Investigating ways to contextualise a mindfulness and resilience based online intervention for busy academics

by Jonathan (Jonny) Wells

Thesis submitted in fulfilment of the requirement
for the degree of

Doctor of Philosophy

Under the supervision of Dr Keith Heggart
and Associate Professor Caroline Havery

University of Technology Sydney, Australia

Faculty of Arts and Social Sciences

May 2025

Certificate of original authorship

I, Jonny Wells declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the School of Education, Faculty of Arts and Social Sciences at the University of Technology Sydney, Australia.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

This research is supported by the Australian Government Research Training Program.

Signature: Production Note:
              Signature removed prior to publication.

Date: 07/04/2025

Acknowledgements

Completing this PhD has been one of the most challenging and transformative experiences of my life. It has been a journey of growth, resilience, and discovery, made possible by the guidance, encouragement, and support of many remarkable people. I am deeply grateful to all those who spared their time, lent a hand, or simply reminded me to keep moving forward when the path seemed insurmountable.

First and foremost, I extend my heartfelt thanks to both my current and former supervisors, whose expertise and patience have been invaluable throughout the different stages of my candidature. Each supervisor has contributed in their own way to shaping this thesis and I appreciate their insights and encouragement throughout this journey. My sincere thanks to Dr Keith Heggart, my main supervisor, whose unwavering belief in my work and encouragement have shaped not only my thesis, but also my personal and professional development. Deep thanks also to my secondary supervisor, Associate Professor Caroline Havery, whose patience, thoughtful feedback and critical eye, along with developing my academic writing skills, have all been greatly appreciated throughout my candidacy. She has made me a more skilled writer and researcher as a result.

Special thanks also to Professor Nick Hopwood, whose keen intellect and willingness to challenge me, when necessary, helped to shape many of the ideas and complexities within my project. His hard work and dedication to my research have made it all the stronger and made me a more experienced researcher as a result – thank you.

To my dearest Tosh, your love and support have been my rock throughout this journey. Thank you for believing in me even on the days when I doubted myself and when it all seemed too hard. Your encouragement gave me the strength to persevere through the most trying times. You are one in a million. To my friends and colleagues, thank you for being there to share a kind word, a listening ear, or much-needed encouragement. To those in our UTS writing club 'The Write Bunch', your camaraderie

Statement indicating the format of thesis

This thesis is presented in a traditional monograph format, consisting of seven chapters: an introduction, literature review, methodology and conceptual framework, three chapters of findings—each integrating a discussion section—and a conclusion. It adheres to the guidelines established by the Faculty of Arts and Social Sciences at the University of Technology Sydney, Australia and follows the APA 7th edition citation style. This requires that, for all authors with the same surname, each first author's initial(s) must be included in all citations. Initials are included even if the year of publication differs. Italics have been used sparingly within the thesis to show *emphasis* on particular words or phrases of note.

According to APA 7th edition, words formed with prefixes and suffixes should be written as one word without a hyphen. APA 7th edition generally suggests writing compound words without hyphens when commonly accepted as single words, for example, "wellbeing", which is the spelling adopted in this thesis. The exception to this hyphenation rule is in relation to word "judge". In this thesis, "nonjudgmental" *is not* hyphenated, while in discussions of the FFMQ Questionnaire (Appendix F), "non-judge", "non-judging" and "non-judgment" are hyphenated according to their use in the questionnaire.

This thesis was edited by Dr Teena Clerke. Editing was limited to formatting grammar and style and did not alter or improve the substantive content or conceptual organisation of the thesis. Editorial interventions were restricted to Standards D and E of the Australian Standards for Editing Practice.

At the time of submitting this thesis, all DOI numbers included in the final reference list had been thoroughly checked to ensure they were active, functional, and available for viewing. However, their continued availability cannot be guaranteed, as external changes or updates to the referenced sources may affect future access

List of papers/publications

Pathrose, S. P., Wells, J., Patterson, P., McDonald, F., Everett, B., Ussher, J., Salamonson, Y., Biegel, G. M., Nguyen, T., & Ramjan, L. (2024). Contextualising an online mindfulness-based intervention for young people with cancer: A qualitative study. *Collegian*, *31*(1), 56–62. https://doi.org/10.1016/j.colegn.2023.11.005

Wells, J. (2022, November 16). Mindfulness contemplation for time-poor 21st century educators (Online Mindfulness contemplation for time-poor 21st century educators). https://www.icmmelbourne2022.org/

* Throughout this thesis, I am referred to by my nickname, Jonny Wells. However, I am also formally known as Jonathan Wells, but have previously published under my nickname. Both names refer to the same individual, and I am grateful for the opportunity to clarify this connection.

Table of contents

List of Figures

List of Tables

List of abbreviations

AR	Action Research
BCF	Behaviour Change Framework
BSB	Breathing-Sound-Body (2-minute MMR practice)
MBCT	Mindfulness-Based Cognitive Therapy
MBI	Mindfulness-Based Intervention
MBSR	Mindfulness-Based Stress Reduction
MiCBT	Mindfulness-Integrated-Cognitive-Based Therapy
MM	Mindfulness Meditation
MMR	Mindfulness Meditation and Resilience
MRBi	Mindfulness- and Resilience-Based Intervention
PG	Pilot Group
RCT	Random Controlled Trial
UTS	University of Technology Sydney
WG	Working Group

Abstract

University academics today face intensive workloads, time scarcity, and rising levels of stress and anxiety. While mindfulness and resilience-based interventions have proven beneficial for other educators, the duration and practice demands of established mindfulness interventions often pose barriers for time-poor academics. Research into mindfulness-resilience-based interventions (MRBis) contextualised and conducted with academics remains limited. My study addresses this gap by investigating ways to contextualise an online, custom-designed MRBi for busy, mentally well academics. A secondary aim was to evaluate the effects of the intervention on participants' levels of mindfulness, resilience, and professional wellbeing.

The intervention was iteratively developed using a Behaviour Change Framework (BCF) in tandem with a three-phase Action Research (AR) approach, that used mixed methods to collect and analyse data. Phase 1 involved interviews with 11 experts in mindfulness, resilience, and professional wellbeing to inform my initial plan for the intervention. Phase 2 involved collaboration with a working group of six academics to refine prototyped practices and supporting content. Phase 3 delivered a six-week pilot intervention via a social media app with 15 academic participants. Pilot participants completed pre- and post-intervention surveys using validated tools, the Five-Facet Mindfulness Questionnaire (FFMQ) and the Connor-Davidson Resilience Scale (CD-RISC2).

The findings that emerged from data analysis represent practical ways to contextualise MRBis for university academics, such as shorter intervention durations, flexible online schedules, and tailored mindfulness and resilience enhancing (MMR) practices that participants adapted to their individual circumstances. These strategies ameliorated key challenges faced by academics, including time poverty, excessive workloads, and the needs of novice meditators. The results of the statistical analysis of the quantitative survey data demonstrated statistically significant improvements in mindfulness levels and positive changes in resilience among the pilot participants.

Qualitative feedback from these participants indicates multiple benefits arose from engagement in the MRBi, including enhanced work focus, reduced reactivity, and sustained contemplative practices two months post-intervention. The perceived value of the MRBi was underscored by the fact that most participants recommended the program to peers.

This study contributes to the growing body of knowledge on contextualising MRBis for academics, by showcasing the acceptability, feasibility and effectiveness of a contextualised, custom-designed, online MMR intervention. The findings offer both a foundation for further research and a practical exemplar for implementation in academic and other professional settings.

Chapter 1. Introduction

1.1 Research motivation and rationale

The stresses and demands placed upon university educators have increased significantly in the ever-evolving landscape of higher education. The increase is driven by enhancements in technology (Brewster et al., 2022), the recent pandemic (Turner et al., 2023) and student and market demands (Jayman et al., 2022). The situation is ongoing (Wray & Kinman, 2021), and moreover, is unlikely to be resolved in the near future (Fetherston et al., 2021). I recognise these increases from my own previous experiences as a casual academic, which were marked by multiple responsibilities, each with its own set of challenges, and set within a busy, demanding environment. The outbreak of the COVID-19 pandemic impacted my position as a casual academic, to the extent that complex and ongoing tasks were required to be completed within short time frames and after-hours. During these periods of increased workload, I began to reflect on the sustainability of such a demanding profession. My reflection generated two questions. First, how do academics maintain their wellbeing and build resilience to navigate these pressures, particularly those on the frontline of institutional demands? Second, were there meditation or mindfulness practices to enhance academics' resilience as they adapted to an increasingly demanding work environment? These questions resonated deeply and inspired me to begin this doctoral research journey.

Alongside my academic work, I have been a practitioner and facilitator of meditation and mindfulness for many years. Mindfulness is central to meditation, and a critical component of my research is exploring the transformative potential of mindfulness meditation as a tool to build resilience and mental wellbeing among academics.

Meditation offers a holistic and engaging approach to help manage stress and enhance personal resilience (O'Connor et al., 2023). Meditation has roots in ancient Buddhist,

Hindu and yogic practices (Singla, 2011), and represents a core concept in many spiritual practices globally. The conceptualisation that has most influenced my research, however, is Cahn and Polich's (2006) conceptualisation of meditation, which they liken to cognitive or mental training. I will define the concepts of mindfulness and resilience that are pertinent to this study in Section 1.7.2 and discuss them further in Chapter 3. In the next section of this chapter, I will discuss the aims of and background to my study and explore some of the relevant debates and discussions in the literature that underpin my approach.

1.1.1 Aims of the research

The rigorous demands of contemporary scholarly work, as previously mentioned, generate significant stress for academics, negatively impacting their wellbeing and productivity. My own mindfulness and meditation experiences led me to investigate the potential for evidence-based mindfulness and resilience practices to address academic stress. To achieve this, I developed the following research aims:

1. To create a customised mindfulness-resilience-based intervention (MRBi) for academics who were stressed, but otherwise mentally well;

2. To test the MRBi and measure its effectiveness on participants' levels of mindfulness and resilience;

3. To devise ways to contextualise the piloted evidence-based MRBi into institutional life to enhance academics' engagement and impact; and

4. To investigate the degree to which mindfulness and resilience-enhancement practices, such as those developed in the pilot MRBi, might alleviate the negative effects of demanding work stresses and improve academics' wellbeing.

