zeichen? mach mal halb lang (.) nimm mal nen gang raus (.) mach langsamer. ähm (.) ne aufmerksamkeit oder [] ACHtsamkeit gegenüber bestimmten (.) [] beim ESSen zum beispiel dass man (.) doch so morgens (.) dass ich dass ich bewUSSter im alltag momente setze wo ich sag so (.) moment (.) jetzt machen wir erst mal halb lang (.) jetzt nehm ich mir mal fünf minuten (.) ja oder so. (.) nich dass ich jetzt gleich ne halbe stunde gehmeditation mach aber so einfach (.) momente (.) wo ich sag beim DUschen oder beim essen oder wo auch immer (.) in so momenten wo man plötzlich nochmal so (.) wie so ein moment innehält. ja? und auch das iwa system was sie da genannt hat. das praktizier ich schon auch und das merk ich des (.) ohne dass ich das jetzt fest vornehmen müsste (.) das drängt sich fast schon so (.) wie von natur aus auf. ja (.) dass man das so einfach (.) übernehmen kann und auch (.) sich in den alltag integriert hat."
129-130	114	"also ich versuche immer ähm (3) bestimmte elemente von achtsamkeit in äh in den alltag hereinzubringen also zum beispiel sowas wie (.) achtsam DUschen oder oder achtsam essen oder so (I: mhm) ähm (-) es gelingt mir oft nicht (.) (I:mhm) weil ich einfach (.) ich dENk zwAR drAN und es (.) das das gelingt mir dann die ersten (.) zwei minuten (.) aber dann schreits baby oder so (lacht) und dann merk ich dass ich wieder ähm (.) im prinzip DA hin hetz und DA hin hetzte (.) aber (.) was ich trotzdem interessant find (.) mir wird es (.) mir ist es bewusst dass ichs mache (.) also ich habs (.) vorher (.) wirklich FERNgesteuert gemacht (I: mhm) also (.) ich wusste nich warum ich jetzt grad (.) den (.) autoschlüssel im kühlschrank gefunden hab (lacht) das ist jetzt übertrieben (.) das ist mir tatsächlich einmal passiert (lacht) aber aber ähm ja (.) ah (.) äh des war mir gar nicht bewusst warum des so IS un und ähm (.) jetzt MERK ich das (.) also ich ertAPP mich dabei (-) (I: mhm) es gelingt mir aber (.) also des is (.) wahrscheinlich nur ne übungssache es gelingt mir noch nicht immer (.) oder selten (.) ähm (.) da dann des wirklich auch zu verändern oder diese haltung dann tatsächlich zu verändern also ich geb da zu schnell auf oft (-) (I: mhm) ich versuche zwar (.) ich nehm mir das immer vor (.) ähm (.) heute irgendwie mit mehr ja mit bisschen mehr ähm (.) gewahrsein durchs leben zu gehen (.) und dann passiert aber irgendwas unvorhergesehenes und dann is des weg (.) (I:mhm) erstmal für en paar stunden und dann kommts irgendwann wieder und ich merk dann ach mensch (.) ich war jetzt überhaupt (.) weit (.) das hab ich jetzt gar nicht gemacht."
129	224	"aso bei mir is es ja eh grade ganz ganz viel ä so im fluss weil ich die letzten anderthalb jahre die ausbildung zur beratungslehrerin gemacht habe und da ham wir auch ganz viel achtsamkeit praktizlert aso sowohl in der ausbildung als auch ämmm (-) i- in den beratungsgesprächen da isses da is eigentlich son son feld wo ich des ganz bewusst auch einsetze dassich (-) ämm (.) dass des f- dass das entspricht ja der haltung des berAters totAl dass dass man eben sozusagen sIch wie inner meditation leer macht und keine vOr ähm annAhmen hat über jetz den schÜler oder so sondern erstma hÖrt was kommt einem da eigentlich entgegen und des ämm dass man sich da erstmal so ja innerlich sozusagen öffnet in in die in diesen gesprächen und ich (.) dA n- g- setz ichs bewUsst ein oder da praktizier ich des auch bewUsst? und dann isses aber glaub ich dto- doch leider so dass es immer wieder in dies- dass man immer wieder in diesen alten modus zurückfällt also ich bin da nich- (.) ich merk dann an manchen stellen merk ichs dann dass ich dass ich wieder was weiß ich so gAnz schnell urteile ganz schnell dieses das is gut das is schlEcht oder oder ämm (.) abwertend spreche auch aso d- ämm (-) ä- ä ä so wei- < <la>lachend&gt; so weit bin ich noch nich dass ich dA tatsächlich mein mein hAndeln (-) m f- (.) sagma mal zu nem großen prozentsatz verändert hat oder so aber ich bin zumindest so weit dass ich merke dass ich merke oke jetz hab ich wieder äm &lt;<ra>räuspert sich&gt;&gt; ja ne abwertende bemerkung gemacht oder oder geurteilt oder ämm (-) ohne zu denken irgendwas gemacht schnell."</ra></la>
129	211	"dann (.) auch des thema mit (.) umgang mit ähm (.) gefühlen NEgativen gefühlen

		NEgativen gedanken (.) überhaupt das thema MUSTER (.) und diese m- (.) sich zu überlegen ok des (.) läuft ja jetzt schon so weiß nicht wie oft sO ab und (.) kann ich ja auch mal anders machen und des is auch ne bewertungsfrage und da diese (.) diese autonoMIE zu haben auch zu sagen ich entscheide mich jetzt bewusst (.) für ne andere art und weise (.) das dann zu Üben und auch so umzusetzen is halt dann nochmal was anderes."
130-131	119	"waren so gedanken in so nen prozess gekommen (.) die jetzt (.) durch diesen kurs nochmal äh ne bestätigung oder nen akzent oder nochmal ne verstärkung gefunden haben (.) und zwar (.) kam diese frage (.) so als lebensfrage für mich auf (.) es ist ja für uns junge mütter immei der frage (.) wieviel zeich instellenen wir in für mich auf (.) es ist ja für uns junge mütter immei die mak diese frage (.) so als lebensfrage für mich auf (.) es ist ja für uns junge mütter immei die frage (.) wieviel zeich instellenen wir in für mich er beteich sieden sieden sieden sieden die ses so familien modell gefahren aus innerer überzeugung (.) dass wir eben die kinder erst im kindergarten gegeben haben und nicht gleich eingekrippt haben [] also ich war viereinhalb jahre zuhause und dann bin ich jetzt ganz langsam hier wieder rEln (.) hab dann hier erst mal KEIne feste stelle gehabt (.) und dann (.) ist halt immer so die frage (.) wiveIEl stock ich auf mit deputat (.) so (.) jedes jahr stellt man sich diese frage (.) und DANN (.) kam bei mir so diese frage (.) ok (.) wenn ich mal achzig bin (.) auf mein leben zurück schau (.) wors (u) Wofte Was swird michs mit frenad eerfüllen (.) obaruf (.) veich in äh (.) als die kinder für und sechs hab ich acht stunden unterrichtet (.) abrauf (.) veich bin äh (.) als die kinder für und sechs hab ich acht stunden unterrichtet (.) abrauf wire waren (.) hab ich schon so und so viel stunden geschafft (.) und dann hab ich des (.) und dann und und (.) und dann war ich oberrätin (.) wirds DES sein worauf (.) DANN wenns mal (.) sag ich mal drauf ankommt (.) was wirklich so diesen IEBENSsweg eigentlich so hinter sich sieht (.) jist es des was mich dann erfüllen wird. und dann hab ich des (.) und jats ich sieht (.) jist es des was mich dann erfüllen wird. und dann hab ich gemerkt (.) nee (.) das sich es nich (.) ich jabab ich werd DANN erfüllt sein (.) venn ich weiß (.) dass ich es nich (.) ich jabab ich werd DANN erfüllt sein (.) und dann kAnn ich nichts örder wird wird wird wird wird wird wird wir
131-132	120	"auch wenn jemand kommt und einen anmotzt oder einen einen überfährt oder oder rumschreit oder was auch immer (.) dass man sagen kann (.) ja jetzt komm das gucken wir uns erst mal an (.) mal halb lang (.) das ist so also die gelASSenheit äh äh zu LERnen und das hat der achtsamkeitskurs auf JEDen fall äh geholfen (.) ähm das war ne große hilfe. (I:mhm) also geLASSenheit mehr gelassenheit im alltag in alltagssituationen (.) ABstand einfach zu den dingen (.) ja. dass man also nicht so GANz nah immer mit der nase dran ist und und auch nicht mehr zu nem richtigen gescheiten urteil kommt sondern dass man wirklich sagt ok moment (.) komm wir gucken uns nochmal alle faktoren an (.) da gibts

		doch noch anderer dinge. (I:mhm) das fand ich (.) sagen wir mal für die URteilsfähigkeit für die gelassenheit ähm und letztlich auch für einen gesunden (.) gesundes bewältigen des alltags hilfreich."
132	211	"gleichzeitig würd ich schon sagen also des thema atem (.) (I: mhm) so (.) dass ich da so (.) so (.) so daBEI bin (.) oder bei mir bin das war ich vorher nich (.) und des hab ich über den kurs (.) so (.) also dass ich (.) da (.) da is mir des nochmal so beWUsst geworden bin des war zenTRAL (-) und (.) was war denn noch vielleicht ne große veränderung? (3) JA vielleicht auch wirklich nochmal klar zu kriegen (.) ähm (.) gedanken gefühle des ähm (.) muss nich ICH persönlich sein sondern (.) oder des is nich iDENtisch mit mir sondern ich kann mich dazu auch distanziern und dann überlegen ob ich nicht ne andere haltung oder ein- (.) also EINstellung dazu finde (.) und des hatt ich (.) so n- (.) sO klar NICH (.) also des hat sich während des kurses des war en sehr interessanter abend und (.) danach eben dann so (.) des hab ich so MITgenommen und des war davor (.) sag ich mal war ich vielleicht eher dann opfer oder wurde sozusagen auch von NEgativen oder auch POsitiven aber das war nicht so (.) ich hatte nicht so die (.) oder ANdere (.) ANdere möglichkeiten vielleicht damit umzugehen aber des (.) dieses so (.) das auch dann zu (.) DIStanzieren und zu Identifizieren."
133	211	"was mir total viel BRINGT ist (.) was eigentlich ganz baNAles aber was so (.) ja (.) haupt auch erge- (.) erkenntnisgewinn war war so diese (.) rückbezug auf meinen atem und irgendwie die körperwahrnehmung (.) um so (.) innehalten zu können und und auch zu (.) herauszuge (.) bekommen (.) w- (.) wie gehts mir grade."
133-134	119	"zum beispiel gestern ist mein mann mit den kindern zu seiner mutter gefahren ein tag. da hatt ich nen tag zu hause. und eigentlich ists so (.) dann ratterts los (.) WAS könnt ich alles erledigen in dieser zeit? die fotos sortieren ähm und dadadadam und äh und dann wenn die am abend schon wieder einfallen um sechs denk ich so und des und des ist nich gemacht. frust. ja? das hab ich jetzt auch so gelernt da diesen anderen blick zu haben. und da hab ich jetzt zum beispiel den tag begonnen (.) ich bin WALken gegangen (lacht) ja? und DA mach ich dann wenn ich äh walken geh oft diese übung dass ich sag (.) so (.) jetzt tu ich mal bis zu dem baum den ich da vorne seh einfach mal NUR aufs hören achten (.) diese wahrnehmungsübung oder mal (.) äh weil die vögel ja so unglaublich toll grad singen im wald im frühling (.) oder ähm (.) auf den ATem oder wie der WInd eben an der haut oder wie ich mich in der kleidung fühl (.) im schuh fühl oder diese diese verschiedenen sachen [] und dass ich solche sachen dann auch einbau. also dann war ich walken und danach hab ich dann äh die baumscheibe (.) das unkraut gejätet und so weiter und und dann bin ich am nachmittag (.) musst ich noch an den schreibtisch (.) weil ich heut noch ne nachprüfung hab und ich hab einfach so in RUHE eins nach dem andern gemacht (.) dass ich so mitkam. ja? das wo der rythmus war (.) hab dann schon viel hingekriegt gehabt am abend. hatte jetzt fünf sachen die noch auf der to do liste sind. aber war zufrieden (.) weil ich gesehen hab (.) das hab ich gemacht und ich hab dann nachdem ich mittags kurz hingelegt hab (.) obwohl ich dachte (.) oh jetzt muss ich langsam an den schreibtisch (.) hab ich gesagt das krieg ich so schnell nich wieder dass RUHE mittags im haus ist (.) keiner da ist und ich kann lesen. hab ich hab ich mir ne tasse kaffee gemacht und hab mich in den sessel gesetzt und ein buch ganz privAT gelesen. NICHT für die schule. hab mir dann so ne zeit gesetzt (.) halbe stunde und dann (.) geh ich wieder und hab diese zeit mir so genommen."
134	114	"achtsamkeit im sinne von wirkliches interesse (.) für (.) für (.) für die person (I: mhm) ähm (-) und NIcht schon bei der nächsten frage sein oder beim nächsten thema sein oder (-) irgendwo in eigenen gedanken oder so (.) sondern WIRKlich dabei sein (.) was mir die person gerade (.) im moment erzählt (I: mhm) oder wie sie sich grad fühlt (-) in gewisser weise auch so ne (-) hm (-) so MITfühlen mit dem was die person grad erlebt (-) und das (.) das hab ich das (.) also ich hab (.) das gefühl dass DAS der ausschlag is (.) äh dafür dass (.) dann halt einfach ne andere beziehung entsteht als (.) als es vorher (-) möglich wär und da (.) da seh ich die verbindung (.) zum (.) zu achtsamkeit (.) und das is im prinzip des was ich auch schon ganz zu anfang gesagt hab (.) wenn ich mich eben mit jemandem unterhalte (.) dann unterhalte ich mich also WIRklich mit DIEser person JETZT (.) in diesem moment."
134	108	"wenn ich merke es läuft irgendwas nicht rund oder so (.) und (.) immer wieder irgendwo so (.) ja mich auf mich selber dann besinne und (.) so denke ok (.) des is jetzt (.) DIE

		auseinandersetzung gewesen mit der klasse aber (.) ich selber bin trotzdem noch (.) ICH und äh (.) ich hab nich unbedingt was falsch gemacht also irgendwie dass ich mich selber son bisschen besser wieder (.) beRUHIGEN kann auch."
135	104	"aber auch in dem kurs war das der hauptmechanismus. (-) hauptWIRKmechanismus. einfach diese (.) haltung der gelassenheit (.) des liebevollen umgehes mit sich."
135	215	"also was ich auf JEDEN fall mitgenommen habe ist (.) die SICHTweise zu verändern (.) (I: mhm) dieses (.) was mich (.) UNglaublich angesprochen hat (.) sich mit FREUNDlichkeit (.) zu begegnen (.) sich mit freundlichkeit (.) anzuschaun (.) ähm (.) NICHT immer kritisch zu sein (-) den mut zu haben (.) mal was NICHT zu schaffen (.) (I: mhm) das sind so dinge die (.) ich (.) toTAL mitgenommen habe."
136	128	"also ich (.) kann jetzt eigentlich nicht sagen (.) dass (.) der mbsr hat genau DES gemacht weil ich glaube dass dieses mbsr so gut (.) zu MIR und meinem anderen passt (.) dass es sich einfach ganz harmonisch eingliedert."
137	214	"bei meiner einen kollEgin mit der ich ja häufich auf klassenfahrten bin (-) bei der wEIß ich dass die des ähm (-) ä die hat des nIch so sehr an sich rankommen lassen (-) (I: mhm) weil die sone ganz nüchterne (-) zwar chrIstlich orientierte aber (-) ähm so mit ich sag mal esoterik und hokuspokus hat sies nich so (I: mhm) und deswegen lässt sie des nich so an sich ran. (-) ich würde das nich so bezeichnen aber das kann ma natürlich we man bÖs is (I gleichzeitig: mhm) so (.) sehen. (-) ja [] und in sofern (-) aso dA (.) bei der hat sich zumindescht nix verÄndert."
138	222	"ich muss sagen also dieses (.) meditieren des war MIR völlig fremd also ich hatt noch nie irgend ne berührung damit (.) äh war auch sehr skeptisch (.) und hab so gemerkt wenn man sich darauf EINlässt also man kann des tatsächlich MAchen (.) dann GEht des auch (.) (I: mhm) und das BRINGT einem dann auch was also das war was was ich da (.) wirklich ganz neu erfahren hatte (I: mhm) also ich wär NIE auf die idee gekommen irgendwie was mit meditation zu machen das wusst ich eben auch nicht wie ich ihnen ja gesagt hab ich (.) wusst so überhaupt nicht was auf mich zukommt (.) und das mit dieser meditation hab ich auch erst im ersten moment so gedacht hmmm naja (.) mal schauen (lacht) aber (.) es (.) es hat dann auch der herr (name des kursleiters) dann auch geSCHAFFT (.) also mir so nahe zu bringen also ich war da wirklich SEHR skeptisch weil sowas (.) eigentlich GAR nicht kannte oder auch nie (.) WOLLTE irgendwie aber (.) das hab ich da echt erfahren dass des GEHT dass ma sich darauf dass ICH mich auch darauf einlassen kann (I: mhm) (.) des war (.) ne neue erfahrung."
139	103	"glaub so die langfristige wirkung werd ich erst später ähm ((lacht)) FESTstellen. Wie gesagt (.) es dominierte so das=das war son bisschen sperrig vorne dran so ungünstige zeit (-) was ich sehr bedauert hab [] und äh (.) war eingentlich das perfekte angebot (.) ähm ja. TROTZdem war es so es gab trotzdem momente (.) in der situation an den mittwochabenden oder auch bei dem stilletag (-) wo ich so VOLL DRIN war (.) mh: nur hatten diese momente nich so die nachhaltige ja nich so ne nachhaltige wirkung wie ich=s mir ((lacht)) gewünscht hatte (.) nur ich war sehr schnell wieder im alten trott im alten stress und hab einfach gemerkt ich hab nicht die RUHE (.) um das GELERNTE oder das neu erfahrene voll auszuprobieren mich daruf einzulassen. also da war ich NOch nicht SO weit äh (-) aber ich denk das sind erfahrungen (-) die auch noch in den nächsten monaten JAHren immer mal wieder hervorgekramt werden und ich glaub wenn sich son moment ergibt (.) dass ich dann auch gern nochmal die cds rauskrame und äh nochmal durchgeh was=was warn denn so die übungen und (.) entdeckt man doch noch mal was dran."
140	114	"also zum einen warns ja lauter kollegen (-) des (.) ich hab am anfang hab ich mir gedacht (.) mh? ob des (.) ei- also ob des so einfach is und es kennt ja son bisschen wer da dabei is (.) (I: ja) ähm (-) fand aber eigentlich (.) also von der gruppe her jetzt auch (.) hab ich gedacht ach des des des wird bestimmt nett also des könnte bestimmt gut passen und des hat sich dann auch wirklich bestätigt (-) ähm (3) also ich habs als als (.) super super angenehm empfunden, einfach äh (.) GANZ anders als in der schule (.) also des war für mich was ganz anderes war komplett losgelöst davon obwohl es desselbe gebäude war aber (.) (I: mhm) es hat einfach (-) weiß nich hab mich mit den mit den leuten im kurs über ganz andre dinge

		unterhalten können (.) danach (.) davor (.) als ähm als im lehrerzimmer, also ganz ganz andre (.) sachen irgendwie."
140	211	"also (.) im AUStausch (.) miteinander des war (.) zentral ge- noch also (.) BEIdes würd ich sagen (.) übungen und der (.) und d- (.) die des REden über das was (.) also es war ja auch ma hausaufgabe dann aufgewesen über das was wir da so (.) an eigenen erFAHrungen mit rein gebracht haben und zu (.) und DIE dann auch mit den anderen zu teilen oft (.) [] und des (.) is dann (.) war dann auch (.) total entLAStend zu merken ja da schlagen sich andere AUCH mit rum oder so ja (.) also (.) dieses (I: mhm) (.) geSPRÄCH (.) das hat echt viel bewirkt."
141	120	"aber als es dann so weit war (.) war ich sehr positiv überrascht weil eben frau S. das toll gemacht hat und wirklich auf ne art und weise dass man das annehmen konnte (.) äh dass man dass man sich immer eingeladen fühlte mitzumachen aber dann auch LUSt hatte mitzumachen und jetzt nicht irgendwie sich vielleich geschämt hat oder irgendwie das gefühl ah muss das jetzt sein? und die gucken mir zu und ich find das geht mir jetzt zu weit (.) also ich hatte nie das gefühl (.) über ne grenze gehen zu müssen oder mich überwinden zu müssen in nem bestimmten punkt (.) wovor ich ein bisschen (.) anfangs sorge hatte. insofern äh (.) sind die erwartungen (.) die wenigen die ich hatte (.) äh übererfüllt worden (.) also ich war sehr sehr froh mit dem kurs. ich fand das sehr sehr schön (.) ne sehr interessante erfahrung (.) mit sich selber (.) achtsam (.) aufmerksam auf sich zu schauen. ähm und die befürchtungen haben sich komplett (.) zerschlagen. also auch (.) ich war mit kolleginnen zusammen mit denen man jetzt mehr oder WEniger gut kann (.) aber man denkt (.) naja (.) muss ich jetzt neben DER auf der matte liegen (.) was erst so ein bisschen bremst vielleicht (.) aber das war ÜBERhaupt nicht der fall. (I:mhm) und das lag sicherlich auch dadran wie frau S. das gemacht hat. also dass sie ein gutes handling hatte einem dinge VOrzuschlagen ohne einem aufzudrücken und man hatte immer das gefühl gahabt FREi zu sein (.) ja oder nein zu sagen. das fand ich sehr schön."
144	230	"gut fühlt sichs an < <lacht>&gt; (I: &lt;<lacht>&gt;) (-) ich fühl mich nich so geb- gehEtzt und (.) getrIEben ich bin zufrIEden (-) ähm (.) hab eine innere rUhe (-) und kann= (-) hab nich so viele wirre gedAnken im kopf. (.) ja sondern kann des was ich in dem moment mAch sEhr genIEßen (.) was auch (I gleichzeitig: mhm) immer s iss."</lacht></lacht>
144	119	"ich machs jetz zum beispiel öfters dass ich äh in der pause [] dass ich einfach auf meinem platz sitz und mein brot ess. oder einfach nur da sitz und entweder ergibt sich ein gespräch mit meiner sitznachbarin oder nich (.) ja? also dass ich immer nur (.) dass ich manchmal nur EINE sache mach (lacht) das ist ja total luxus.ja? nur eine sache mach. oder mal GAr nichts mach (I:lacht) und dann geh ich natürlich (.) komm ich natürlich ANders in das klassenzimmer [] das ist dann ne größere besonnenheit ne größere konzentration ne größere dichte (.) und dadurch auch ne klarheit UND (.) je weniger flattrig ich bin oder je weniger hektik ich drum rum VOR dem unterricht hatte (.) desto mehr bin ich zentriert bei mir wenn ich ins klassenzimmer geh und desto besser nehm ich natürlich diese gruppe (.) diese gesichter einzeln die vor mir sitzen WAHR."
145	108	"gestern mit meiner tochter zum beispiel eben krach wegen äh (.) ja (.) buch nicht DA [] und dann (.) sie halt äh (.) anfang der puperTÄT natürlich gleich aufgebracht und (.) dagegen gehalten und äh (.) ja (.) wos dann so leicht auch eskalieren kann oder man (.) und jeder sich dann irgendwo verletzt fühlt (.) dass ich dann einfach äh (.) relativ schnell gesagt hab (.) ok (.) gut (.) mach du deins (.) rausgegangen bin und dann eben (.) TIEF durchgeatmet habe und so für mich gesagt hab (.) komm (lacht) is nur ein mathebuch (.) eben (.) ja so (.) also wirklich ganz KLEIne situationen nur ähm (.) die dann aber irgendwo doch leichter (.) zu händeln sind oder zu entSPAnnen sind (I: mhm) dass man sich eher rausnehmen kann (I: mhm) und nicht in so ne spirale kommt dass man dann anfängt sich anzubrüllen oder (.) türen knallt oder was auch immer."
145	214	"ja aber da hab ich schon ge- äh gemerkt bei solchen wenn man solche stressphasen hat wie jetzt in dieser fÜnften klasse (-) dAnn (.) äh is des Umso wIchtiger dass man dann Innehält und vielleicht auch mal wÄhrend der stUnde (-) versucht ähm die jetzt machen zu lassen und dann mal kurz (.) äh nich die augen zu aber mit offenen augen (-) trotzdem innen schließen? (I: mhm) und äh versuchen kurz zu- (.) zu sich zu kommen. (-) (I: mhm) des hab