For the purposes of this thesis, I coined the term mindfulness-resilience-based intervention (MRBi) to denote mindfulness meditation practices in which resilience

enhancement practices are embedded. Such a term brings together the benefits of both practices to better suit busy academics.

1.1.2 Methodological overview of the study

The key concepts of mindfulness and resilience-enhancement are explored in my research, to determine the degree to which they bring about a sense of increased wellbeing among academics. At the core of the study is the design of an effective and acceptable online intervention that meets its academics' unique needs. I adopted an AR methodological approach that employed mixed methods to design and test the intervention. First, I reviewed the extant literature to understand the landscape of mindfulness and resilience interventions in academia (see Chapter 2). The review included programs, interventions and research studies that were developed to promote mindfulness within academic faculties. Second, I reviewed existing mindfulness-based and resilience-enhancing practices that could be adapted to university settings. Third, to inform the design of the intervention, I conducted interviews with specialist academic experts about the accessibility and adoption of evidence-based practices and intervention content (see Chapter 4). Fourth, I engaged a small working group (WG) of University of Technology Sydney (UTS) academics to refine, customise for academics, and prototype the intervention (see Chapter 5). Fifth, I pilot-tested the intervention prototype with a small pilot group (PG) of different UTS academics to gauge its effectiveness, perceived benefits and identify improvements (see Chapter 6). The AR approach was adopted so I could identify ways of contextualising the custom-designed MRBi for academics and measure its effects.

In the next section, I describe contemporary debates in the literature that background my study, such as academic workplace stress, neoliberalism in higher education, and remedial action in universities. The section concludes with a description of mindfulness interventions and how they have been contextualised for academics.

1.2 Stress and demands of increased workloads in universities

Significant increases in the levels of stress experienced by academic staff have been well documented over the past decade (Brewster et al., 2022; Dinu et al., 2021; Fetherston et al., 2021; Husbands & Prescott, 2023; Wray & Kinman, 2021). Contributing to increased stress is the intensity of work and increasingly complex environment in the university sector in Australia and other English-speaking countries (Fetherston et al., 2021; Wray & Kinman, 2020, 2021). Such work is characterised by serious limitations in funding and resources (McDonough & Lemon, 2018), and in Australia, increased commodification of the tertiary education sector (Coonan, 2022). Combined with ongoing research and publication demands (Urbina-Garcia, 2020), these factors contribute to increased academic workloads marked by a substantial rise in administrative tasks. The culmination of these factors has had a negative impact on academics' mental health, in particular, heightened levels of stress and anxiety (Ohadomere & Ogamba, 2021). The mental health impact of contemporary university working conditions, has led to increased rates of workplace dissatisfaction, stress, time-poverty and burnout among academics.

1.2.1 Academic stress, mental ill-health and burnout

One of the impacts of the demanding working conditions in universities is increased rates of burnout amongst academics (Darbishire et al., 2020; Whittet, 2021). A recent study of 38 Australian-based universities between 2020 and 2023 (University of South Australia, 2024a) reported disturbingly high rates of poor psychosocial safety, and high rates of anxiety, depression, mental distress and burnout. Other studies show burnout rates result from chronic and prolonged stress (Rocha et al., 2020), and impact between 25% and 50% of staff (O'Brien & Guiney, 2018). Burnout can lead to significant physical and emotional exhaustion, which seriously undermines health and wellbeing in stressed academics (Wray & Kinman, 2021).

Challenging workplace conditions are complicated by the increasing influence of neoliberal tendencies in Australian and many other English-speaking universities. Neoliberal principles have framed a shift towards a business and profit-oriented management approach in universities since the 1980s. These principles emphasise cost efficiencies, measurable productivity, and profitability across faculties. Whilst such principles may drive improvements in some areas, they place additional pressures on staff, who find themselves needing to do more with less (Kinman & Johnson, 2019). The expectation to achieve more with fewer resources at their disposal, frequently comes at the expense of historically collegial interactions between academics (Taberner, 2018), which can negatively impact wellbeing (Wu, 2022). The neoliberal emphasis on budgets and profitability that manifests as performance targets can add frustration and disillusionment to the challenges faced by academics, who may feel that their primary role as educators and researchers is undermined (Mula-Falcón & Caballero, 2022).

Relentless expectations and quality metrics heighten academics' feelings of precarity, anxiety, and stress and increases the toll on their physical and mental health (Jayman et al., 2022; Puāwai Collective, 2019). Such workplace stressors are intensified by the pattern of neoliberal marketisation (Taberner, 2018) in the sector, whereby universities are placed under increasing pressure to perform well in national and international rankings. The effect of institutional performativity measures, in turn, is intensified academics workloads and performance expectations. The neoliberal shift towards a profit-driven institutional model can erode intrinsic motivations driving many academics to continue a career in academia. The outcome is decreased job satisfaction, and higher rates of stress and burnout.

1.2.2 Remedial action

Universities are beginning to respond to such increased challenges by implementing strategies to mitigate workplace pressure and promote better staff mental health. Many universities in Australia and elsewhere have initiated wellbeing programs,

which often include ways to monitor and improve workplace health (Gereluk, 2018). For example, a model developed by the University of South Australia focuses on six key pillars of staff wellbeing; mental, relationship, community, physical, financial and career wellbeing (University of South Australia, 2024b). The model includes staff resilience training, based on a resilience at work model delivered by an outsourced private provider. Resilience training comprises staff workshops and mental health training, with the aim of fostering emotional balance and reducing stress in university employees. When effective, resilience training and support programs can play a vital role in improving staff wellbeing and positive mental health. Often integral to such programs are meditation-based mindfulness practices and other kinds of resilience training. Some of these programs are discussed in Chapter 2 (see Table 2.1).

Well-being initiatives such as these may provide staff with broader strategies and specific exercises to more effectively manage workplace-related stress, yet despite this, high rates of stress and mental ill-health persist amongst university staff, who continue to report high levels of stress and burnout. A recent comprehensive survey of Australian university employees found that between 2020 and 2024, almost 73% of academics and professionals reported poor working conditions, and 66% reported burnout, in addition to high levels of stress and anxiety (University of South Australia, 2024). The survey gathered responses from almost 6200 university professional and academic staff across all Australian states and territories between 2020 and 2023. Together, these studies indicate a sector "facing serious problems that need addressing" (University of South Australia, 2024), plagued by high stress, exhaustion, and relentless work pressures.

Mindfulness-Based Interventions (MBIs) are widely recognised for their numerous benefits, including better mental health and improved overall wellbeing in general (Becker et al., 2020; Frank et al., 2015; Juberg et al., 2019; Klingbeil & Renshaw, 2018). Some MBIs have been found to be helpful in mitigating stress specifically amongst educators, such as school teachers and academics (Hwang et al., 2017; Lomas et al., 2019; Marais et al., 2020), and others have been integrated into general education settings (Meiklejohn et al., 2012; Roeser et al., 2013). Together, the evidence points to the role MBIs play in reducing anxiety, stress and burnout. I now turn to the practice

of mindfulness, which has been shown to promote focus, calm, present-mindedness and resilience in work and teaching.

1.3   Mindfulness, resilience, and academics

Mindfulness and resilience-based interventions for university staff and academics are increasingly common, yet many fail to address the unique challenges faced by academics. A key challenge is the limited time available to academics and the impractical length of mindfulness-based interventions. The interventions for academics that I reviewed in this study (see Table 2.1) are predominantly adapted from pre-existing interventions that have been run with professionals, such as doctors or health professionals. None of the reviewed interventions incorporated design concessions for academics' time poverty. By time poverty, I mean the impact of heavy administrative, teaching and research workloads (Johnson et al., 2019; Wray & Kinman, 2020) in an output-orientated work culture that affords academics little time for health and wellbeing. This is particularly so for lengthy gold-standard (Bravo et al., 2019) interventions, such as the leading Mindfulness-Based Stress Reduction (MBSR), which lasts for many weeks and has numerous daily practices.
Time poverty is directly related to intervention attendance or lack thereof, and is therefore a significant barrier to academics' participation in and adherence to mindfulness and resilience exercises (Hyland, 2014).

Whilst shorter mindfulness-based interventions that require fewer weeks attendance are available (see Chapter 2), they can often be *practice intense,* requiring hours of meditation practice, additional journaling and homework after class. This can be a barrier for time-poor scholars. Similarly, briefer mindfulness-only (non-resilience-focused) interventions have been created for academics (Marais et al., 2020). These interventions are often based on variations of MBSR, and can vary enormously in duration, content and efficacy, many of which do not accommodate participants experiencing time-poverty issues. Few of the briefer interventions for academics,

however, have explicitly focused on Resilience-enhancement, which has been deemed important for improving academic wellbeing (Hegney et al., 2021)

Although there is a small number of MRBis that have been conducted with academics (see Chapter 2), none that I have discovered through extensive searching, have been purposely designed for this group. This is important because academics have specialised jobs that require adequate resourcing, such as time, funding, technology and collegial/managerial (Johnson et al., 2019; Kelly, 2017; Kinman & Jones, 2008).

There is growing evidence that more contextualised interventions can better meet the needs of diverse populations and groups and therefore can be more effective for them (Craig et al., 2008; Duggleby & Williams, 2016; Galante et al., 2018). This opens space for contextualising mindfulness-based interventions that incorporate Resilience-enhancement practices to better serve the needs of individual participants, particularly those who are time-poor and overworked. A contextualised MRBi is more fit-for-purpose and can assist academics in coping with the unique challenges they face. The next section explains why.

1.4   The importance of intervention contextualisation

Research shows that contextualising interventions is crucial for their effectiveness, and for participants to perceive them as successful (Craig et al., 2008; Duggleby & Williams, 2016; Fraser & Galinsky, 2010; Michie et al., 2011). Their effectiveness is attributed to content, practices and messaging that better address the needs of a specific population and their context (Spears et al., 2017). Individuals differ widely in their emotional, physical and psychological profiles, while cultural factors and personal preferences play a significant role in how individuals benefit from and engage with mindfulness programs (Kabat-Zinn, 2015). A contextualised intervention thus avoids the disadvantages of a one-size-fits-all approach, that reflect many of the existing programs (see Section 2.4.1).

1.4.1 Defining contextualisation for my study

To define contextualisation in my study, I draw on the notion of *contextual adaptation* (Fraser & Galinsky, 2010), which refers to the practice of altering the design and content of an intervention to improve its relevance to a population and its context. Incorporating contextualisation into intervention design and its practices emphasises the importance of *the context in which interventions occur,* which may be defined by factors such as sociodemographic characteristics, or location and place (Fraser & Galinsky, 2010). My study adopted a hierarchical structure to contextualisation, which means that it includes tailoring.

The term tailoring falls under the broader hierarchy of contextualisation and is defined as the process of customising intervention information to select characteristics that suit each person (Ryan & Lauver, 2002). In the context of program design, tailoring refers to any combination of change strategies intended to reach one specific person to match the characteristics that are unique to that person and related to their outcome of interest, such as increasing mindfulness (Kreuter & Skinner, 2000). Tailoring within contextualised interventions is important for achieving better adherence and retention (Hyland, 2014). While both the practitioner and the intervention developer can do tailoring, only the academics in the PG phase of my study tailored their mindfulness practices. My study extends Ryan and Lauver's (2002) definition by offering three specific ways in which MRBi participants could tailor their mindfulness-resilience practices, by altering the: duration of their practice; location, timing and ways of practising; and finding new ways of being mindful and/or mixing anchors during practice and sharing insights (Figure 1.1).

Through tailoring, individuals can engage in evidence-based mindfulness practices and then choose or change aspects that better suit their needs and preferences. For example, instead of focusing concentration on their breath, practitioners might prefer to focus on their stomach rising or their feet making contact with the floor. Such flexibility can better support specific populations, particularly those with histories of trauma. Individuals who have experienced trauma frequently participate in

interventions (Treleaven, 2018), and often require modifications to standard practices to avoid triggering distress, to help them feel safe and comfortable, and to better align with their personal preferences or health needs (Hatfield et al., 2023). Primarily because of their flexibility, trauma-informed mindfulness approaches informed tailoring in my study (see Chapter 2). Such an approach works well for the wider population because it enhances the efficacy of mindfulness interventions and encourages the integration of mindfulness practices into everyday life and longer-term commitment. By acknowledging and addressing the unique needs of each participant, contextualised interventions featuring tailored mindfulness practices offer a more effective and inclusive means of promoting wellbeing within diverse cohorts. Figure 1.1 shows the concepts of contextualisation (Fraser & Galinsky, 2010), and tailoring (Ryan & Lauver, 2002), as adapted by the participants in Phase 3 PG.

Figure 1.1   Contextualisation and tailoring in the MRBi Phase 3

Contextualisation

(* done by the researcher)

Adapting the MRBi to improve its relevance for participants' contexts

(Fraser & Galinsky, 2010).

Tailoring

(* done by the pilot participants in the MRBi pilot phase - Phase 3)

Tailoring concept adapted from Ryan and Lauver (2002) as a process of customising intervention information to match the select characteristics of each person.

MRBI Participants tailored the MMR practices to custom fit them in three distinct ways:

1. Altering the duration of practice
2. Altering the location, timing and ways of practising
3. Finding new and unique ways of being mindful and/or mix anchors during practice and sharing insights with the group

Despite the increase in contextualised mindfulness interventions designed to meet diverse and complex needs (see Table 2.1), few address the specific needs of busy academics. Of those that do, many are based on existing generalised mindfulness interventions, and are not, therefore, been specifically contextualised for academics. Moreover, none of these interventions were designed to enhance both mindfulness and resilience in academics, and instead, focus solely on mindfulness. This is the gap my research addresses. The intervention needed to be acceptable to and feasible for academics from a range of disciplines to engage. The intention was to design an intervention that accommodated the specific challenges faced by academics and generate evidence-based practices that directly address them, rather than adapt an existing intervention.

1.4.2 The increase in online meditation interventions

The number of online meditation programs and interventions has been increasing over the past ten years, largely due to improved streaming internet access and advancements in digital-based technology (Sommers-Spijkerman et al., 2021). These programs were somewhat rudimentary initially, comprising basic pre-recorded audio and video sessions. More recently, advances in technology and growing awareness of mental health issues have contributed to more sophisticated and increasingly evidence-based online mindfulness offerings (Torous et al., 2020). These programs are becoming more popular because of their ability to provide wide-scale solutions to many individuals at convenient times (Torous et al., 2020). The past decade alone has seen an exponential increase in the popularity of online meditation programs (Sommers-Spijkerman et al., 2021). This has been driven in part by the escalating stress levels in modern society, along with the COVID-19 pandemic, which accelerated the need for accessible and affordable wellbeing interventions. As a result, interventions delivered online offer convenience, flexibility, and accessibility to practitioners, and cater to the needs of busy individuals who have challenging schedules.

Online interventions often incorporate evidence-based practices that feature personalised and interactive elements (Jayawardene et al., 2017), representing a convenient resource for maintaining mental health (Sommers-Spijkerman et al., 2021). Accessibility and convenience have been enhanced by smart phones and devices, which can stream online interventions, thus reducing social, geographical and monetary barriers (Flett et al., 2019, as cited in Cavanagh et al., 2018, p. 1). The integration of community support or communities of practice with real-time comments or chat functions (Jayewardene et al., 2017) further enhances the effectiveness and reach of online interventions, particularly for time-poor individuals. Despite their potential for enhancing mental health in convenient and flexible ways, there is a need for systemic change in academic workplaces and practices.

1.5 The need for systemic change and mindfulness interventions

The literature on academic wellbeing shows that whilst current wellbeing strategies are welcomed and often beneficial, they are not sufficient on their own, nor are they a cure-all (Jayman et al., 2022). More comprehensive and nuanced interventions (Lomas et al., 2017) are needed, as well as drastic systematic change within universities (Brewster et al., 2022; Carnegie et al., 2022). Although beyond the scope of my research, future efforts could focus on reducing workloads and job demands, improving job security, and fostering a wellbeing culture that prioritises academics' mental health over neoliberalist rankings and performance metrics. In its national report, the Australian Government's Department of Education (Department of Education, 2024) highlighted the importance of improving wellbeing and workplace conditions in universities to create a more productive and healthier environment for academics. Whilst many universities in English-speaking countries like Australia are increasingly recognising and are willing to address this situation (Jayman et al., 2022), significant challenges remain. Ongoing efforts are required to ensure a sustainable and supportive work environment for academics.

Well-designed mindfulness and resilience interventions and other evidence-based wellbeing programs for academics have been developed (Fetherston et al., 2021), yet the contemporary situation underscores the need for *both* systemic change *and* more comprehensive and contextualised interventions that are specifically designed for this cohort. Prioritising the mental health, job security and wellbeing of university staff is essential, especially in light of government recommendations (Department of Education, 2024) that emphasised the importance of maintaining a healthy and productive academic environment.

While mindfulness interventions are helpful, they are *not a panacea* for the systemic issues facing the university sector (Coonan, 2022; Lemon, 2021; Wray & Kinman, 2020), such as workload pressures, cost-cutting measures, email overload, and time poverty. In lieu of systemic change, more comprehensive and nuanced interventions are needed, and without systemic change, the relief provided by existing interventions could be compromised (Jayman et al., 2022). Change to the sector, however, will take time. In the meantime, prioritisation must be given to the development of evidence-based, nuanced and effective wellbeing interventions.

Both mindfulness and resilience-enhancement practices offer relief from the challenges facing academics. The efficacy of these practices, however, depends upon their design, duration, and whether they resonate with academics. My research is driven by a commitment to discovering ways of contextualising an effective intervention to help academics manage adversity within the workplace. The aim of my study is to rigorously develop and enhance the design of a MBI that explicitly incorporates resilience-building elements that are often secondary in or by-products of existing interventions.

Drawing on evidence-based practices and a robust framework of intervention design applied to an AR methodology, my research endeavours to custom-design and pilot test a contextualised intervention that is theoretically robust and practically viable. My study seeks to bridge the gap between theory and practice by integrating insights from empirical studies and expert interviews and developing a holistic, evidence-based effective intervention for enhancing mindfulness and resilience in academics.

The rationale for the research is underscored by increasing rates of mental ill health amongst academics (see Chapter 2).

1.6 Study approach and Research Questions

My research study aimed to investigate ways to design and create an MRBi for busy academics by exploring approaches to contextualising intervention practices, design and delivery. The goal was to create a prototyped intervention and test it in a pilot study. Participants in the pilot were invited to undertake pre-and post-intervention surveys that measured their levels of mindfulness and resilience. Section 1.7.1 outlines the research scope and limitations, and Section 1.7.2 articulates the Research Questions that guided my study.

1.6.1 Research scope and limitations

The study was primarily concerned with discovering ways of developing and contextualising an effective MRBi for busy academics. I used a mixed method, three phase AR approach to developing the intervention, which involved the active engagement of academics throughout the process to assist in contextualising and tailoring the MRBi. The intervention was intended to be used holistically, not just in academic work settings, but did not seek to address clinical populations with specific medical or psychological conditions, for reasons of safety. The investigation was designed to be online and context-specific, focusing on practical contextualisation to provide a holistic offering to busy scholars. Of primary concern in the Research Questions was the investigation of ways to design and contextualise my MRBi to meet participants' needs and expectations whilst rigorously measuring the effect of the intervention.

1.6.2 Research Questions

My research aimed to investigate what was needed to design an effective MRBi to suit busy and time-poor academics who may be novice meditators, that is, unfamiliar with contemplative practices. The purpose was to discover the impact of the intervention on its academic participants.

The Research Questions that guided my study were:

Q 1.   In what ways can a custom-designed online MRBi be contextualised to suit academics and their work?

Q 2.   What are the effects (if any) of the intervention on the academics' mindfulness and resilience?