		ich schon (.) ein bisschen gelernt durch diese- (-) durch diesen kurs."
146	203	"meine frau hat gemeint ich wäre RUhiger (lacht) (.) mh (.) aber ähm (.) joa (.) was vielleicht war ich hab besser geschlafen (lachen alle) (.) also es gibt schon so (.) mechanismen die dann (.) sind wenn jetzt hier so vier wochen rum sind dann (.) bin ich so im (.) im strudel drin (.) dass manchmal eben (.) mich das nachts auch umtreibt (I2: mhm) was was am tag war (.) und dann kann ich halt nich schlafen (.) und das war jetzt während DER phase WEnig der fall (.) auffällig wenig der fall (.) allerdings muss ich sagen ich hatte jetzt auch nicht die (.) GANZ aufregenden (.) äh alltäglichen erLEBnisse."
146	104	"es hilft mir son bisschen (.) dieses UNsägliche effizienzstreben (.) son bisschen im alltag nachm schnürchen (.) hm wie am schnürchen laufen (.) das is so mein alter anspruch (-) wenn du was umsonst machst dann (.) schön DUMM ne? dann kannste das und jenes nicht machen (.) also praktisch so diese (.) systematische überforderung (.) schmilzt das son bisschen AB [] ich geh einfach (.) zunehmend GELASSENER damit um (-) also praktisch der richtwert EFFIZIENZ schmilzt ab (.) ne? das is ja sowas absolut ertötendes ne? also wenn man also praktisch richtig als lebensmotto [] ah ja jetzt fällt mir ein (-) ich hab mir vorgenommen wirklich MITTAGS (.) [] mittags wirklich ne GROSSE pause und am besten mit hinlegen und allem (-) das is schon ausdruck das hätt ich früher nie (.) gedacht. da hab ich gedacht ich komm heim (.) computer an und weiter gehts und mit dem ergebnis (.) das ich um fünf VÖLLIG erschöpft bin (.) ganz toll. sehr uneffektiv ne? das ich mir jetzt gedacht hab (.) GEH (.) besser mit deinen ressourcen um. und das find ich ist schon n deutlicher ausdruck dessen (.) also peitsche einpacken ja?"
147	230	"also erst mal hab ich natülich versucht die übungen zuhause zu mAchen was nich Immer so funktioniert hat wie ich des gerne wollte habs aber dOch mit ner gewissen regelmäßigkeit hinbekomm? (.) und ich weiß nich obs (.) äh am frühling lAg oder woran auch immer aber ich hab schOn das gefühl gehabt dass ich (.) mit einer größeren gelassenheit und lEIchtigkeit den anforderungen gegenüber trete also (I gleichzeitig: mhm) eher so dieses haja wir werden schon sehn wies wird (.) und (.) so ises halt (.) und gleichzeitig mir auch bewUsst (-) zwischendurch im schUlalltag kurz meine paar minuten ruhe (.) gÖnn. (.) also seis tatsächlich dass ich auf der toillette die augen zu mach und kurz dUrchschnauf oder in der großen pause ganz bewusst mich ins kaffeezimmer setz und keine ähm (-) organisatOrischen gespräche mach? (I gleichzeitig: mhm) dass ich vielleicht vieles zuhause lieber in ruhe per email mach (.) dass ich mir ganz bewusst so meine (-) äh kleinen auszeiten eben oder auch nich dauernd radio hör sondern einfach mal in rUhe (-) äh zuhause bIn (.) und vers- ich versUch schon mich auf eine sAche zu konzentriern und auch nich ganz so (-) sonst hab ich ta- tAUsend sachen geplAnt wenn ich jetz n leerlauf hatte an der kasse warten muss hab ich schon den nächsten tag vorgeplant oder wenn ich im wartezimmer beim arzt bin die zeitung gelEsen und wieder was geplAnt sondern dass ich genau diese kleinen (.) phasen so als (.) kleine ruhepause für mich nehme (I: mhm) das hat sich auf jeden fall geändert."
148	108	"[Meine Wahrnehmung ds Kollegiums hat sich verändert] ja also zumindest äh (.) bezüglich der kollegen die mit mir zusammen in diesem kurs waren dadurch dass einfach die beziehung natürlich etwas ENger geworden ist und man die kollegen eben auch (.) von andern facetten her kennen gelernt hat die mit denen man vorher nich so viel zu tun hatte (.) auf jeden fall irgendwo ne (.) offenere oder (.) noch FREUNDlichere oder (.) ja (.) liebevollerer umgang oder so (.) des bemerk ich schon bei mir also dass ich die mit (.) etwas anderen augen jetzt sehe weil ich (.) sie ja auch besser kennen gelernt einfach."
148	203	"also (.) mir war halt primär mal aufgefallen dass es (lacht beim reden) (.) also (.) einmal (.) an dem tag der (.) offenen tür beim (.) pädagogischen tag (.) da am schluss (.) ähm (-) gabs eine situation die (.) war schon überraschend für mich (.) wenn sie sich vorstellen en kollegium mit sechsundneunzig leuten (.) is (.) äh (.) sch- äh äh is äh zum schluss nochmal versammelt in der mensa (.) und (.) hat so ne art ma- (.) offenen marktplatz (.) und dann (.) kannte ich bisher das nur so (.) wir ham diese marktplätze HÄUfiger gemacht auch hier an der schule schon (.) dAS war in der regel von großer hektik und großer (.) betriebsamkeit gekennzeichnet und (.) keiner hat sich irgendwie auf den andern groß eingelassen sondern die ham ihre sachen hingebebbt und geguckt jetzt müssen wir dann (.) bis dann und dann alles fertig ham und dann haun wir ab (lacht) (.) und an diesem tag (.) mh (.) dieses (.) ähm

		(.) al- also an an diesem marktplatz (.) wars VÖllig anders (.) die (.) kollegen standen da (.) ganz ruhig ham sich unterhalten (.) standen vor diesen tafeln und des (.) war (.) en open end (.) es ging (.) auch viel länger als geplant (.) es gab keine (.) UNruhe es gab (.) AUCH nicht diese völlig durchrationalisierte (.) ähm (.) die ich (.) diesen durchrationalisierten ablauf und DAS fand ich eigentlich ganz (.) gut (I2: mhm) (.) und ich MERK das in den konfeRENzen auch also (.) mmh (.) es (.) GIBT immer mal wieder einzelne kollegen die ja (.) so die speerspitze des widerstands gegen andere sind (I1 lacht leicht) (.) und die die (.) richtig gehend einäschern (.) und davon hab ich NIchts mehr erlebt (I1: mh) jetzt [] ich würde da schon zusammenhänge mit dem kurs sehen (.) weil (.) ich mein (.) äh die reflektion die ham wir ja mitNANder gemacht (-) und ähm (.) die FÜHRT natürlich auch unternander zu gesprächen (.) die dazu beitragen nochmal sich (.) bewusst zu machen WAS LÄUFT denn eigentlich also (.) mit nem (.) sag ich mal distanzierteren blick auf des (.) eigene (.) ähm (.) joa (.) joa (.) die eigene kommunikationskultur (.) und das eigene miteinander (.) zu (.) werfen und das (.) passiert auf alle fälle dadurch."
149	213	"dieses ähmm (.) kommuniziern miteinander iss ein anderes nämich in der gewIsshet dass man wEIß um diese dInge die man dort erlEbt hat. (I: mhm) < <schmunzelnd> das fand ich ganz spannend aso dieses begEgnen im lEhrerzimmer zum beispiel das is n- nEU gewesen jetz weil man auch vieles von den andern erfAhren hat? (.) un das fand ich sehr sehr gut weil= ich glaub in der gesellschaft gEnerell als auch jetzt (.) in der schUle (-) is des ja schon so dass man sich gut unterhÄlt und man hat ja auch bezÜge zueinander (.) aber es gibt ja bestimmte dinge die man tatsächlich jetz nicht offenbArt oder wo man sagt dass das äh (.) glaub ich dass da hab ich jetz n problEm ja aber (.) und da merkt man es hat es (.) betrifft vIEle andere auch und (.) ähm (.) mit dieser offenheit eigentlich äh f- hat man wiederum äh die mÖglichkeit (-) ähm (.) ja gelAssener einfach damit umzugehn (I: mhm) ja? und auch mal (.) vielleicht sich dann etwas herauszunehm wo der andre weiß darum weiß dass es ja jetz auch wichtich is etwas mal nIch zu machen oder etwas zu tUn (-) also dass man da keine bedEnken da hab- vOr haben muss."</schmunzelnd>
149	105	"[] in der schule sind war ja ständig gezwungen zu bewerten auch (.) des einfach so ein bisschen mehr in den hintergrund rücken zu lassen (.) obwohl ich ja immer auch noten machen muss (.) aber so ne größere offenheit glaub ich (.) hab ich manchmal (.) oder des is so was was ich da auch mitnehm (-) ja (.) auch vielleicht (.) also des gelingt ja auch nich immer (.) aber manchmal dann schon auch (.) dass ich so (.) also genauer schau (.) oder mir mehr zeit nehm (I:mhm) zum überlegen auch was meint sie jetzt (.) jetzt nich nur inhaltlich (.) sondern ähm (.) also wer sitzt da jetzt vor mir ja? also dass ich des schon manchmal irgendwie so klarer irgendwie (.) ähm (.) empfind oder mir nochmal überleg [] ich find (.) letztlich ist es ja so ne arbeit mit der eigenen person ja also (.) man zentriert sich (.) und ähm (.) erdet sich oder [] und ich find so ne eigene klarheit zu haben (-) ist ne gute voraussetzung für so nen bewussten umgang auch mit anderen (.) so vielleicht (.) also so selber selber ähm und selber sich zu entwickeln und zu entfalten find ich was sehr POSItives auch (.) und auch wirklich für diesen beruf irgendwie gut ja (.) für den umgang mit anderen-"
150	215	"es geht eigentlich nur so um (.) diese achtsamkeit auf MICH (.) (I: mhm) und das überträgt sich auf die schüler (I: ja?) (.) weil ICH besser mit mir umgehe (.) und ähm (.) es dann einfach auch BESSER habe f- (.) TAG ür TAG (.) kann ich (.) hab ich einfach auch mehr (.) RAUM (.) für probleme von andern menschen (.) (I: mhm) die aufzufangen."
150	211	"also unbedingt auch dass ich (.) wenn ich irgendwie MERke gut des (.) es is sowieso irgendwie teil unseres handwerkszeugs dass man (.) also (.) unbedingt immer erst mal ähm (.) also grade wenn man irgend- (.) mit irgendwelchen (.) also aggressive schüler oder so hab ich hier auch schon erlebt dass man (.) dass man eben dann erst mal innehält also des (.) hab ich auch schon vorher (lacht leicht) gelernt also (.) auf KEINEN fall im äh (.) am (.) effekt (.) irgendwas (.) Affekt (.) irgendwas (.) Effekt? Affekt (I: Affekt) Affekt irgendwas macht ja (.) aber (.) ähm NOCHmal klarer zu bekommen ok wie gehts mir jetzt damit? (.) und dann halt ne ICH botschaft zu senden (.) und dann also (.) dieses INNEhalten des hab ich (.) also (.) des hat des noch beSTÄRkt ja (.) (I: mhm) auch so (.) in ner SCHWIErigen situation (.) irgendwie IN der gruppe oder so erst mal so (.) ok (.) was is denn jetzt (.) also was is denn jetzt los so."