1.7   Methodological approach and key concepts

This section first overviews the methodological approach adopted in my study, which is described in more detail in Chapter 3. It then identifies the key abbreviations used in the dissertation and defines the key concepts of mindfulness and resilience that background the study.

1.7.1 Methodological approach

The project utilised AR Reflective Cycles in tandem with a Behaviour Change Framework (BCF) to drive the intervention development across the three research phases. AR served as a rigorous research methodology for refining the prototyped materials and contextualised content of the intervention, allowing for cycles of evaluation, feedback, and iterative refinement of the intervention. The iterative process fostered continuous improvement of the intervention, as real-time

adjustments based on participant feedback and changing needs were made across the research phases. The approach effectively contextualised the intervention content to be both relevant to and suit the unique needs of the participants. The BCF provided an overarching framework, process and staged tasks that guided the intervention development and helped to set clear goals and objectives and drive the development process in a logical and rigorous manner.

The study employed a mixed-method approach to AR to enhance the depth and breadth of the research across three distinct phases of fieldwork and intervention development. The project encompassed an expert interview phase, a working group (WG) phase and a pilot intervention phase, which are detailed respectively in Chapters 4, 5 and 6. The three phases generated data to guide the contextualisation of the online intervention. The collated data were thematically analysed, from which overarching themes emerged. These themes addressed the Research Questions, particularly Q 1. Qualitative methods involved semi-structured interviews during the expert phase, and discussion groups during the WG and pilot intervention phases.

The pilot phase used validated tools pre-and post-intervention to quantitatively evaluate its impact on mindfulness (Five Facet Mindfulness Scale- FFMQ) and resilience (Connor-Davidson Resilience Scale-2 – CD-RISC2). The results of these surveys are discussed in Chapter 6. Integrating qualitative and quantitative methods enabled comprehensive and detailed analysis of the dataset, the outcomes of which addressed the Research Questions. Framing the research were the key concepts of mindfulness and resilience-enhancement.

1.7.2 Mindfulness

Mindfulness has a rich history that stems from ancient Eastern traditions like Buddhism (Bush, 2011; Hassed, 2021; Landau, 2017; Leggett, 2022), where it was initially practised as a form of meditation for spiritual enlightenment. Mindfulness is also a key component of other religions, and spiritual practices like yoga (Kabat-Zinn, 2003b) During the latter part of the 20th century, mindfulness gained prominence in

Western Countries, notably through Professor Jon Kabat-Zinn's development of Mindfulness-Based Stress Reduction (MBSR), which secularised the practice for non-Buddhists and focused on stress reduction and wellbeing (Kabat-Zinn, 1996, 2003a). This development of the MBSR led to the emergence of various other mindfulness-based interventions such as Mindfulness-Based Cognitive Therapy (MBCT), Dialectical Behaviour Therapy (DBT), and Acceptance and Commitment Therapy (ACT) (Apolinário-Hagen et al., 2020), each tailored for specific therapeutic purposes. These evidence-based interventions have since been widely adopted in clinical settings, offering effective tools for reducing stress, managing emotions, enhancing psychological flexibility, and preventing depression relapse, among other applications. In the 21st Century, mindfulness-based interventions and offerings are now well-established evidence-based solutions (Burton et al., 2017; Goddard & Kenny, 2016; Klingbeil & Renshaw, 2018; Visted et al., 2015) found in a wide array of disciplines ranging from psychology, medicine, education, and other domains, with the sole aim of promoting mental and emotional wellbeing.

Mindfulness meditation has been defined in a variety of ways. The most frequently used is Kabat-Zinn's (1994) definition of mindfulness as "the ability, moment by moment, to pay focused attention, to one's experience of the present, without judgment" (p. 12). Mindfulness is understood both as a trait and a state.

As a trait, mindfulness is a natural occurrence in and inherent capacity of human beings (Brown & Ryan, 2003; Brown et al., 2007; Kabat-Zinn, 2003; Mesmer-Magnus et al., 2017; Thompson et al., 2011). As such, mindfulness varies in strength from person to person (Brown et al., 2007; Glomb et al., 2011). Trait mindfulness refers to a person's baseline of mindfulness, which typically comprises five facets (Mesmer-Magnus et al., 2017), two of which are awareness and focused attention. Trait mindfulness can be enhanced and developed (Bajaj & Pande, 2016; Kiken et al., 2015) through practice and mindfulness interventions; which in turn, enables the development and enhancement of states of mindfulness.

Mindfulness has typically been conceptualised solely as a state (Jamieson & Tuckey, 2017), a "state of consciousness achieved through meditation" (Conze, 1956, as cited

in Mesmer-Magnus et al., 2017, p. 81). For my project, state mindfulness refers to the extent to which an individual is currently aware of and paying attention to stimuli occurring in the present (Brown & Ryan, 2003; Jamieson & Tuckey, 2017). Similarly to trait mindfulness, there is substantial variance in levels of state mindfulness both "within" and "between" individuals (Glomb et al., 2011; Jamieson & Tuckey, 2017; Mesmer-Magnus et al., 2017). This infers that, in untrained minds, mindfulness is often fleeting and momentary. State mindfulness, or mindful states, are actively altered and enhanced by meditation (Jamieson & Tuckey, 2017), contemplative practice, and mindfulness Interventions (Brown & Ryan, 2003; de Bruin et al., 2015; Kiken et al., 2015; Parcover et al., 2018).

1.7.3 Resilience

Definitions of resilience are wide-ranging, covering a range of contexts and disciplines and resulting in a lack clarity around its meaning (Davoudi et al., 2012; Jackson et al., 2007; Masten, 2001). Many definitions, however, share a focus in the domain of Human Service Professionals (primarily high school teachers, nurses and other health professionals), in that, similarly to academics, these professionals work in stressful, complex environments and they serve humankind in varying ways. In this context, resilience is predominantly defined in one of two ways: bouncing back or bouncing forward. Bouncing back implies that individuals return to their previous state, *relatively unchanged* (Davoudi et al., 2012), after exposure to trauma or challenging events. This interpretation is articulated as "the ability to overcome adversity, and be successful in spite of exposure to high risk" (Fraser et al., 1999, as cited in Greene et al., 2004, p. 76). A further interpretation of bouncing back refers to a "psychological capital approach, as an ability to bounce back from problems and positively adapt to accept and experience challenging situations" (Luthans et al., 2007, as cited in Priyatama et al., 2018, p. 63). More recently, Masten (2016) claims that resilience is more dynamic, and can be understood as involving a changed state for the individuals who use it. This concept of a changed state of being has led to the definition of

resilience as *bouncing forward*, which suggests that individuals

becoming altered and somewhat empowered during the resilience utilisation process.

The bounce forward interpretation has been adopted in my research. In this
thesis, therefore, resilience is defined as arising from exposure to adversity and
the subsequent arising of positive adaptation to challenge (Fletcher & Sarkar, 2013).
Resilience is required to be able to respond to challenges that (Robertson et al., 2015)
range from everyday annoyances to significant and life-changing events (Allison, 2011;
Davydov et al., 2010; Fletcher & Sarkar, 2013; Robertson et al., 2015).

1.7.4 Resilience as trait and process

My study conceptualises resilience as being both a trait that humans are born with,
and also a dynamic evolving process that changes over time (Fletcher & Sarkar, 2013;
Robertson et al., 2015; Siambabala et al., 2011). First, trait resilience considers all
individuals as born with a starting point of resilience (Allison, 2011), as part of the
operation of basic inherent human systems of adaptation (Masten, 2011).
Resilience is also a cluster of human characteristics (Grant & Kinman, 2013; Sims-
Schouten & Edwards, 2016), such as optimism and reflection, that form resilience.
Evidence suggests that this cluster of characteristics have a protective effect from
potential negative stressors (Connor & Davidson, 2003; Fletcher & Sarkar, 2013),
leaving one changed/altered (Grant & Kinman, 2013; Sims-Schouten & Edwards, 2016).
Trait resilience is underpinned by the ability of humans to adapt to their circumstances
using inherent character traits (Borucka and Ostaszewski 2008, as cited in McDermid et
al., 2016), and a range of coping strategies.

Second, resilience as a process is often referred to as *being dynamic* (Fletcher & Sarkar,
2013; Robertson et al., 2015; Sood et al., 2011). This means that resilience will morph
and change dynamically over an individual's lifespan (Robertson et al., 2015; Windle,
2011). Events in individuals' lives, moreover, will either compromise or build upon
levels of trait resilience (Allison, 2011; Egeland et al., 1993; Robertson et al., 2015)
in a process-driven way. The process works through lived experience, in which

humans adjust to changing circumstances (both good and bad, minor and severe) and learn from the exposure to them, increasing or decreasing levels of resilience along the way. This process has been likened to fundamental human development (Siambabala et al., 2011).

Resilience can be enhanced (Fletcher & Sarkar, 2013; Robertson et al., 2015) to build on the trait levels each individual already possesses. In learning to be more resilient, individuals take positive action in a new and changed reality that frequently focuses on effective planning, positive self-talk, recovery tactics, and prevention strategies (Fletcher & Sarkar, 2013). Through the dynamic process of enhancing resilience, individuals learn/draw on a range of strategies to deal with a multitude of difficult and challenging mental struggles and unpleasant emotions (Galli & Vealey, 2008). Enhanced resilience is not simply a *coping mechanism*, which is a different construct (Campbell-Sills et al., 2006; Fletcher & Sarkar, 2013). Coping can be seen as just getting by, whereas employing resilience is seen as thriving, by doing what is needed now to deliver better outcomes now and possibly into the future.

1.7.5 Resilience enhancement

Research shows that resilience can be practised and enhanced (Fletcher & Sarkar, 2013; Robertson et al., 2015) in two distinct ways: through mindfulness practices, and through specific resilience-building strategies. First, undertaking regular mindfulness practices fosters resilience by promoting present-moment awareness, reducing stress, and enhancing emotional regulation, thereby creating a buffering effect from adversity (O'Connor et al., 2023). As individuals continue to practise mindfulness, they increasingly discover a greater capacity to manage adversity, recover from challenges, and maintain a more balanced perspective. From this perspective, improving resilience is a by-product (Bajaj & Pande, 2016; Neumann & Tillott, 2022; O'Connor et al., 2023). Second, explicitly focusing on evidence-based, dedicated resilience-enhancing practices within mindfulness interventions improves

trait resilience. It is this second approach that is adopted in my study and I explain the reasons for this in the following section..

1.7.6 Resilience-enhancement interventions

Personal resilience-enhancement involves *deepening the capacity* to recover from adversity and thrive in the face of challenge (Grant & Kinman, 2013; Jackson et al., 2007; Joyce et al., 2018; Robertson et al., 2015). Resilience interventions have evolved over decades, drawing on early psychological theories on ego resilience (Fletcher & Sarkar, 2013), developmental psychology studies on children's resilience (Masten, 2011), and the shift towards positive psychology (Fletcher & Sarkar, 2013). Such interventions place emphasis on personal strengths and personal growth. Various resilience interventions have been developed, incorporating cognitive-behavioural techniques, stress management skills, and techniques in problem-solving and better emotional regulation. Currently, there is no one dominant, universally regarded resilience-enhancing intervention.

The resilience-enhancing practices embedded in my intervention are influenced by Baker et al. (2021), who created a skills-based model of personal resilience-enhancement. This model (Figure 1.2) has been theoretically derived and developed from research insights in academic and clinical psychology. The model features three inner rings of emotional resilience, resilient thinking, and balance and recovery (Baker et al., 2021, p. 464), which inspired the resilience practices in my research.

Baker et al.'s focused and intentional approach to resilience-enhancement ensures that resilience is not an incidental benefit, but a central, emphasised consequence and outcome of my intervention. By integrating targeted exercises inspired by the model, the practices developed in my intervention emphasise generating resilient and flexible thinking via reflective journaling, promote emotional regulation via mindfulness, develop insight and reflection, encourage optimistic thinking through reflection, and focus on increased self-care through mindfulness meditation. Both Baker et al.'s model and my model seek to increase social connection and support from others, the latter

by building an online MRBi community (see Chapter 6). Thus, the resilience-enhancing practices in my study were based on evidence-based methods to help participants develop skills to thrive in stressful and challenging conditions.

Figure 1.2   Skills-based model of personal resilience (Baker et al., 2021, p. 464). Reproduced with permission.

Many existing interventions choose to unintentionally incorporate resilience as a by-product or secondary outcome of mindfulness practices, and or resulting from continued mindfulness practice. In contrast, my study explicitly combines mindfulness and dedicated resilience-enhancement practices, the latter of which has been somewhat overlooked (Husbands & Prescott, 2023). In this way, my intervention design sees participants receiving explicit and comprehensive enhancement in both mindfulness and resilience. This approach maximises the benefits of mindfulness and provides structured support for developing resilience, making it a prominent and deliberate feature of my intervention. This dual focus is designed to equip academics with evidence-based tools to navigate and withstand the pressures of their demanding environments.

1.8   Significance of the study

This study generates new insights into ways to contextualise MRBis for time-poor academics. Its contributions are threefold: deepening knowledge about MRBis; expanding methodological approaches to researching mindfulness and resilience practices; and designing a practical online, streamlined and customised MRBi contextualised for academics. First, my study provides novel insights into the development, contextualisation, and testing of a custom-designed MRBi specifically for university academics. My investigation of the unique stressors and challenges affecting this cohort has informed the development of both the process of designing a MRBi contextualised in academics' specific needs and limited time schedules, and the intervention itself. This process offers a feasible pathway to enhancing academics' wellbeing and mental health, and a conceptual and practical framework that may support other researchers in developing their own contextualised MRBis.

Second, my study introduces a tandem methodological approach that combines AR and a BCF for the iterative development of MRBis. Central to this approach is the active engagement of end-users in AR cycles, to ensure that the MRBi both resonates with and is feasible for them. This is in contrast to existing gold-standard (Bravo et al., 2019) mindfulness-based interventions, such as MBSR, which often overlook the busy schedules and unique stressors faced by its participants (as described in chapter 2). The iterative approach I devised for the study enhances the effectiveness of the intervention and contributes to the paucity of knowledge about MRBis for academics.

Third, this study demonstrates the practicalities of designing and contextualising an effective MRBi in a three-phased iterative process. This practical contribution is significant, because it offers a rigorous, reliable, and practice-based design framework that can be adapted for use in domains and populations beyond the university. The development of a tandem AR-BCF approach to designing, testing and measuring the effectiveness of a MRBi affords research participants the opportunity to engage in the development of content and practices that are feasible and resonant with academics and valuable insights for intervention developers and educators. As such,

my findings show the importance and benefit of designing evidence-based effective, brief mindfulness practices that add no significant extra work for their practitioners, thus enhancing adherence and retention. This design approach from my study is particularly useful to inform intervention design in high-stress environments like academia, where time and opportunity to practise are often limited.

In the longer term, the engagement in regular mindfulness and resilience practice offers improvements in wellbeing beyond the participants in my study, to university academics more broadly. The findings may extend, furthermore, beyond the university to enhance practical understandings of designing holistic MRBis that can be more readily undertaken and adopted into practice by other busy professionals.

1.9   Outline of the thesis

This thesis has seven chapters. In Chapter 1, I outlined the setting for and methodological approach to my study and defined the core concepts. In Chapter 2, I first provide an overview of the extant research on the increase in academic workplace stress and reduced wellbeing, and the history of mindfulness enhancement and subsequent development of dedicated mindfulness-based interventions. I then review resilience-based interventions, their underlying constructs, and development and contextualisation processes. Finally, the review identifies a gap in the literature relating to customised MRBis designed for academics, which suggests that the contextualisation and development process is crucial to an intervention's efficacy and overall success.

Chapter 3 describes the methodological approach and methods used in my study. First, I articulate the conceptual framework framing my approach that highlights the interrelatedness between mindfulness, resilience and overall wellbeing. Second, I describe the research design, which used an in-tandem approach combining AR and a Behaviour Change Framework to drive the intervention development and contextualisation of its core practices and messaging. Third, I support my choice of this methodological approach, by showing its alignment with

the study aims and Research Questions. Finally, I detail the data collection procedure and data analysis process across three iterative research phases.

Study findings from the first research phase, which involved academic experts in mindfulness, resilience and wellbeing, are presented in Chapter 4. I begin the chapter with a brief overview of interviews participants, and the aims of the semi-structured approach taken. I then report the findings of my thematic interview analysis, followed by a discussion locating the findings in recent literature, identifying barriers to intervention participation for novice meditators, notably time-poverty. Finally, I describe how short online interventions and practices embed rigour and traditional wisdom in ways that avoid "McMindfulness" connotations.

In Chapter 5, I report my findings from the second research phase, conducted with a working group (WG) to contextualise the MRBi and its prototyped content. I begin with a brief overview of the six academics who participated in the WG. This is followed by the findings from thematic data analysis, which details the contextualisation needed to refine the MRBi, highlights the importance of a holistic intervention, and identifies the need for a more streamlined approach with deep, immersive intervention practices that embody the present-moment experience for novice meditators.

Findings from the third research phase, the MRBi online pilot are presented in Chapter 6. I first provide an overview of the 15 academic participants and the pilot intervention content. I then present two sets of findings based on qualitative and quantitative analysis. The findings are presented as themes, supported by selected data derived from statistical analysis of the pre-and post-intervention surveys measuring mindfulness and resilience. The statistical data demonstrated the effect of the MRBi on participants in Phase 3. Recommendations for contextualisation emerged from participant feedback surveys and allusions to the ongoing efficacy of the MRBi and its practices arose from analysis of the two-month follow-up post-intervention survey.

Chapter 7 concludes the thesis with my responses showing how the Research Questions framing the study were addressed, the significance of the research, its contribution to knowledge, study limitations and the implications for future research.

I lay out my argument that the study produced a feasible and acceptable online MRBi contextualised for academics who are both novice and experienced meditators. The contextualised MRBi mitigated time poverty issues and offered a holistic online intervention for busy academics. I conclude by identifying the design process and guiding principles formulated from the study.

Chapter 2. Literature review

2.1 Introduction

Chapter 1 introduced the research topic of mindfulness training for academics, identified the Research Questions and outlined the thesis structure. I also provided a background to mindfulness interventions and resilience enhancement that has the potential to offset the challenges and stressors in academic work. The background lays the foundation for this research study. In this chapter, I identify the key themes emerging from my review of the literature relevant to my study. First, I explain the challenges and stressors in academic work in the university sector that create anxiety and mental unwellness for academics. Second, I review the literature on educators who have engaged in mindfulness-only (non-resilience-focused) interventions or practices and the work done with academics undertaking such interventions. I draw on research studies specifically involving academics who attended mindfulness-based-resilience-enhancement interventions and discuss the benefits and limitations of those studies. Third, I review the literature focusing on contextualisation in mindfulness-based interventions and investigate common challenges, such as retention and attrition rates, and those that face novice meditators. This is a growing body of literature, which suggests that brief mindfulness interventions and practices can be equally effective as those of longer duration and that tailoring can support intervention participation and adherence to regular practice. The following section describes the scope of the literature review and search strategies used.

2.1.1 Search scope and strategies

I began with a broad search of published studies investigating mindfulness and resilience-enhancing interventions for academics and teaching staff in higher education. To do this, I used seven online databases: ProQuest, EBSCOhost, APA

PsycINFO, Scopus, PubMed/Medline, SAGE publishing and Google Scholar. In consultation with a UTS Sydney librarian, I identified and tested keywords using Boolean operators to optimise precision and accuracy.

The search terms with Boolean operators included: "mindful?" OR "mindful? intervention" OR "mindfulness-based" OR "mindfulness program") AND (resilien?) OR "resilience program" OR "resilience training" OR "resilience promotion") OR 'intervention" AND ("higher education" OR "faculty" OR "higher education teachers" OR "lecturers" OR "university instructors" OR "academi?" or "academic staff" OR "teaching professionals" OR "college faculty" OR "university faculty" OR "faculty staff".