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151	222	"ich glaub (.) na ich denke da halt nicht immer so GANZ beWUsst dran aber auch so im umgang mit den kindern nur beispielsweise oder eben auch in der beziehung mit meinem mann (.) dass ich da (.) in MANchen punkten schon gedacht hab ja ähm (.) eben achtsam sein oder (.) den anderen erst mal so (.) nehmen wie er IS (.) ja (.) des hat vielleicht manchmal (.) schon (.) so ne kleine veränderung also dass man da (I: mhm) vielleicht nicht zu kritisch (.) das (-) eher das (.) das hab ich schon gemerkt also dass ich manchmal vielleicht nicht so ganz kritisch bin oder (.) oder (.) so reagiert hab wie ich sonst vielleicht reagiert (.) (I: mhm) hätte (-) oder auch bei den kindern jetzt den (.) größeren der ist neun und son bisschen mal so (.) zu nehmen wie er ist er is (.) er hat so seine ei- (.) macken oder seine eigenarten aber (.) mh (.) des halt auch zu trennen von (.) von was anderem also zum beispiel von seiner schulischen leistung und so wie er sonst so ist dass man da ganz klar sagt des eine hat mit dem anderen nichts zu tun er ist so und (.) ihn dann so WAHRzunehmen wie er halt sich so (.) verhält (I: mhm) ja (.) genau [] aber so (.) hab dann halt weniger groll ver- (.) geSPÜRT also oder ich konnte damit gut umgehen und ich war nicht innerlich zornig."
152-153	119	"es ist vielleicht einfach des (.) wenn man einmal so bemERKt hat was bei raus kommt (.) dass man des (.) des wieder herstellen will. und weiß (.) da tu ich was dafür. [] und äh was ich auch zum beispiel (.) also diese unterlagen die wir äh gekriegt haben [] das war so ein text (.) es war von (.) santorelli oder von jon kabat-zinn. ich glaub es war jon kabat-zinn. da stand eben auch mal so drin dass wenn man jeden tag EINmal so diesen moment nimmt und sich so ganz auf sich (.) so zu SIch kommt (.) dass man dann ähm (.) ähm also dass man da ja eben (.) in sich gefasster ist und auch besser so SEInen weg findet also (.) wir leben ja schon in ner gesellschaft wo UNglaublich viele anforderungen von AUßen kommen (.) aber es geht ja darum dass ich DEN lebensweg geh der für MICh vorgesehen ist (.) also der für MICH der richtige ist (.) also für mich ist es vielleicht nicht richtig (.) jetzt äh fünfzehn stunden zu unterrichten und die zwei kinder zu haben und sie trotzdem auch am nachmittags bei mir zu haben und für die zu kochen und so weiter. des ist nicht mein modELL (.) aber von außen wirds ja schon so eigentlich und wenn ich so dieses INNEhalten am tag hab (.) dann dann werd ich immer so auf des zurückgeworfen was für mich gut ist."
154	105	"also oft überleg ich mir einfach klarer (.) was mach ich (.) oder dass ich mich vorher schon entscheid (.) heut abend arbeit ich nichts mehr (.) da mach ich des (.) obwohl ich ja IMMer arbeiten könnte (.) ich hab auch immer was zu arbeiten (.) aber dass ich manchmal einfach mir dann so (.) zeiten nimm wo ich sag NEE da nicht (.) und nich immer mich treiben lass (.) also dann lass ich die arbeiten halt liegen dann hab ich sie nicht korrigiert (.) dann kriegen sie sie halt morgen nich (.) und basta (.) und heut ist jetzt des [] des gelingt mir auch nicht immer manchmal hab ich dann trotzdem alles im kopf (.) und DES ist der zustand von nicht muße und auch von nicht achtsamkeit äh wenn so alles gleichzeitig so dededede des ist (.) des gibts ja auch manchmal und dann muss irgendwie versuchen da wieder raus zu kommen (.) also wenn wenn so alles so gleichzeitig irgendwie gegenwärtig ist und des muss ich noch und des und des und des (I:mhm) sondern (.) ja so eins nach dem andern mehr zu sehen (I:mhm) so jetzt ist des und nachher des und des ist heut gar nicht mehr also dann mach ich noch (.) eher was für mich."
154	114	"UNd dann einfach so ne positive GRUNdeinstellung (.) zu menschen (.) dingen (-) ähm (-) ein verstÄ- also en verstÄNdnis [] einfach des verSTÄNdnis dafür (.) dass die person möglicherweise vielleicht grad (.) keine ahnung (.) en problem hat oder so des is mir gar nich innen SINN gekommen vorher (-) also solche (-) ähm (überlegt) dass dass diese person vielleicht nicht von grund auf böse ist sondern (.) einfach (lacht) ja (.) vielleicht selber grad (.) irgendwas (-) durchzumachen hat oder so [] AH ja NOCH eine sache genau. NICHT URteilen (.) das ist ne sache die (.) die mich auch ganz lang im im im leben (.) schon schon begleitet (.) und die mir immer wieder (.) dich ich mir immer wieder bewusst mache dass ich sehr sehr oft SEHR sehr schnell urteile über leute (-) also ähm (.) äh (.) ja das is en idiot. punkt. ja so äh (.) einfach des (.) sag ich nich einmal mehr unbedingt aber des is einfach so was ich mir (.) so son BIld das ich mir im kopf schon schon FEst klopf und dann ist es klar (.) ähm (3) aber (-) des (-) hab ich jetzt (.) also hab ich jetzt des gefühl dass dass ich des en bisschen (.) anders (.) damit dass ich ein bisschen anders damit umgehen lern."

156	203	"ich hab schon mal erzählt ja (.) dass das (.) möglicherweise nich (.) nich NUR die (.) beste für mich is weil ich bin halt in diesem modus drin dass ich des (.) über sport immer kompensiert hab und ähm (.) der fehlt mir in jedem fall (I1: mhm) (lacht) (.) aber (.) ich wollt des einfach ausprobieren."
156-157	102	"ich denk ich arbeite sehr viel undt ähm hab (-) hab vielleicht gar nich so viel freie zeit zur verfügung und wenn ich dann zeit hab und die arbeit äh is ja meistens ähm (.) ähm oder findet meistens sitzend statt oder eben im unterricht schon bewegt man sich n bisschen aber eigentlich ziemlich wenich bewEgung (I: mhm) und ähm dann find ich möcht ich mich bewegen (I: mhm) ja? und zwar nich nur gehen so gehmeditation sondern dann will ich rennen oder springen oder oder mit andern n spiel spieln und ähm und deshalb möcht ich halt die zeit die ich hab anders nutzen."
157	215	"den krieg ich eigentlich nich hin (.) (I: mhm) den erleb ich mit (-) meinm ganzen (.) hamsterrad (.) was sich dreht (-) äh (.) ich schweife dann ab (.) (I: mhm) und (.) im KURS gelang es mir besser weil ER uns dann wieder zurückgeholt hat aber die CDs zum beispiel so dass ich dann gar nicht mehr zuhöre sondern in meinm gar- (.) ähm (.) karussell drin bin und rattere was mach ich jetzt anschließend (I: mhm) und dann steh ich auf un hab eigentlich gar nichts davon gehabt."
157	108	"also zum einen als der kurs anfing (.) war ich grade in so ner phase in der es mir (.) SEHR gut ging und ich SEHR WEnig gestresst war und ich sos gefühl hatte eigentlich BRAUch ich das grade gar nicht so [] ich hab diesen ganzen stress NICHT mehr SO (.) und äh (.) ja war dann immer s- (.) am anfang son bisschen zwiespältig (.) äh (.)äh (.) bringt das jetzt eigentlich was für mich? äh (.) was mach ich hier?"
157-158	103	"ich hab ja erwähnt dass äh (-) ich das gefühl hatte (-) viele der=der übungen oder der zugänge ähm waren da nicht so (.) MEINS (.) und ich hatte aber (.) sozusagen bei mir auch andere zugänge entdeckt (.) oder andere übungen und äh (-) DA steckt so=n bisschen mehr motivation drin (.) weil es sachen sind (.) die (.) also ganz konkret den zugang über stressabbau durch MUSIK ähm musik is aber was was mein leben sehr prägt und bestimmt und (.) ähm aber auch (.) und DA (-) und das ist eines der frühsten begegnungen die ich mit achtsamkeit hatte war eigentlich achtsames (.) HÖREN (.) ähm oder erleben von musik äh was (.) ja in unserer gesellschaft () eigentlich gar nicht mehr so (-) so gefördert wird oder eigentlich wird musik ja immer UNachtsamer äh konsumiert das ist äh (.) äh (.) durch ne (.) durch die viele auswahl die man hat durch die (.) es darf alles nur noch (.) reduziert auf zwei minuten werden und am besten nebenher und äh und eben überall dabei und äh zu jeder zeit=ich glaub ja diese grundsätzliche verfügbarkeit (-) und deswegen ist für mich ja auch (-) also ich würd schon sagen die achtsamkeit war an sich=oder sich damit zu beschäftigen war n impuls den ich dann aber auf MEINE art so umsetzen kann dass ich zum beispiel sag (.) ich (-) ich such mir wieder wege um äh (-) um einfach mal in ruhe musik zu genießen oder so was. (.) ähm um stress abzubauen (-) (I: mhm (.) das heißt-) ALSO ich, ich glaub=ich glaub nich, dass ich (.) äh die die übungen aus dem mbr SR (lacht) oh gott mbsr kurs () SO übernehmen (.) kann (.) aber: (-) wie gesagt, es sind eher die impulse, wo ich dann andre übungen, andre angewohnheiten andre zugänge (.) draus zieh."
158	114	"was mir sehr schwer gefallen is es eben (.) mich (.) NUR aufs GEhen zu konzentrieren (I:mhm) und (.) und zwar aus dem grund (.) glaub ich (.) ich glaub dass es aus de- (.) ich kanns nich (.) ganz genAU beschreiben aber (-) ähm (.) mir gefällt des bild (.) eines zum beispiel eines (.) berges oder eines sees oder so was (.) also irgendwas st- (.) eine (.) eine sache die standhaft ist BESSER (.) als dieses wacklige (.) stehen auf einem bein (.) (I: mhm) also (.) also we wenn ich geh dann hab ich so so son wackliges gefühl mehr oder weniger (.) (I:mhm) und des (.) des (.) des steht für mich irgendwie in WIderspruch zu dem was (-) was ich durch die meditation (.) gern erreichen würde (.) wenn man das so beschreiben kann I] das hab ich (.) DANN bei der gehmeditation empfunden wenn ich mich eben (.) ganz speziell auf (.) auf des gehen also auf (.) auf den (.) kontakt mit den (.) der fußsohlen mim boden oder so konzentriert hab (.) des des ging irgendwie gar nicht so."
159	227	"also bei diesem bodycheck da war ich ähm (.) irgendwann ähm (.) wars mir zu viel ähm (-) also wie gings mir (.) teilweise war ich (-) gings mir zu LANG jetzt von (.) von dem einen

		zeh zum andern (lachen beide) zu spürn und so aber (.) vielleicht bin ich da nicht so geduldig (I: mhm) oder (.) aber so grad bei der (.) atemübung un und sitzübung da hab ich dann (.) hab ich gemerkt ok ich denk jetzt wieder was aber ich komm dann wieder zurück zum atmen und des beruhigt mich des (.) da kann ich klar denken dann (.) und ähm (.) danach gings mir immer (.) VIEL besser."
159	227	"also ich hab mich immer drauf gefreut (.) MANches war (.) sehr hilfreich (.) MANche abende warn bisschen anstrengend für MICH also weil man da sich schon bisschen auseinander setzen musste mit (.) grad wos darum ging ähm (.) um erfahrungen die NICHT so gut (.) warn die dann auch (.) so (.) nachzuempfinden und (.) ähm sich da reinzuversetzen was für geFÜhle man hat und des hat mich schon ziemlich mitgenommen (-) aber grad so die (.) die SCHÖnen sachen und ähm (-) wobei jetzt im nachhinein denk ich (.) des war AUCH hilfreich (I: mhm) also des war ne gute erfahrung (.) ich hab gemerkt wie (.) wies mir damit geht und (-) wie man damit umgehn KANN."
160	103	"was ich festgestellt habe is äh: (.) dass () ichs äh dinge, die der klassischen (-) [] ENTnommen sind dass ich da sehr gut mit umgehen kann ähm (.) aber so diese (.) diese (.) BEWERTUNGS=äh ja oder=oder dieses nichtbewertende in der meditation ähm () hat=hat NE ach wie soll ich=s formulieren? () hat nich so funktioniert. ÄHM (3) es waren kleinigkeiten mir hat zum beispiel mir ist aufgefallen als wir beim stilletag ne=ne mitte ne wirklich gestaltete mitte hatten und dann warn irgendwie da kerzen in der mitte (.) ähm und das war für mich ne art fixierpunkt (.) wo ich in ne art versenkung kommen konnte (.) während wenn ich jetzt einfach nur die augen geschlossen hab und äh () den bodyscan oder äh (.) andere (.) übungen gemacht hab (.) das mir viel schwerer fiel in sone wirklich so in versenkung zu kommen [] mir fällts schwer (.) ähm solche (.) sachen die richtung meditation gehen und auch ACHtsamkeit reflexion ähm hinschauen hinhören (.) das sozusagen ganz (.) ich sag mal weltanschauungsNEUTRAL ((lacht)) äh (-) auch angeleitet zu kriegen (.) also ich merk einfach dass ähm es sind ja eigentlich Ü:BUNGN oder ansätze die ausm spirituellen oder äh=bereich kommen ähm (-) unterschiedlicher religiöser strömungen ähm (.) oder man findets ja in vielen religionen aber da ist es immer auch ein stückweit äh (-) ja irgendwie geerdet (.) religiös oder=oder weltanschaulich (.) äh verankert. und ich TAT mich n bisschen schwer mit."
161	103	"UND (.) ich fand auch so es gab auch so n paar widersprüche für mich [] das eine war dieses ähm (.) eigentlich zweckFREIE ähm () üben äh (-) und trotzdem war ja das ganze (lachend) so vor dem hintergrund) äh stress reduction ((lacht)) also (-) da das fand ich son bisschen schwierig ich hab mich immer wieder erWISCHT dabei äh zu sagen (.) ich muss jetzt für mich diese übung so optimieren dass sie auch wirklich mir mein stress abbauen () und ich glaub dass ist son bisschen die falle in die man tappt."
161	230	"ich muss zugeben dass es erst ma rein vom zeitlichen her (.) diese zwei stunden in der woche ham mir einerseits gefEhlt also es hat mich (.) grad am dienstag mit der vorbereitung n bisschen in die bredouille gebracht (I gleichzeitig: mhm) und manchmal hab ich mich schon ertappt un hab gedacht oh nein (-) jetz muss ich schon wieder lo=s (.) und (-) hab mich n bisschen auch gestrEsst aber sobald ich da war war ich frOh dass ich da war."
162	222	"is es auch manchmal nich nur mir auch andern schwer gefallen so GANZ offen zu sprechen (I: mhm) (.) es merkt man (.) also ich find manchmal SPÜRT mans ja bei manchen leuten die so was erZÄHlen aber dann doch sich immer son bisschen zurück nehmen (I lacht leicht) [] also ich würde da jetzt auch nicht irgendwie (.) KLAR man (.) man sagt man ist verschwiegen und alles aber (-) ja (.) es ist trotzdem natürlich (.) schWIERig oder man hat dann doch (.) hemmung da was (.) zu persönliches vielleicht preis zu geben wenn des der kollege xy (.) daneben ist."
163	104	"mein problem wenn ich so sagen darf (.) is jetzt natürlich die übersetzung in alltag (.) also das ÜBEN und dass findet eigentlich (.) oder fand bei mir bisher nicht statt da bin ich einfach (-) weiß nich da fühl ich mich zu rastlos (.) also (.) des probier ich ja auch schon (.) längere zeit jetzt im geistlichen bereich (.) dass ich so (.) jeden morgen zwanzig minuten vor der kerze ist natürlich oft utopisch ne? [] denn ich denk (.) klar vom üben hängt natürlich auch schon ab ob man da weiter kommt? insofern würd ich sagen (.) ich hätte da sicher mehr rausholen können aber so für den für den normalen (.) für die normale