Studies were included where they were: published research studies, including books and theses; published between January 2012 and May 2024; and in non-English speaking countries. Studies were excluded if they: involved populations outside higher education settings; interventions without a mindfulness or resilience focus; were non-empirical studies such as opinion pieces or abstracts; published before January 2012; written in languages other than English. Additionally, studies focusing exclusively on non-university student populations, non-academic contexts, or intervention types unrelated to mindfulness or resilience were excluded.

The search included quality journals such as *Mindfulness*, *The Lancet*, *The British Medical Journal*, and other scholarly sources. The results of my search are presented in Table 2.1. In these articles, mindfulness and resilience enhancement practices are conceptualised in two distinct ways: interventions that exclusively use mindfulness to build resilience; and mindfulness-based-resilience-enhancement interventions that explicitly weave resilience enhancement practices into mindfulness practices. These conceptualisations will be discussed later in the chapter, but first, I outline the key issues impacting academics working in universities.

2.2   Academic stress and burn out

Significant changes at universities over the past 15 years have played a key role in increasing stress and decreasing wellbeing in academics working in the higher education sector generally (Riva et al., 2020) and those who work in universities in particular (Kelly, 2017; Kinman & Wray, 2014; O'Brien & Guiney, 2018). Indeed, the rates of increased stress and decreased wellbeing in academics are significantly higher than many other professional populations (Singh et al., 2020), and higher education employees, including academics, are more likely to experience mental health issues compared to other professionals (Fernandez et al., 2016; Kinman & Wray, 2014). The definition of academic well-being used in this thesis is derived from a systematic review investigating burnout in academic staff (Watts & Robertson, 2011), and is as follows. Well-being among academic staff refers to their overall mental, social and physical, health within the higher education work environment. This encompasses factors such as work-life balance, job satisfaction and the ability to effectively manage occupational stressors. This same review by Watts and Robertson (2011) highlights that stress and burnout among university teaching staff is a substantial concern, emphasising the importance of strategies to enhance well-being in academic settings.

In this thesis, stress in academic settings refers to the adverse reactions experienced when job demands exceed a person's coping abilities, as defined by Jayman et al., (2022). Factors such as increasing workloads, job insecurity, and the erosion of academic freedom have all been identified as substantial stressors affecting academic staff (Jayman et al., 2022). These challenges underscore the importance of addressing stress to prevent burnout and promoting a healthier academic work environment (Jayman et al., 2022).

Burnout is a term used in my thesis to mean the psychological syndrome resulting from prolonged exposure to work-related stressors, characterised by emotional exhaustion, depersonalisation from the work environment, and reduced personal accomplishment (Urbina-Garcia, 2020). This stress-induced condition is prevalent amongst university academics, as evidenced by a systematic literature review

indicating that the university environment contributes to high levels of stress and burnout, leading to diminished overall well-being (Urbina-Garcia, 2020).

Addressing the well-being of academic staff is essential for fostering a productive and sustainable university sector into the future. This requites wide systemic change such as implementing organisational policies and support systems that mitigate stressors, workload pressures and promote better mental health. Academic stress and burnout are the two of the multifaceted issues that negatively impact academic stress and wellbeing, which are discussed at length as follows.

2.2.1 Academic stress

Universities are increasingly complex and stressful working environments that negatively impact academics' health and wellbeing. Research suggests that academics are working harder than ever before (Jayman et al., 2022), primarily because contemporary universities experience serious limitations in funding and resources (Barkhuizen et al., 2014; Kelly, 2017; McDonough & Lemon, 2018). Neoliberal imperatives in the university sector (Carnegie et al., 2022; Urbina-Garcia, 2020), furthermore, emphasise performance ranking, productivity measurement, and increased institutional competition (Puāwai Collective, 2019). As a result of these workplace challenges and the pressure on research output, academics find it difficult to be recognised as valuable team members and retained in scholarly positions if they do not comply to the intense work performance culture (Jayman et al., 2022).

Research also demonstrates a trend in Australia towards increased commodification in the tertiary education sector (Arthur, 2009). Commodification occurs in various ways, including a substantial rise in administrative tasks and academic workloads, and increased demands for research outcomes (Arthur, 2009; Kelly, 2017; Lemon & McDonough, 2018a). The increased emphasis on administrative and research performativity adds to stress, mental health challenges and wellbeing (Abenavoli et al., 2013; Jayman et al., 2022). Academics are now intensively working in ways unfathomable twenty years ago (Wu, 2022).

The COVID-19 pandemic saw universities reduce staff numbers, which further impacted academic wellbeing (Husbands & Prescott, 2023; Subban et al., 2022). Academics report a less satisfying working environment in part because of excessive work hours (Hegney et al., 2021; Johnson et al., 2019; Morrish, 2019), which impacts lack of work-life balance, reduced physical activity, an over-emphasis on meeting work demands, and high levels of intrusive work-related thoughts (Fetherston et al., 2021). To illustrate, a U.K. study (O'Brien & Guiney, 2018) reported academic stress rates as high as 50%, and noted that at least 40% of academic staff were considering leaving the profession. Rising dissatisfaction together with increased work pressures contribute to increased academic burnout rates.

2.2.2 Academic burnout

Burnout is a serious issue affecting academic staff worldwide (Darbishire et al., 2020). In the past decade, studies estimate burnout rates at 20% of academic staff globally (Korkmaz et al., 2015; Tijdink et al., 2014). Other studies attribute burnout among faculty members to having to balance multiple high-level responsibilities, including research, industry engagement, governance commitments, and teaching obligations (Darbishire et al., 2020). Productivity-related expectations, inflated workloads and increased levels of fatigue and stress, were key factors potentially leading to professional burnout (Subban et al., 2022; Taberner, 2018). For example, a U.S. study involving 869 faculty staff from Big Ten universities reported that academics experienced high workplace stress and suboptimal lifestyles, and burnout was common among faculty (Melnyk et al., 2021). In Australia, evidence suggests that academics are increasingly suffering from workplace-induced burnout (Lee et al., 2022). To reduce burnout levels in university staff, radical change in the academic working environment has been called for (Brewster et al., 2022; Carnegie et al., 2022; Urbina-Garcia, 2020). Although radical change is beyond the scope of my study, it seeks to provide more support for academic staff (Brewster et al., 2022) by contributing to practices that enhance academic wellbeing, irrespective of whether systemic change occurs.

2.3   Mindfulness practices reduce burnout and workplace stress

Research shows that mindfulness practices can effectively reduce burnout and
workplace stress in educators. Workplace stress has become a major occupational risk
factor in all industrialised nations (Hassard et al., 2018). A systematic critical literature
review (Luken & Sammons, 2016) found that 75% of randomised controlled trials
(RCTs) significantly decreased burnout in mindfulness-practising participants, including
teacher educators and health care workers. Other interventions with educators have
shown similar results (Abenavoli et al., 2013; Flook et al., 2013; Jennings, 2016;
Lutovac et al., 2017; Roeser et al., 2013; Wongtongkam et al., 2017). Through
mindfulness practice, university educators can reduce rumination (Gardner & Grose,
2015; Shapiro et al., 2007; Wongtongkam et al., 2017), enhance control over emotions,
reduce worry and develop stronger inner resources (Wongtongkam et al., 2017).
Such benefits serve practitioners well in high stress work environments. To help
mitigate the effects of excessive workplace pressure and reduce academic burnout,
scholars have suggested regular mindfulness practice (Becker et al., 2020; Marais et al.,
2020; Mazorco Salas & Cuenca Botero, 2020; Nash, 2023). To develop and test its
effectiveness, my study trialled a time-efficient mindfulness practice program
that incorporated resilience training.

2.3.1   Incorporating resilience to better cope with adversity

The integration of resilience training with mindfulness practices has gradually emerged
over the past few decades, with greater developments occurring toward the late 20th
and early 21st centuries. A major contributor to its emergence in the late 1970s and
early 1980s was Dr. Jon Kabat-Zinn, who as Professor of Medicine at the University
of Massachusetts Medical School. Kabat-Zinn developed the Mindfulness-Based Stress
Reduction (MBSR) program at the school (Kabat-Zinn, 2011). The MBSR combines
mindfulness meditation techniques, cognitive therapy, and yoga movements to help
individuals manage stress and improve overall wellbeing. Whilst not explicitly focusing

on resilience, the MBSR program laid important groundwork for understanding how mindfulness interventions could potentially enhance psychological resilience by promoting increased stress reduction and emotional regulation (O'Connor et al., 2023)(O'Connor et al., 2023). Since then, researchers and practitioners have further explored the link between mindfulness and resilience. Studies suggest that mindfulness-based interventions

can increase resilience by nurturing adaptive coping strategies and enhancing inner strength, self-efficacy and emotional regulation (Slatyer et al., 2018). Building resilience enables individuals to manage, adapt and negotiate stress more effectively (Grant & Clarke, 2020).

Interest in mindfulness and resilience grew throughout the 2000s and into the 2010s across a range of scholarly domains, including psychology, neuroscience, organisational development and education. Indeed, mindfulness has explicitly been identified as a vital element psychological element crucial for resilience improvement (Rees et al., 2018; Rees et al., 2015). The link between resilience and mindfulness has contributed to increased demand for resilience training (Liu et al., 2022), and the integration of mindfulness practices into resilience training programs is a promising approach to promoting psychological wellbeing as well as resilience to adversity (Slatyer et al., 2018). This has seen a multitude of mindfulness-resilience training interventions utilising a range of formats, durations and settings implemented across diverse clinical and non-clinical domains (Chmitorz et al., 2018). Such studies underpin my approach, which focuses specifically on mindfulness and resilience enhancement for academics.

2.3.2 Educators and mindfulness practices

Research indicates that mindfulness practices can improve educators' wellbeing and enhances their resilience to manage stressful work environments. Whilst only a small number of studies have been conducted with academics, this section draws on research involving other educators, namely schoolteachers. These studies have

shown that *combining mindfulness with a focus on resilience* positively affects the wellbeing of educators and helps them better manage stressful working environments. I recognise this is a different context to Higher education, but nevertheless, I feel that there are some pertinent points worth discussing. A review of this literature follows.