		alltagsREALITÄT wars wohl das was ich (.) jetzt im augenblick zu leisten (lacht) zu leisten im stande bin."
164	103	"nur ich war sehr schnell wieder im alten trott im alten stress und hab einfach gemerkt ich hab nicht die RUHE (.) um das GELERNTE oder das neu erfahrene voll auszuprobieren mich daruf einzulassen."
164-168	108	"also zum einen wars zuhause en bisschen (.) merkwürdig erstmal also im kurs sich da hinzulegen das war dann ja irgendwie schon auch so ne gewisse routine und wir hatten da unsern (.) raum und äh (.) unsre decken und kissen und des war also normal und als ich des des erste mal zuhaus gemacht hab wars schon UNgewohnt also (.) (I: mh) musste ja auch erst mal meine familie (.) (lacht) vorwarnen oder so die dann erst mal komisch guckten was machst du denn da (.) (lacht) aber äh (.) ja also ich habs dann so (.) zwei dreimal gemacht und hab dann (.) einfach mir auch ne zeit genommen wo dann eigentlich keiner da war oder so der mich stören konnte (.) und (-) es ging SCHON aber es ging HIER besser (.) (I: mhm) also es is vielleicht auch ne sache die man (.) in die man erst mal so REINkommen muss wenn man se öfter macht dass des einfach auch (.) vom ort unabhängig wird (.) (I: mhm) des war eigentlich jetzt eher schon so dass es hier im kurs wars (.) kein problem (.) so mit den äußeren gegebenheiten und zuhause das war alles noch irgendwie en bisschen fremd (.) en bisschen merkwürdig [] vielleicht is einfach zuhause mit so vielen (.) dingen noch (.) zusätzlich behaftet ir- (.) im kopf (.) dass man irgendwie äh (.) des nich so als (.) geschützen raum empfindet wie jetzt hier (.) wo ich weiß ok jetzt sind wir hier alle zusammen äh (.) in dem raum und (.) wir sind hier für den kurs da und das ist jetzt meine ZEIT und das ist mein RAUM des ist einfach festgelegt (.) und zuhaus [] also es war jetzt kein fester termin sondern (.) es war einfach so (.) jetzt passts grade (.) jetzt ist grad keiner da (.) jetzt mach ich das mal (.) und dann (.) stand ich da und irgendwie hat ich en (.) komisches gefühl dass ich mich jetzt in unserm wohnzimmer oder so lang hinlege und (.) was ich sonst halt nie mache (.) also es war einfach ein bisschen fremdartig und (.) HIER wars einfach klar dass man (.) die strukturen warn einfach so vorgegeben (.) raum (.) zeit (.) fester termin (.) des fiel mir dann leichter (.) (I: mhm) mich drauf einzu
166	128	"was beDARFS (.) is (.) GANZ bestimmt (.) innere freiheit (-) und ähm (.) die wahrnehmung dessen wer man ist (.) was man is (.) was man braucht (.) was man will (.) wo man hingeht und wo der eigene weg ist und wo die eigene innere stimme is."
166	108	"wenn (.) des gleich morgens losgeht mit äh (.) kalender so nach dem motto (.) DAS muss erledigt werden (.) DAS muss noch gemacht werden (.) DAS muss noch (.) gem- (.) also einfach so dieser terMINdruck (.) oder (.) ansprüche dass (.) der eine DAS will (.) der nächste DAS will (.) und kannst du noch HIER und (.) gib mir mal DAS äh (-) also diese (.) diese erWARTUNGShaltung (.) oder die anforderungen an einen selbst oder AUCH DIE EIGENEN anforderungen wenn ich weiß (.) ich muss noch DAS korrigieren ich muss noch das vorbereiten (.) und ich HAB eben gar nicht die möglichkeit (.) mich jetzt einfach mal (.) vor den kamin zu setzen oder (.) spaziern zu gehn weil ja noch das und das und das erledigt werden muss (.) (I: mhm) das wär so genau das gegenteil."
167	114	"des is schwierig weil ich glaub ich (-) ich weiß nicht ob ich schon mal in muße WAR (-) [.] vielleicht ähm (5) bei dem tag der stille (-) aber ansonsten (.) weil ich wusste einfach (.) da hab ich jetzt einen tag (.) in dem ich einfach (.) NICHTS (.) machen muss (.) NICHTS erreichen (.) gar nichts (.) sondern ich kann einfach SO sein wie ich bin und die erFAHrungen einfach so auf mich (.) einströmen zu lassen (.) aber (-) ähm (-) also im alltag gelingt mir des (.) des nicht ich hab zwar moMENte der muße (-) in meim alltag zum beispiel wenn ich (.) keine ahnung durch (.) durch unsre gegend spazier und des wetter is so wie jetzt und ähm (-) ich ich guck mir (.) keine ahnung (.) ich ich lauf einfach durch gegend ohne (.) ohne (.) en ZIEL (.) großartig ein ziel zu haben und häng so meinen gedanken nach oder so was (.) also da (.) da empfind ich so was (.) son ganz (.) ganz warmes (.) ganz schönes gefühl einfach (.) ähm (-) aber dass ich des jetzt aufn ganzen (.) TAG bei mir auswirkt"
167	128	"sehr vielfältig (lacht) mhh (.) och ganz (.) alles (.) alles zusammen eigentlich (.) zeit auf

		jeden fall (.) entdeckung (.) freiheit (.) zulassen (.) ähm konzentration (-) mh (-) hingabe (-) ganz persönliches (3) bejahen (3) DA sein einfach (3) mh (-) genießen (3) und so bei mir sein (.) und so im (-) so ECHT (.) ECHTheit irgendwie auch (-) ähm (3) und ja (.) genau (.) unter anderem ich könnt jetzt noch weiter machen."
168	224	"für mich is mUße jetz mittlerweile wirklich ganz ganz viel auch mit natUr verbunden dass ich wir ham s glück dass wir n gArten haben dass ich wirklich einfach im gArten bin undt und ne- nich unbedingt dann was mAche aso pflAnze oder so sondern wirklich einfach da bIn. ä nich ma unbedingt lEse oder so sondern ich ich machs echt dass ich dann einfach nur da sitze und und (-) das genieße dass ich da sein kann. dass ich die sonne spür dass ich meine blumen angucke oder so (.) ämm (-) aber muße kann kann auch find ich muss nicht nur immer im im (-) im im rUhen stattfinden ich fin- mUße kann auch in bewEgung zum beispiel stattfinden aso ich kan nauch muße zum beispiel spaziergang- (-) beibm spaziergang muße m aso ich kann hektisch spaziern gehn und irgendwie ämm nich auf die umgebung achten aber ich kann diese muße auch in dem spaziergang empfinden (gleichzeitig: < <gong>&gt;) das kommt dann auch wieder auf diese ja eigentlich ja auf die innere haltung dann an."</gong>
168	119	"ja genau. des ist nämlich des (.) dass dass dieser kurs (.) das triffts genau ins schwarze. dieser kurs hat im grunde genommen grunde genommen nochmal legitimiert äh muße sich mußezeit zu nehmen (.) und sich ne auszeit zu nehmen (.) sich ne pause einzuräumen. und zwar nicht weil man faul ist oder weil man irgenwie nichts bewegen will in der welt (.) sondern im grunde genommen (.) um äh das potential zu entwickeln wieder anpacken zu können. (I:mhm) dass das genauso dazu gehört."
170	104	"allein (.) dadurch dass sich die haltung ändert (.) dass ist find ich die vorraussetzung ne? wenn man diese haltung einfach nicht hat dann kommt man nie (.) ich find so muße ist für MICH n zweiter schritt (-) aber wenn ich am rödeln bin und mir stress mache (.) dann is muße ja quasi praktisch wie sone frucht an die ich nie drankomme (-) aber wenn ich BESSER mit mir umgeh (.) wenn ich gelassener werde wenn ich liebevoller mit mir umgehe (-) dann (.) ist damit die grundlage bereitet und DANN kann ich auch wirklich die dinge des lebens (-) dann mal mit muße (.) oder mehr mit muße (-) auch (.) auch angehen."
170	128	"ich glaube schon dass (.) NUR durch achtsamkeit man letztendlich zur muße gelangen kann (.) also ich glaube dass des (.) des erkennen (-) dessen (.) was mit einem so is (.) einem die tür öffnet (.) des doch zu machen (.) was für einen (.) muße bedeuten kann (.) und ich denke dass das ganz eng zusammen gehört (.) und deswegen glauben ich (.) tatsächlich auch dass dieser kurs (.) ein weg dahin war."
170	114	"und was mir auch bewusster geworden ist das (räuspert sich) meine eigenen (.) also (.) MEIN eigenes empfinden von muße (.) ähm (-) GANZ extrem (.) auch tatsächlich mit MIR zu tun hat (.) und nicht mit äu- (.) äußerlichen dingen (.) also ich kann es nicht vermeiden dass (.) dass (.) dass äh (.) leute vielleicht irgendwie unhöflich oder so was zu mir sind (.) des kann ich einfach nicht vermeiden (.) aber ich kann meine (.) meine einstellung dazu ändern (.) also diese (.) ähm (-) ja (3) diese erkenntnis hat für mich auch etwas (.) mit muße zu tun (.) weil dann kann ich mich einfach (.) tatsächlich auch (.) äh (.) viel entspa (.) also ich kann dann viel entspannter sein wenn ich weiß ja (-) ich hab ja jetzt die möglichkeit (.) so oder so drauf zu reagieren (.) also ich muss mir nicht den tag davon verm (.) vermießen lassen (.) und dann hab ich eben auch die möglichkeit (.) das in meinen tag son bisschen einzubaun einfach (.) ähm (-) solche momente wirklich zu geNIEßen (.) ohne meinen gedanken nachzuhängen (.) äh (.) WAS da jetzt gerade wieder passiert is oder so (-) (I:mhm) also ich hab das gefühl (.) die die momente (.) die warn vorher auch schon da aber jetzt ha (.) kann ich sie wirklich erKENNEN."
171	104	"vielleicht SO irgendwie dadurch dass der kurs diese (-) innere ruhe vielleicht ein bisschen noch gepuscht hat? (-) kann jetzt auch muße besser wachsen (.) oder ist jetzt mehr (.) mehr muße möglich (.) mehr muße hafte tätigkeiten."
171	114	"man kann ja alles (.) auf verschiedene art und weise deuten also ich kann an (.) keine ahnung an irgendeinem (.) grade blühenden baum oder so (.) der mir jetzt viellEIcht einen moment der freude oder so (.) bescheren (.) würde (.) kann ich vorbei (.) rennen (.) ähm (.)