Teacher educators have been shown to benefit significantly from undertaking mindfulness-resilience enhancement (Birchinall et al., 2019; Garner et al., 2018). This is because of its potential to mitigate high-stress work environments (Neumann & Tillott, 2022; Schussler et al., 2018) that help avert burnout (Kangas-Dick & O'Shaughnessy, 2020). A meta-analysis of 29 studies reported that mindfulness-based interventions (MBIs) teachers showed significant promise in increasing mindfulness, reducing psychological distress, enhancing wellbeing and increasing levels of resilience (Klingbeil & Renshaw, 2018). The authors recommended that schools aiming to better support teachers could try mindfulness-based interventions to help improve their wellbeing and resilience.

A systematic review of mindfulness-based interventions (MBIs) involving over 600 educators (Hwang et al., 2017) found that such interventions effectively reduced teacher stress, anxiety, and burnout, and improved teacher wellbeing and resilienc*e*. The authors note, "These improvements were associated with reduced feelings of stress and opened greater possibilities of not reacting automatically in stressful situations but rather to respond in skilful, reflective ways" (p. 39)*.* The claim is that when engaged in integrated mindfulness practice and resilience training interventions, participants develop understanding and insight into ways to bolster their levels of resilience. Such interventions, therefore, hold great promise for reducing burnout rates while enhancing educator wellbeing (Squyres, 2023).

Noteworthy interventions include the Cultivating Awareness and Resilience in Education (CARE for Teachers) program (Jennings et al., 2017), which is a mindfulness-centred professional development initiative to enhance teachers' competencies, and the Inner Resilience Program (IRP) which is a thorough mindfulness-centred intervention (Lantieri et al., 2011; Lantieri et al., 2016). Both studies found that

compared to those on the waitlist, teachers participating in the programs experienced notable reductions in stress and enhancements in mindfulness and resilience.

In the context of higher education, universities must prioritise staff wellbeing by fostering a supportive atmosphere that bolsters academics' resilience and wellbeing, which is required to succeed in academia (Husbands & Prescott, 2023) because they need to maintain a commitment to quality teaching practices despite ongoing workplace difficulties and stressful conditions (Hwang et al., 2017). While research shows that regular mindfulness practice significantly reduces academic stress (Rich et al., 2021), only a few studies examine how academics' resilience can be enhanced with mindfulness practices. I review these studies next, with reference to the literature about the link between mindfulness and reduced stress.

2.3.3   Improving academic wellbeing with mindfulness and resilience interventions

Despite their small number, mindfulness-based interventions that focus on resilience enhancement conducted with university academics reveal positive benefits for participants. This is evidenced in the nine studies that emerged from my literature search, in which mindfulness-based and resilience enhancement practice provided benefits to academics' physical, mental and emotional states (see Table 2.1). The studies included seven located in the USA, one in Australia, and one in the Czech Republic, all focusing on university academics. A majority of the studies were conducted within medical faculties. Participant numbers varied across studies, with interventions delivered predominantly face-to-face, although some used a blended online and in-person format. Over half of the interventions were contextualised to some degree, though not specifically for academics.

The nine studies explored the benefits for academics from integrating mindfulness practices for resilience enhancement, which range from better emotional stability, more mindful behaviour and higher tolerance for adversity—enhanced resilience—in academic workplaces. For example, Long et al. (2023) conducted paired t-test analysis

and found improvements in academics' self-efficacy, anxiety, burnout and resilience. The study's participants provided feedback reporting higher personal levels of empathy and improved self-regulation skills and emotional balance. Similar benefits were noted by Lacková et al. (2023). Academics in their study reported feeling calmer, being able to handle complex and challenging situations more effectively and acknowledged that they felt better equipped with skills that could be applied in high-pressure academic work settings. Noticing better self-regulation, increased emotional stability and greater calmness in everyday situations post-intervention was a common thread for academics in other studies (Moffatt-Bruce et al., 2019; Raddon, 2023; Sood et al., 2014).

Participants in an Australian study (Hegney et al., 2021) observed that they were able to transfer coping skills learned in the intervention to their classroom and home environments. Skills transferability indicates that the intervention had a broader impact on academics, extending beyond work to the home context.

Six of the nine studies (67%) were contextualised for an academic population, albeit in minor ways, which opens space for my research. The studies used varying interventions to enhance resilience and approaches to measure its outcomes and efficacy. Just over half (55%) of the interventions in these studies incorporated focused resilience-enhancing practices (Aggarwal et al., 2017; Hegney et al., 2021; Long et al., 2023; Sharma et al., 2014; Sood et al., 2014). Interventions in the remaining studies (Lacková et al., 2023; Moffatt-Bruce et al., 2019; Raddon, 2023; Rahmat, 2024) incorporated practices that enhanced resilience *via the practice of mindfulness*. In other words, resilience emerged from participants being able to better regulate emotions, increase equanimity and relaxation as a result of the extended practice of mindfulness.

Three studies conducted pre- and post-tests to measure the efficacy of their intervention in relation to participant levels of *mindfulness and resilience* (Long et al., 2023; Sharma et al., 2014; Sood et al., 2014). Four studies did not quantitatively evaluate participant levels of mindfulness or resilience (Aggarwal et al., 2017; Hegney et al., 2021; Lacková et al., 2023; Raddon, 2023). One study measured participants'

levels of mindfulness and compassion in separate scales (Moffat-Bruce et al, 2019). One of the articles designed but did not trial an intervention (Rahmat, 2024). In contrast to most of these studies, I contextualised the intervention for an academic cohort, embedded resilience-enhancing practices into mindfulness practices, and used validated tools to measure participants' pre- and post-intervention levels of mindfulness and resilience. I identified other limitations in the studies in Table 2.1.

2.3.4 Challenges in mindfulness and resilience interventions for academics

Despite demonstrating favourable outcomes, the studies were impacted by participant attrition and retention, problematic program duration, and the lack of contextualisation for an academic cohort.

2.3.4.1   Attrition

Participant attrition was an issue for three of the studies. Attrition in Sood et al.'s (2014) 12-week study with 26 participants significantly impacted the outcomes, while a 29% attrition rate in Aggarwal et al.'s (2017) 12-week intervention saw participants' enthusiasm for and attendance at the weekly mindfulness booster sessions, particularly the morning sessions. It is not, however, clear whether resident physicians or faculty dropped out. Similarly, the attrition rate in Moffatt-Bruce et al.'s (2019) study was 25% of the 50 participants, which meant not all post-intervention surveys were completed, reducing the accuracy of data-gathering and evaluation. High rates of attrition of academics in *mindfulness-only* (non-resilience-focused) interventions are not unusual, primarily because of practice duration. For example, a RCT of an abridged version of the gold-standard Mindfulness-Based Cognitive Behaviour Therapy (MCBT) intervention for scholars based in the U.K. (Cavanagh et al., 2018) had a 40% attrition rate, despite requiring only 10-minute daily practices over two weeks. In a similar attempt to reduce attrition, an earlier study (Russ et al., 2017) halved the duration of an MBSR intervention to four weeks and paid participants a stipend of US$350 on completion, which resulted in a 10% drop out rate.

2.3.4.2   Retention strategies

High attrition rates of academics in mindfulness interventions may be attributed to program duration and time needed for daily practice (Becker et al., 2020; Cavanagh et al., 2018). On the surface, therefore, shortening interventions may appear to be a way to increase participant retention. To this end, an Australian study by a Monash University research team (Koncz et al., 2016) created and tested the Stress Release Program (SRP). This was a six-week intervention involving weekly 60-minute sessions during worktime over five weeks, a half-day introductory session, and daily 5-minute practice and mindfulness 'pauses' throughout the day. While the study found that compared to the control group, academics in the test group reduced their distress and enhanced their wellbeing and engagement in the workplace, participant retention remained problematic at 50%.

Other non-resilience-focused mindfulness-based interventions conducted with academics show similar issues with retention primarily because the time commitment is significant. For example, the MBSR requires 30 hours of class-based training (Koncz et al., 2016). In an attempt to increase retention, Juberg et al. (2019) shortened a version of the MBCT to weekly two-hour sessions for eight weeks to accommodate 17 academics in a large U.S. public university. Each session incorporated mindfulness meditations ranging from 20 to 40 minutes and home-based daily practices ranging from 10 to 40 minutes. Despite the abridgement, time-poor participants were overwhelmed by the combined time commitment at work and home.

Table 2.1   MRBi with academics

Citation	Location Academic participants	Delivery mode Intervention used	Contextualised in any way	Brief practices used?
(Sood et al., 2014) *Stress Management and Resiliency Training (SMART) program among department of radiology faculty: A pilot randomized clinical trial*	*Minnesota, U.S.* ✓ 26 faculty members radiologists (unclear how many academics)	*Face-to-face* Stress Management and Resiliency Training (SMART) Single 90-minute teaching session -with x 2 follow-up phone calls. Intervention lasts for 12 weeks.	Yes. Contextualised and adapted from an existing 2011 intervention for doctors. This study created a condensed version of the original program that can be mastered in one or two short sessions and does not require extensive sitting practice	Yes. Brief deep diaphragmatic breathing meditation was used for 5–15 minutes, once or twice daily
(Sharma et al., 2014) *Bibliotherapy to decrease stress and anxiety and increase resilience and mindfulness: A pilot trial*	*Minnesota, U.S.* ✓ 37 staff from large academic medical centre (unclear how many were academics-some listed as nurses and doctors and an audiologist)	*In published form only* Self-directed -written based materials only based on the SMART program (Sood et al., 2014)	Yes. A 447-page book and three study handouts were provided to participants. Written versions created from the original SMART program devised (Sood et al., 2014) (Sood et al., 2014)	Brief self-directed intervention offered, so participants can make it brief
(Aggarwal et al., 2017) *Resident wellness: An intervention to decrease burnout and increase resiliency and happiness*	*New Jersey, U.S.* ✓ 188 resident physicians and faculty in Dept Psychiatry, Academic Medical School (unclear how many academics)	*Face-to-face* Initial 60 min group session followed by weekly boosters face-to-face over the 12-week intervention	Unclear. The authors note that each program and resident was responsible for personalising the impact of the booster exercises impact. No other detail given	Yes. Brief practices excerpted from a companion manual that accompanied the intervention experienced in the booster sessions. Brief reflection journaling also used
(Moffatt-Bruce et al., 2019) *Interventions to reduce burnout and improve resilience: Impact on a health system's outcomes*	Columbus, Ohio, *U.S.* ✓ 50 faculty members and residents in academic medical centre (unclear how many academics)	*Flipped classroom: 4 online modules, 3 hr lecture series, 2 x 7 hrs face-to-face* Mind Body Skills intervention training and discussion sessions. Eight x one-hour group MIM intervention conducted at their workplace, followed by six x one-monthly one-hour booster sessions	Not contextualised. Existing intervention first piloted in 2004 (https://ccts.osu.edu/news/2017/8/mindfulness-motion)	Did not specify.