		oder ich kann ihn mir (.) anschaun (-) und (.) kann dann vielleicht (.) keine ahnung (-) was (.) kraft raus schöpfen."
171	120	"insofern fand ich den kurs wirklich auch gut (.) weil er wirklich bei der person angesetzt hat (.) die achtsamkeit für sich selber (.) die freundlichkeit gegenüber sich selber (.) äh (.) zu leben (.) und DAnn öffnet das ressourcen und dann öffnet das auch sagen wir mal das HERz ja? und und die augen für die schönen dinge auf die man sich DANn einlassen kann (.) also so um MUße fähig zu sein (.) muss man erst mal sozusagen im inneren oder als person erstmal diesen diese öffnung erfahren. ja (.) äh wo man dann plötzlich keiner angst keiner anspannung und keinem druck mehr äh zu entsprechen glauben muss."
172	222	"also ich find (.) diese MUße muss man ja auch erst mal haben um achtsam (.) zu sein also ich kann ja nicht (I: mhm) voll im stress oder so dann sagen jetzt ähm (.) bin ich aber achtsam (I: mhm) (.) also deswegen find ich braucht man ja auch erst ne gewisse muße um zu sich zu kommen (I: mhm) und (.) dann eben die achtsamkeit auch ähm wirklich akTIV irgendwie wahrzunehmen oder (.) (I: mhm) sich so zu verhalten."
173	230	"in dem momEnt wenn ma in mUße irgendwas tut was schönes malt (.) e lebt man ja hier und jetzt im augenblick undt achtsamkeit is ja auch genau des dass man auf was auf des achtet was wies eim grad im augenblick geht oder grad m augenblick da is."
173	211	"MUße vermittelt ja eigentlich was sehr posi- is ja sehr positiv besetzt des heißt ja auch genau (.) mußestunden sind ja stunden wo man eben (.) äh (.) n- nich irgendnem (.) besonderen ZIEL (.) irgendwas MACHT und und dabei en besonderes ziel verfolgt sondern man is einfach mal so DA im hier und JETZT (.) und DArum gehts ja auch bei der achtsamkeit (.) dieses (.) durch den Atem irgendwie (.) DA zu sein (.) so würd ich die verbindung ziehen [] WERTfrei (.) vor allen dingen (.) ohne beWERtung ja (.) schuldigung (.) ja (I: also in (.) in der muße oder in der achtsamkeit?) BEIDES (.) das ist (I: mhm) die verBINdung (I: mhm) also ich m- (.) wenn ich muße (.) müßig (.) gang (.) betreibe dann (.) hab ich ja (.) dann (.) DAmel ich so vor mich rum (.) hin (.) ja MACH hab kein MACH einfach (.) wa- wo gra- (.) wo mir grade nach IS (.) und und hab nich äh (.) irgendwie das gefühl (.) wenn ich Das jetzt nicht mache dann schaff ich Das wieder nich ssondern es LÄUFT halt so (.) und (.) wenn ich achtsam bin dann (.) lebt des ja vor allen dingen auch davon äh das (.) KOMMEN zu lassen und und (.) und NICH sofort zu beWERten (.) sondern irgendwie (.) es erst mal ähm (.) so (.) sich ANzugucken ja (.) INNEzuhalten."
174	104	"denn achtsamkeit seh ich wenn ma jetzt mal von der lebenshaltung absieht (-) das ist praktisch ein (-) da lern ich wie ich (.) wie ich auf mich selber (.) für mich selber OFFENER werden kann oder für die umgebung offener werden kann (.) aber praktisch dann bin ich bereit es ist die schale von vorhin (.) und in die schale kann dann neu was ein (.) neue erfahrungen eingefüllt werden so. und das wäre dann die MUßE (.) dieses einfüllen und das was das eingefüllte dann in dieser leeren schale MACHT ne? welche konstellationen sich dann ergeben."
188-189	214	"weil dann lAg halt doch noch die französischarbeit oben oder keine ahnung was ja (I: mhm) (-) die ma jetz halt hätte vielleicht schon korrigiert haben können wenn man nich zum kUrs gegangen wär (I: mhm) (-) un dEs immer abzuschalten des rauszukriegen (.) des war schwierich aber des hat ma dann (.) auch (-) dEs hat ma bissche gelernt sich dann zu zwIngen eben des zu tUn weil ma des auch im alltag jetz so machen muss (I: mhm) ja sonscht verliert man des ganz."
189	102	"jemand der wi- wAhnsinnig gestresst is und nicht mehr entspann kAnn. (I: mhm) ja? der die ganze zeit noch kurz was- wann muss ich alles machen un so ähm (-) und dann glaub ich iss is so was sehr (I gleichzeitig: mhm) hilfreich (I: mh interessant) wenn ich stress hab ja dann (.) kann ich den auch abbauen oder denk mein gott jetzt reg dich nicht so auf (I: lacht) und so aso un und da mach ich lieber noch n bisschen sport und dann mach ich weiter mach aso so ne pAUse."

#### **Passages from Feedback Sheets (School 3)**

The following lists the passages quoted from the written comments provided by participants of the third school in the order of their appearance (section 5.9.1).

Table 40: Original German version of passages quoted from feedback sheets

Table 40: Original German version of passages quoted from feedback sheets			
Page	Participant	Original German Version of Quoted Passage	
175	327	"Die Körperübungen kann ich immer wieder im Alltag einsetzen u. die kognitive Auseinandersetzung hat an einigen Stellen zu einer lebensbejahenderen u. gelasseneren Haltung geführt. ich bin achtsamer geworden u. dankbar für dieses Geschenk, das mir sicherlich noch häufig von Nutzen sein wird."	
176	326	"Die Erfahrungen im Kurs bzw das, was ich für mich an Entspannungstechniken u. vor allem an Strategien für eine "mentale" Entspannung/ Umdenken mitnehmen konnte, haben meine Erwartungen weit übertroffen. Der Kurs kam für mich persönlich zum richtigen Zeitpunkt i. meinem Leben - ich bin beeindruckt davon, wie stark es möglich ist, Denkstrukturen durch gezielte Impulse zu hinterfragen und positiv "umzupolen" - Herr Kuhn hat uns sehr gut betreut und uns viele (Denk-) Impulse mit auf den Weg gegeben, die noch lange nachwirken werden."	
176-177	307	"Mich haben u.a. die Kerze und die Taschentücher in der Raummitte gestört, das kam mir gewollt u. übertrieben vor. Auch das Sitzenmüssen auf einem Stuhl wg. Knieproblemen fand ich unangenehm. Teilweise konnte ich mit der Meditation wenig anfangen. Nett fand ich, die Kollegen in ungewohnter Umgebung zu erleben u. etwas über sie zu erfahren. Insgesamt bin ich wohl nicht so empfänglich für diese Art von Meditation, da sie mir z.T. zu "esotherisch" m. zu wenig handlungsorientiert vorkommt."	
177	301	"Ich hatte von dem Kurs etwas anderes erwartet als er dann war. Für mich war Herr Kunz nicht vorbereitet auf den Kurs: es nervt mich total, wenn die ausgeteilten Blätter/ Zusammenfassungen von ihm erst einmal wieder selbst gelesen werden "müssen" bevor er sie dann "erklärt". Dafür ist mir die Zeit zu schade. Außerdem fehlte mir total der Bezug zur Schule! Für mein Wirken und Arbeiten in der Schule habe ich in dem Kurs keine Impulse/ Motivationen/ neue Anregungen/ Ideen bekommen. Im Vergleich zur bisher an unserer Schule stattgefundenen Supervisionsgruppe (Leitung: (XXXXX)!) konnte mir der Kurs überhaupt keinen Zugewinn bringen! Wenn ich den Kurs persönlich hätte zahlen müssen, hätte ich mich sehr geärgert. Ich war trotzdem bei jeder Sitzung dabei und habe auch jedes Mal versucht (bewusst und aufmerksam!), mich von Neuem auf den Kurs einzulassen. Die von Herrn Kunz verwendeten Bilder/ Übungen/ haben mich überhaupt nicht angesprochen."	
178	323	"Es würde mich tatsächlich interessieren, ob ein Unterschied beim "Kreuzen" vor und nach dem Kurs erkennbar ist, denn persönlich habe ich das Gefühl, dass sich mein Lebensgefühl durch den Kurs nicht sehr verändert hat, sondern sehr von äußeren Faktoren beeinflusst wird."	

#### Passages from Interview with the Principal of School 3

Table 41: Original German version of passages quoted from the interview with the principal of the third school

	principal of the unit believe
Page	Original German Version of Quoted Passage
179	"kleine dinge sind präsent also so wir haben da ja es fing ja an mit dieser rosine kauen und dann am stilletag dies auch in stille essen äh und ähm so bewusster wahrnehmen DAvon begegnet mir viel so im vorbeihuschen immer wieder so wenn ich da dann wenn ich mir so nen müsli da mache und mal wieder so nebenbei am schreibtisch esse dann sag ich mir (.) wenigstens guckst du jetzt mal da ins grüne und kaust vernünftig und nimmst wahr, dass du was ißt und nich so nebenbei zack zack."
179- 180	"dieses so ja was hab ich jetzt davon (I2:mhm) so. Äh jetzt sitz ich hier und investiere meine zeit (lacht) und WAS? das kenn ich schon (P & I2 lachen) jetzt weiter weiter (P & I2 lachen) das nächste so ungefähr so (.) so ergebnisfokussiert (I2: mhm) mh so dass man abhaken kann ah dass hab ich jetzt von dem und das hab ich jetzt (I2 gleichzeitig: mhm) von dem. (.) so das war für manche vielleicht also für eine kollegin jetzt in unsrem kurs besonders die so ne macherin is die die immer schnell also die gerne konzepte ausarbeitet und dann die wirkung gleich sehen will und so (I2: mhm) ähm (-) ja das war eben nich oder wenn sich was wiederholte jetz (.) das ham wir doch schon gemacht jetzt kommt das schon wieder (lacht) äh jetzt müsste doch eigentlich was neues hier im programm stehen (I2: mhm) äh oder auch weil (XXXXXX) ja SEHR ruhig (I2 lacht gleichzeitig) und SEHR langsam war äh dass man sich wünscht OAH kann's nich nen bisschen schneller gehen?"
180	"ich finde wir haben das ein totales zeitproblem. (-) und DAS ist der große hinderungsfaktor denk ich mir an der integration [] dass wir VIEL zu wenig zeit haben uns oder uns nicht nehmen wollen."
180	"wenn man jetzt so noch so wenig zugang zu sich selber (.) sich erarbeitet hat im leben dann war es tauchten glaub ich auch so sachen auf (.) wo dann nich da der raum war diese zu bearbeiten (I2: mhm) und dann merkte man eben so in diesen mitteilungsrunden oh oh da is aber irgendwie bei jemandem (I2 gleichzeitig: mhm) nen problem versteckt (I2: mhm) das klingt dann so an aber da kann sich ja dann auch keiner drum kümmern (I2 gleichzeitig: mhm) und dann is es vielleicht für diese person (.) ne frustration weil irgendwie was angerissen wird (.) äh aber sie eben selber sich jetzt da mehr kümmern müsste wenn sie merkt da hab ich n' massives problem (I2 gleichzeitig: mhm) oder zuhause stimmt jetzt die harmonie nicht ich krieg hab immer kampf mit meinem mann wenn ich jetzt zu diesem kurs gehen will weil der sich nicht um die kinder kümmern will oder so dann ist da dieser kurs (.) ja nur so nen zeichen für was was da eigentlich grundsätzlich falschläuft oder so und da gabs dann in dem moment keine lösung und wenn man sich's einfach machen will dann überträgt man das auf den kurs und sagt ja blöder kurs (I2: mhm) äh raubt mir nur zeit aber ich komm nich von der stelle aber eigentlich liegt's woanders (I2:mhm) Uund so was hat's glaub ich hier und da auch schonmal gegeben (I2:mhm) dass man sich so (.) vielleicht das allHEILmittel erhofft hat."
180	"und dann war dann eben mal so GUTE stimmung und andere waren eher so bisschen abseits und für sich so was hab ich gemerkt dass (I2:mhm) dass eben manche sind einfach so sociable und sind so miteinander gerne zusammen und andere (.) andern fällt das schwer und die blieben auch da eher so n' bisschen für sich."

#### Passages from Interviews with Course Instructors

Table 42: Original German verison of passages quoted from the interviews with course instructors

Instructors			
Instructor	Page	Original German Version of Quoted Passage	
Instructor 2	183	"also ein teil denk ich is (.) dass die dass bemerkt wird dass automatisch dass wir automatische mustern reagieren. (I: mhm) das is ein teil und der andere teil is dass ich zu mehr dass ich mir zeit nehmen kann mich mit angenehmen und unangenehmen empfindungen auseinanderzusetzen. (I:mhm) und zwar ohne unangenehme empfindungen hauptsächlich dass ich nich sofort kratzen muss wenn's juckt. sondern ich kann gucken wie das jucken sich verändert und ich äh muss diesen impuls nicht folgen wenn ich das tue entdeck ich was neues. (I: mhm) des is eigentlich glaub ich dieses und Diese haltung is so (.) unterschiedlich [] wie wir das gewohnt sind (I: mhm ja) das is (I gleichzeitig: das brauch seine zeit, ne?) das brauch seine zeit ne? das kann doch nicht wahr sein wieso soll ich mich dem aussetzen ne? [] und des hat sich aufgelöst hin zu so ner ja mal gucken (I:mhm) So also nich so Ja Ok ja das gab's ja auch ja also des heißt des is ja eigentlich ne is eigentlich ne konfrontative arbeit ne (< <störgeräusch>&gt;) sind ja konfrontationsgeschichte so seh ich's jedenfalls so versuch ich's zu vermitteln"</störgeräusch>	
Instructor 1	184	"die essenz der kurse ist dass es nicht primär auf stressreduktion geht also das es nur oberflächlich um stressreduktion geht und eigentlich grundsätzlich um einen anderen umgang mit dem eigenen stress oder dem eigenen leid oder dem eigenen leben und das sind die diese form eine geeignete ist um das wie soll ich sagen ich sag jetzt mal anzubieten oder einzuladen auch dahingehend ähm (-) dahinzuspüren ist mir jetzt zu wenig sich zu entwickeln ist mir schon wieder zu zielgerichtet aber so dazwischen eben ne also dahin zu (.) ahnen dass es vielleicht auch noch anderes geben kann. das ist ja auch ganz häufig der fall dass in den gesprächen es irgendwann einmal nicht mehr um den stress geht sondern um das was einen beschäftigt."	
Instructor 1	185	"also ich find ein charakteristikum der kurse also jetzt geh ich von den erwachsenen aus ist dass das angebot an achtsamkeitsübungen so groß ist dass eigentlich jeder selbst einen schwerpunkt setzt und das raussucht was einem guttut und z. B. im alltag auch umsetzt und deswegen kann ich das gar nicht gegeneinander werten wer jetzt mehr oder weniger profitiert hat (.) das weiß ich auch nicht ob ich das vergleichen kann innerhalb der kurse ähm äh innerhalb der teilnehmer in den kursen weil die ja die lehrer also nachdem was sie sich vorgestellt haben was sie gemacht haben eigentlich ja alle profitiert haben."	
Instructor 1	187	"die übungen selbst sind gar nicht das entscheidene sondern eher wie sie angeleitet werden also das WIE ist entscheidender aus welcher haltung heraus ich die anleite (-) und ich glaube auch ein bisschen vorweg zu nehmen aus der eigenen erfahrung die man mit sich selbst hat oder ich selbst hatte als leiter oder ich mit mir selbst habe was so die ich sag jetzt mal fallen sind wenn man selbst übt also z. b. ich habs schon wieder nicht hingekriegt zu denken also solche äh leistungsdruck der deutlich wird äh vorwegzunehmen zu entschärfen eine atmosphäre zu schaffen wo eigentlich deutlich wird [] also das find ich ist eher eine kunst des anleitens was transportiert und nicht so sehr die übung an sich."	
Instructor 1	189	"was mir wichtig war (.) das habt ihr auch mitbekommen war dass eine einladende atmosphäre entsteht und die auch von anfang an da ist (.) sodass der raum schule der von den lehrern und den schülern mit bestimmten vorstellungen schon gefüllt ist (.) dass der sich überhaupt zu einer anderen zu einem anderen raum entwickeln kann."	
Instructor 1	191	"also achtsamkeit hat ja einen aspekt noch der in dem kurs nur ganz wenig vorkommt. [] das ist eigentlich das offene gewahrsein. die richtige achtsamkeit ist geht weg von dem gerichteten fokussierten und hat am schluss ein offenes gewahrsein für alles. und das ist so was wie dasitzen und nichts tun (lacht) [] und das sich mehr oder weniger bewusst zu sein. also für mich gibt es da eine überschneidung und das offene gewahrsein wär für mich eine fähigkeit die ich auch haben muss wenn ich muße habe oder die da ist wenn ich muße habe."	

## Passages Cited in Section 5.11 (Excursion: Digressions and Reflections)

Table 43: Original German version of passages quoted in section 5.11

Page	Participant	Original German Version of Quoted Passage
201	203	"ich bin der meinung GRUNDsätzlich dass unterricht labor ist (.) und (.) das MEINT halt (.) ähm (.) der einzelne beitrag den der schüler bringt (.) der soll nur dazu beitragen dass eben der gesamtprozess vorangebracht wird (.) Oder der gesamtprozess hinterfragt wird egal WIE (.) und (.) DAzu steh ich auch des heißt äh (.) äh ne MEInung die en schüler äußert [] die in bezug aufn prozess äh (.) passiert die hat ihren SINN da (.) weil sie den prozess ir- (.) in gewisser weise steuert und DIEsen (.) eindruck DEN versuch ich den schülern auch zu vermitteln und (.) ähm (-) da würde jetzt kein KURSinhalt direkt dazu passen aber die reflektions- (.) äh (.) ähm (.) inhalte."
202	203	"das ist en produktives nichts tun (I2: ja) (.) das einfach das man aber auch irgendwann braucht damit man ir- (.) sich besser KENNEN lernt (.) also man lernt sich ja sonst gar nicht (.) also ich hab den eindruck VIELE von den schülern die s- (.) funktioniern wunderbar (.) aber sie kennen sich überHAUPT nicht (.) (I1: mhm) sie WISSEN nichts über sich sie wissen gar nicht (.) WAS sie besonders GUT können (.) was sie besonders schlEcht können (.) sie haben SELten äh (.) ne ausreichende distanz (.) zu sich (.) weil sie gar keine ZEIT haben über sich nachzudenken (.) und sie sind es geWOHNT von (.) von KINDESbeinen an (.) DURCHrationalisiert alles mögliche machen zu müssen die eltern (.) äh (.) kommen hier an (.) und haben (.) d- die idEE ne (.) die müssen (.) arzt werden oder (.) weiß der kuckuck (.) oder MUSiker und DANN (.) äh (.) is der tagesablauf aber fixiert (.) der is (.) also hat man (.) vierunddreißig bis sechsunddreißig stunden unterricht in der schule (.) und dann kommt noch mal (.) es klaVIERspielen dazu und (.) ein spORT und (.) dann noch DIES und JENES und (.) ja (3) und dann bleibt eigentlich nich viel übrig (.) und dann wird hinterher noch aufm handy rumgeklimpert."
202	230	"gleichzeitig für schÜler [] da is auch stress n großes thEma (I: mhm) nich für alle schüler aber manche spüren schon stress und leistungsdruck und das geht ja später im leben genauso weiter (I: mhm) und daher denk ich wenn man (-) solche mechanismen kennt? und weiß wie es funktioniert (.) dass man schon früh (-) entgegenwirken kann. ja und aussteigen kann aus dem (-) teufelskreis ne?"
202-203	215	"fänd ich sinnvoll (I: ja) (.) toTAL (.) (I: mhm) (.) also man fühlt sich einfach WAHRgenommen und äh für (.) äh (.) ja des is (.) des is (.) man is (.) man fühlt sich eigentlich (.) WICHtig und WAHRgenommen und das (.) ist doch etwas was hier in der schule so schNELL vergessen wird (I: mhm) (.) man hat ja immer nur DRUck von außen (.) man (.) hat immer das gefühl man arbeitet GEGEN die eltern (.) also alle lehrer sind doof (.) man arbeitet GEGEN die schüler (I lacht) (.) dann hat man vielleicht auch noch en rektor der will auch dauernd was von einem (I lacht) (.) und (.) dann is auch noch die ko- (.) kollegen (.) also man hat immer so viel NEgatives äh (.) so IN schule (I: mhm) (.) ja? (.) es sagt ja keiner mehr danke (.) ja? [] aber (.) das ist son bisschen (.) wo ich dann finde wenn (.) WIR persönlich mal (.) etwas bekOmmen (.) wo man das gefühl hat jetzt achtet man auch mal auf MICH (.) als LEHrer als perSON (.) sogar vielleicht eben (.) wenn man son seminar hat (.) VON der (.) oder FÜR die schule (.) ähm (.) empfinde ich das (.) diese WERTschätzung (.) [] DAS empfinde ich als (.) SINNvoll (.) WICHtig (I: mhm) (.) WERTvoll (.) denn (-) alle schimpfen auf die lehrer (.) aber wir machen ja trotzdem unsern job (.) einigermaßen gut (3) (I: mhm) viele von uns (lachen beide) (.) und (.) diese WERTschätzung das hat mir gut getan (.) also deswegen würd ich das (.) sehr beFÜRworten (.) (I: mhm) auch für SCHÜler weil (.) die mit sicherheit auch (.) nicht viel wertschätzung (.) IMMER (.) erhalten (I: mhm) (.) auch oft DRUCK kriegen."
202	128	"also ich (.) glaub auf jeden fall und ich hoffe drauf (.) dass es nachhaltig sein wird (.) ähm (.) in so fern als dass wir kollegen (.) einfach (.) mit mehr bewusstsein (.) uns diesen dingen widmen und auch wirklich mehr wahrnehmen und mehr zulassen und auch mehr wahrnehmen können dass KINder genau in dieser gleichen situation sind wie wir selber (.) dass wir einfach zeit für uns (.) für unsere bedürfnisse und (.) n blick dafür brauchen (.) dass wir des benötigen (-) wahrgenommen zu werden und auch wahrzunehmen und

dass wenn des passiert auch alles andere von alleine passiert (.) also die ganze wissensvermittlung is (.) letztrangig (.) wenn wir DEM genug raum geben und ich glaube dass das bewusstsein dafür wächst (.) und ich finds !GANZ! wichtig dass wir das in der schule (.) pflegen und hegen und auch wirklich vermitteln und auch selber vorleben (.) ähm (.) die wissensvermittlung is des eine aber ich mein in der schule glaub ich sind wir doch vorbilder vor allen dingen (.) und (-) ich spür des ganz heftig dass kinder des brauchen (.) ähm (.) dass sie des bejahen wenns ihnen mal nicht gut geht und aber (.) des kein drame is (.) und des find ich ganz wichtig und deswegen glaub ich is dieser kurs SEHR nachhaltig und ich glaube man sollte des noch VIEL viel mehr machen und (.) mit ner viel größeren selbstverständlichkeit in die kollegien und in die schülerschaften tragen und denen vielleicht AUCH IN dieser schulstruktur noch en ganz eigenen (-) platz geben also eben nich nur so exclusiv (.) für ein paar kollegen an einer schule sondern viel viel mehr (.) ähm (.) dass es ne selbstverständlichkeit wird dass die kinder damit AUFwachsen (.) mit sich (.) und ihrem wesen (.) ja ressourcenschonend (.) und ganz liebevoll umzugehen (.) also des find ich GANZ wichtig und deswegen find ich dieses (.) diesen kurs (.) AN den schulen (.) so wertvoll (I: mhm) und finde (-) dass es echt unbedingt ausbauungswürdig [..] ja ich WÜNsche einfach auch ALLEN kindern dass sie damit aufwachsen dass sie (.) achtsam mit sich umgehen (.) (I: mhm) gerade weil (.) die umwelt doch sehr (.) manchmal auch destruktiv is mit diesen kleinen seelen und letztendlich (.) sie ja noch ein ganz großes leben mit viel verantwortung vor sich haben." "ich sag mal so (.) erlebt hab ich vor allem (-) dass (.) äh (.) besonders viel RUhe war (-) 204 203 sich (.) auf sich selbst zu (.) konzentrieren (-) und ähm (.) des was man häufig so macht (.) eben diese (.) vielen beWERtungen (.) mal außen vor zu lassen (-) die (.) werden ja (.) in meiner aufgabe (.) mir besonders abverlangt (.) wobei ich (.) schon (.) ähm (.) sag ich mal (.) IMMER (.) skeptisch war (.) gegenüber dieser permanenten bewerteritis (.) sie führt dazu dass äh (.) wir keinen offenen zugang mehr zu mitmenschen haben und das äh (.) is was was im system (.) extrem UNmenschlich macht (.) und deshalb hab ich (.) eigentlich (.) auf (.) also eher dann (.) auf vernünftiger ebene versucht mich davor (.) zu bewahren (.) das führt manchmal dann zu der absurden (.) tatsache dass man ein bauchgefühl hat und dass man dann fragt ja is des richtig (lacht) (.) und (.) manchmal führts dann auch dazu dass man LÄNger braucht bis man irgendwelche (.) entscheidungen fällt (.) auf der anderen seite (.) trägt des mitunter dazu bei (-) dass halt auch DIE leute mit denen man im kontakt tritt nich immer gleich das gefühl haben sie sind (.) schon im kasten (I1: mhm) (.) ähm (.) und (.) DAS (.) äh (.) f- fand ich jetzt (.) DA nochmal besonders gut weil des (,) EIGentlich dazu beigetragen hat dass ALLE die dabei waren (.) diese distanz (.) von dieser ständigen (.) bewertung (.) versucht haben zu gehen (.) deshalb mein ich auch es wär eigentlich für ein kollegium wunderbar (.) wenn man sowas tatsächlich (.) Immer wieder mal zwischendurch (.) ALS koLLEGIUM könnte (-) weil dann klar würde dass ein grund- (.) webfehler in unserm system eben tatsächlich (.) dieses eine schach- (.) kasteln is (.) also (.) als referendar hab ich das erlebt dass ich (.) kam an die schule [..] da war die stellvertreterin (.) ähm (.) die dann (.) vier wochen nach (.) schuljahresbeginn (.) sagte (.) DIE und die schüler gehören hier nicht her (-) des war für mich der größte schock den ich erlebt hab (.) als referendar weil ich (.) der meinung bin (.) dass (.) äh (.) man ein urteil über die entwicklung von menschen nur ganz SCHWER abgeben kann(.) ähm (.) entspringt en bisschen meiner Elgenen biografie [..] hab sozusagen alle tiefen als schüler auch durch gemacht (.) und kann (.) MITfühlen was (.) äh (.) den schülern passiert wenn die halt erleben (.) dass es nicht funktionIERT (.) ich hab dann auch das gegenteil erlebt aber (.) das hatte auch (.) ja sehr viele (.) äh (.) äh f- (.) MITf- (.) MITunterSTÜTzer dass das (.) bis dahin kam und wenn man so nem unterstützer nich (.) begegnet (.) dann (.) gehts halt (.) den bach runter (.) und ich glaube das is das was äh (.) was mich also (.) überhaupt als lehrer ähm (.) motiVIERT (.) am stärksten (.) dass ich halt NIEmals glaube dass ähm (.) ein kind das hier ankommt (.) irgendwie für irgendwas bestimmtes prädestiniert ist und (.) DANN schon festgelegt nach kurzer zeit (.) äh (.) entweder da DURCH geht oder NICH durchkommt das is en völliger humbug (I1: mhm) (.) sondern des hängt ganz stark davon ab was WIR (.) als lehrer mit denen machen (-) ja (.) und deshalb find ichs so (.) also (.) das (.) das war das entSCHEIdende element in dem ganzen kurs (I1: mhm) (.) dass ma halt äh (-) MITerleben konnte dass diese vielen (.) VORverurteilungen die man mit sich rum trägt (.) dass DIE einfach (.) einen auch schwer beLASten."

205	203	"ich sag mal so wenn man (.) keine ähm (.) we- wenn alle (.) gedanken (.) wenn alles funktionalisiert ist alles auf ziele ausgerichtet ist dann (.) hat man eigentlich (.) wenig chancen (.) echt achtsam (.) gegenüber jemand anderem zu sein (.) ähm (-) das IST (.) im schulalltag (.) oder in jedem beruflichen alltag wahrscheinlich ähnlich (.) dass sehr viele (.) ZIELE auf das produkt ausgerichtet sind das man herstellen will (.) und ich finde das ist eigentlich das tolle an der schule dass es keine produkte gibt (.) die man herstellen will sondern (.) dass man eigentlich (.) ähm (.) mit Recht sagen kann (.) ich ARBe (.) – beite mit den schülern an einem bildungsprozess (.) und MUSS nich ein fertiges produkt herstellen sondern (.) hab zwar das fernziel abitur (.) aber auch DAS ist eine (.) ähm (.) ja wie soll ich sagen (.) is en fiktionales (.) fernziel (.) des zwar (.) in den schriftlichen bereichen NORmativ is (.) aber in den anderen bereichen DURCHaus viel spielraum (.) für (.) echte (.) ja (.) individu- (.) individuelle und perSÖNliche (.) äh entwicklung gibt (.) und das heißt wenn man (.) DA (.) durch (.) reflektionszeit (.) und das wär für mich auch muße (.) ähm (-) mh (.) ne disTANZ zu dieser engen zielführung gewinnen würde dann (.) wär das glaub ich (.) sehr zielführend (lacht) [] es würde quasi (.) im endeffekt dazu beitragen dass das (.) dass das sysTEM auch hinterFRAgt werden kann weil des (.) sysTEM is des problem (-) wir werden (.) wir sind alle NUMMER in dem system und wenn wir uns nur als nummer (.) funktional da einordnen (3) dann können wir nicht achtsam (.) einander gegenüber sein (.) in dem moment wenn wir über den (.) status der nummer hinaus kommen (.) und (.) äh Immer (.) als menschen einander begegnen und uns die Zeit dafür nehmen (-) dann kommen auch solche äußerungen nich wie du PEnner oder so (.) sondern äh dann (.) wärn wa (.) möglicherweise (.) sagen ok jetzt (.) stopp (-) jetzt halt ich mal moment den schnabel und sag ihm er soll (.) nach der stunde kommen (-) und dann hab ich das (.
206	203	"also (.) ähm (.) ICH denke halt dass das (.) äh (.) im UNterricht achtsamkeitsprozesse allein dadurch zustande kommen (.) dass [] dass mehr WERTschätzung den schülern gegenüber gebracht wird (.) wobei ich das (.) gar nich mal (.) in abrede stelle dass die meisten kollegen das EH machen (.) ähm (.) (räuspert sich) für das grOS müsste halt der (.) schritt passieren dass (.) tatsächlich (.) die (.) diese beWERtungen die ständig stattfinden (.) dass man davon mehr abstan- (.) -stand nimmt (.) und den kindern auch den weg dazu zeigt dass sie das selber auch lassen (.) weil die bewertungen sind es tatsächlich die (.) glaub ich (.) die nehmen die mindestens []spätestens aus der MITTELstufe nehmen sie mit (.) dass es fixierte bewertungen GIBT (.) und die reichen dann in die oberstufe (.) und diese bewertungen werden sie so schnell nicht los (.) und die SIND aber ein teil (.) der ursachen dafür (.) dass bestimmtes gar nicht (.) erbracht werden kann (.) (I2: mhm) nun würd ich natürlich umgekehrt argumentieren [] man darf das halt NICH (.) wiederum funktionalisiern DAzu (.) dass ma hinterher (.) mh bessere ergebnisse erzielt (.) sondern eigentlich ma (.) müsste man (.) SO weit kommen dass (.) ma mit den kindern (.) ähm (.) also erst mal als LEHrer überhaupt den schritt (.) macht (.) dass ma halt (.) äh (.) NOCHmal sich ganz klar macht ja ICH mach diese aufgabe GERne (.) mit HERZ (lacht beim reden) (.) und seele (.) (atmet ein) und es ist NICHT entscheidend is dass der prozess mit den schülern (.) freude macht (.) MITeinander freude macht (.) wenn DAS (.) dabei raus käme dann wär das schon (.) en GROßer schritt (.) (I2: mhm) (.) und das braucht aber die DIStanz (.) das heißt (.) DIE distanz äh (.) kann man eigentlich nur finden wenn man ab und zu en abstand gewinnt (I2: mhm) (.) sagen muss (.) ich (.) weiß es selbst []dass man halt dann (.) im endeffekt (.) eigentlich nur getaktet ist (.) (I2: mhm) also (.) m· (.) jede sekunde is nur funktionalität []und wenn man DAzwischen (.) GAR keinen (.) kEINE chance findet

		viele schüler die (.) die wirklich NICH nur (.) darunter leiden sondern KRANK werden (-) weil (.) nichts (.) mehr übrig bleibt (.) von ihnen als person sondern (.) sie sind (I2 flüstert: oh je) nur noch (.) funktion (.) (I1: mhm) is WIRKlich so."
207	224	"ich finds totAl sinnvoll also ich finds total wichtig ich glaub aber auch dass s n sehr sehr langer prozess sein wird bis das < <lackend>tatsächlich so&gt; äm ankommt weilll ädass doch &lt;<a href="atmosphere">dass doch &lt;<a href="atmosphere">dass doch &lt;<a href="atmosphere">des des des des des des des des des des</a></a></a></lackend>
208	215	"aber dazu ist unser zu- (.) schulsystem nicht gemacht (.) (I: mhm) das kommt ja alles von oben (.) (I: mhm) ich mein das könnten eventuell privatschulen äh die mehr (.) handlungsspielraum haben einbauen als unterrichtsfach (.) (I: mhm) wir persönlich selber könnten vielleicht ne ag anbieten aber (.) (I: mhm) da ist dann die nachhaltigkeit AUCH (.) sicherlich nicht SO wies (.) gewünscht (.) (I: mhm) wäre oder wünschenswert wäre (.) (I: mhm) aber dA (.) steht uns sicherlich unser system im weg (.) (I: mhm) denn (.) nachhaltigkeit kriegen wir NUR indem wir dann (.) ZEIT und RAUM dafür haben wir bräuchten (.) wir müssten dann ja n (.) auch n RAUM haben (.) (I: mhm) mit (.) wo dann überhaupt diese atmosPHÄRE (-) ähm (.) entstehen KANN (.) dass man jetzt ZEIT hat (.) sich (.) diesem zu öffnen (I: mhm) (.) des erfordert a (.) WIRklich intensiv zeit und (.) auch raum (I: mhm) (.) und dann muss man überlegen kann man das mit dreißig kindern (.) [] und ich denke das ist (.) aussichtslos (I: mhm) (.) in der momentanen (.) situation des kultun- (.) ministeriums (I: mhm) (-) is meine erfahrung (I: mhm) (.) außer man hat en rektor der sagt ok (.) jetzt nehmen wir ne deputatsstunde und machen (.) DAS holen uns die leute von der uni also ich finds WICHtig dass es (.) von extERN kommt dass wir des (.) als lehrer NICHT machen (.) (I: mhm) denn dann kommt wieder so dieses (.) also so (.) Wenn wir diese NOten haben und (.) diese beurteilung eben (.) das sollte dann in diesem fall nicht (.) der lehrer sein."
209	224	"aso des is des is einfach die die schUln die staatlichen schulen sind ham sEhr wenich (.) so ne kultUr entwickelt wos gemeinschaftsbildende zEIten oder rÄume gibt aso was weiß ich zum beispiel n am anfang von nem schuljAhr da gibts an der waldorfschule auch so ne fEIer ja da werden dann neue schüler vorgestellt dann ham die alle mal- die kommen auf die bühne da ham die alle ma gesEhn die kriegn < <lackend> blÜmchen&gt; un und des gibts hier alles überhAUpt nich []mir f- mir falln solche sachn AUf ähmm das is- das is so ne kultUr wo man zum beispiel so ne achtsamkeitspraxis andocken könnte eigentlich nich gIbt aso wenns jetz hier son raum der stIlle gäbe weiß nich ob da überhaupt jemand hingehen würde ja da müsste man vorher ja schon bisschen so ne- so ne arbeit ne grundlagenarbeit &lt;<lackend> leisten&gt; dass die auch was damit anfangen könne aso dass die auch schoma erfahrn haben ei des bringt mir auch was wenn ich dahin gehe oder [] ich kanns mir eigentlich nur vorstellen dass es tatsächlich über die klassenlehrer auch an die schüler kommt. also dass die klassenlehrer fortgebildet werden [] asos wär schOn des (-) nÖtig dass die klassenlehrer dess sElber erfAhrn und dann auch einsEhn dass es wichich is für die schÜler (I: mhm) und dAnn könnte man aso dann n rÄumlichkeiten schaffen."</lackend></lackend>
209-210	213	"ja aso dasses nAch nötich is das had ich ja vorhin im prinzip schon ähm gesagt ähm ideen wie mans machen kAnn [] ich finde f- (-) schUle funktioniert ja (.) immer in diesen treigespann sch- l- kollegiUm ähm schUlleitung ja un natüich auch übergeordnete

stellen und (-) lEhrerschaft ja äh Elternschaft entschuldigung und äh dIEses netz- un natürlich schüler klar. aber dieses nEtz letztendlich von mEhreren äh personenkreisen dIE spielen zusAmmen (.) un ich finde bevor das wirklich eine feste größe werden kann muss dort erstmal ne art AUfklärung betrieben werden (.) wenn dAss nich da is dann öh wIrd es dengich sporadisch bleiben kann gut ankommen auch aber es wenns ne feste größe werden soll un das fänd ich sehr sehr gut dann muss zunächst erst mal (-) dort was getan werden. ja? [..] vielleicht sogar durchaus (-) ähm da mal en (-) ne Offene gesprächsrunde finden kAnn aso das noch noch offener zu gestalten. (-) ähm wo Alle (.) beteilichten wie gesagt da dabei sind und dann muss des natürlich ähm (.) kommuniziert werden an die (-) hÖheren schUlbehörden (-) dass da auch tatsächlich (-) ähm (.) resourcen in form auch von zEIt zur verfügung gestellt wird und räumlichkeiten undt (-) ja (-) ähm (.) ja natürlich auch jemand der das anleiten kAnn weil wir sin dafür nich professionalisiert denk ich (.) und ich fände es eigentlich Ungut wenn wir sagen wir versuchen da irgendwie mal ne stilleminute oder wir versuchen uns da Irgendwie so als (.) <<schmunzelnd> semiprofessionelle> meditations oder kursleiter dass das fände ich gar nich gut. [..] Oder man sagt direkt äh man bildet kollEgen aus die (.) dass in klEInerer form äh dann anbieten Im unterricht und man muss dann halt wirklich davon ausgehen dass im unterricht selbst halt kleinere einheiten mal stattfinden (-) was ich mir auch vorstellen kÖnnte (I: mhm) aber dazu müsste eben nOch mal dirEkt eine Art (-) Ausbildung oder fOrtbildung (-) ähm (.) stattfinden für intressierte."