(Hegney et al., 2021) *Experiences of university employees of the impact of a mindful self-care and resiliency program on their wellbeing*	*Brisbane, Australia* ✓13 academics	*Face-to-face and online: one x 6 hr face-to-face workshop, three x 1.5 hr online follow-up sessions (totalling 10.5 hrs across all sessions)* Mindfulness, Self-Care and Resiliency (MSCR) program (pre-existing intervention)	Yes, it is contextualised from the original intervention designed for nursing cohorts.	Yes. A 3-sigh breathing exercise. No other details mentioned. Other longer exercises like body scans were noted as not suitable for time-poor academics
(Lacková et al., 2023) *Promoting the development of resilience in university teachers through the practice of mindfulness*	*Czech Republic* ✓ 124 academics	*Online or face-to-face* Daily 20-minute practice across eight-week mindfulness-based intervention (name unspecified)	Not specified	Yes. 20-minute practices, although exercises not specified
(Raddon, 2023) *Improving resilience and reducing anxiety, stress, and burnout for faculty members during the COVID-19 pandemic through mindful meditation*	*California, U.S.* ✓ Eight faculty staff	*Self-directed* Daily 10-minute mindful breathing practice conducted across four weeks (details unspecified)	Unspecified whether this was a new or existing intervention or if it was contextualised in any way	Yes. 10-minute practice. Mindful meditation practice involved a breathing meditation, concentrating solely on breath inhalation and exhalation for 10 minutes per day, at least three days a week, over one month
(Long et al., 2023) *Promoting college student and staff wellbeing through a mindfulness-based coping program.*	*Seattle, U.S.* ✓100 academic staff across three campuses of a large university	*Online: 9 hr total course* Be REAL (Resilient Attitudes and Living) Mindfulness-Based CBT program	Yes. Converted from a face-to-face to an online program. Small adaptations including different cohorts, identifying specific cohorts, introducing online break-out rooms, and other engaging online activities. Adapted to either a six-week or a nine-week course	Yes. Several were used in each session according to the intervention curriculum
(Rahmat, 2024) *Compassion-based training for cultivating wellbeing and building resilience in online adjunct faculty*	*California, U.S.* Only program design reported, pilot study not conducted	*Online or face-to-face* Compassion-based program with four core elements: mindful awareness, compassion practices, reflection journaling, and relational action	Yes. Specifically contextualised for adjunct academics -no details on how	Yes. 2 to 5-minute awareness practices, 15-minute mindful walking practices, brief reflective journal practices also included. However, the program offers six 120-minute weekly sessions (12 hrs in total)

2.3.4.3 Time poverty and intervention duration

Time poverty and lengthy intervention durations were noted in three of the studies as problematic for academics (Aggarwal et al., 2017; Hegney et al., 2021; Long et al., 2023). Long et al. (2023) noted that the pre- and post-intervention surveys took between 20 and 30 minutes each to complete and this may have contributed to attrition. Likewise, participants in the Hegney et al. (2021) study struggled to attend the four post-workshop follow-up sessions because of time constraints, and noted that some practices, such as the Body Scan, took too long to complete in the context of busy workloads. The intervention in the Aggarwal et al. (2017) study ran for 12 weeks, and had the highest attrition rate, with cohort failing to engage in booster sessions. The authors attributed this to the lengthy intervention duration.

Studies engaging academics in mindfulness-only (non-resilience-focused) interventions also found that program duration was problematic for participants. Some interventions in these studies were based on the eight-week MBSR (Becker et al., 2020; Marais et al., 2020; Schwind et al., 2022). Despite being the gold standard in mindfulness-based interventions, the MBSR and the MiCBT (Mindfulness Cognitive Behavioural Therapy) may not be suitable for particular populations because of program length and intensity of commitment required (Banerjee et al., 2018; Chapman & Van Gordon, 2018; de Vibe et al., 2018; Huberty et al., 2019; Jamieson & Tuckey, 2017; Lomas et al., 2015; Smith, 2020; van Dam et al., 2018). To illustrate the point, the MBSR involves weekly 90-minute classes for eight weeks, and a six-hour silent retreat at the midpoint. The intervention features basic mindfulness and yoga practices, weekly formal teachings, at least 45 minutes of daily home practice, and daily journaling (Kabat-Zinn, 1996). Interventions can, however, be contextualised to meet the needs of specific time-poor cohorts, such as academics.

2.3.4.4 Contextualisation of studies with academics

Of the nine studies in Table 2.1, six (67%) were designed as contextualised interventions to accommodate the needs of their academic participants. While these interventions were based on pre-existing ones for other professional

cohorts, they were modified for the new context. For example, Sood et al. (2014) contextualised the Stress Management and Resiliency Training (SMART) intervention that was previously designed for medical doctors (Sood et al., 2011). In both of the Sood et al. studies, the researchers abbreviated and contextualised the SMART program by changing the initial 90-minute group training sessions to one-on-one training (2011) and group sessions (2014), and replacing some sitting practices with deep diaphragmatic breathing exercises of five to fifteen minutes duration, to be done by participants once or twice a day. Both studies were RCTs, which ran for eight weeks (2011) and 12 weeks (2014). The authors contextualised the intervention by converting face-to-face training into a 447-page booklet version.

In their study with academics, Hegney et al. (2021) adapted a MSCR-based intervention previously designed for nurses. The authors, however, noted a number of limitations. For example, the program structure and skills were not contextualised for academics, which "may have created barriers to individual engagement with the program" (p. 535). Specifically, the program components could not be integrated into academics' working schedules, which was exacerbated by the lack of time for practise. The authors stress that future contextualised programs may require increased flexibility and strategies to address time-related barriers.

Long et al. (2023) adapted an existing face-to-face intervention for online delivery in their study. Modifications made the intervention more interactive and hence more appealing to participants. For example, interactive exercises were created and embedded in the intervention, online break-out rooms were introduced, and academics were clustered into specific cohorts to encourage engagement. Despite not being trialled, the intervention designed by (Rahmat, 2024) for adjunct professors comprised minor adaptations, such as inviting participants to mindfully reflect on a research project or bring mindful awareness and reflection to a faculty collaboration. While the studies summarised in Table 2.1 included an aspect of contextualisation, their interventions were not specifically designed for academics. My study addresses this gap. The next section reviews the literature on contextualisation to support my case.

2.4   Contextualised interventions

Contextualisation represents a strategy for designing interventions to suit academics' specific needs in a setting marked by rising stress and work demands (Johnson et al., 2019; Kinman & Johnson, 2019). As these demands continue to increase (Fetherston et al., 2021), there is growing recognition that non-resilience-focused mindfulness-based interventions fall short because of the highly structured academic calendar, making it difficult to accommodate attendance at lengthy interventions (Juberg et al., 2019). The paucity of studies investigating resilience-focused mindfulness-based interventions contextualised specifically for academics opens space for my study.

2.4.1   Contextualisation assists efficacy

Contextualisation is crucial for intervention effectiveness, because it incorporates strategies to accommodate the needs, cultures and settings of the target population. An example is cultural contextualisation, in which mindfulness practices are modified to resonate with the population's cultural setting and values. As mindfulness-based interventions have grown in number over the past decade (van Dam et al., 2018), and also across populations, there is a need for specialised and context-dependent program designs (Hatfield et al., 2023; Loucks et al., 2022; Proulx et al., 2020; Spears et al., 2017; Wang et al., 2019). It is clear that a one-size-fits-all approach is not ideal (Craig et al., 2018; Galante et al., 2018; Lomas et al., 2015; Power, 2018), and limits program effectiveness, particularly for populations that are difficult to reach (Biggers et al., 2020). How to do this, however, is subject to debate. Some researchers emphasise the importance of the context in which interventions occur (Duggleby & Williams, 2016; Mertler, 2017), while others argue they are more effective if the content focuses on how it feels and resonates to end-users (Biggers et al., 2020). The next section discusses approaches to contextualising interventions.

2.4.2 Contextualisation strategies

The discussion in this section draws on three bodies of knowledge. First, novice meditators, the issues they experience, and why interventions should be contextualised for their needs. Second, abridging interventions and practices to support adherence. Third, practitioner tailoring of mindfulness practices to enhance engagement. My research combines elements of these three strategies for contextualising interventions.

2.4.2.1   Novice meditators

Embarking on a regular mindfulness practice can be transformative, although for novices, starting the practice is often challenging. Novice meditators are those with less than eight weeks of meditation or contemplative practice experience (Lau et al., 2006). The potential to experience frustration at the initial stages frequently leads them to lose hope in the program or their abilities to meditate (Banerjee et al., 2017), and ultimately abandon their practice (Russ et al., 2017). A key issue for novice meditators is maintaining sustained attention during practice sessions. This is because individuals new to mindfulness meditation frequently struggle with a wandering mind (Russ et al., 2017), which can lead to frustration and self-doubt. Novices may also experience unpleasant or difficult emotions during practice, such as restlessness, tiredness, anger, or frustration (Hunt et al., 2020). Hegney et al. (2021) noted that in their study, novice meditators found some mindfulness practices difficult because they felt they were not relaxed enough, which led to frustration. They also found it difficult to prioritise and commit to regular practice, which is common for novice meditators (de Bruin et al., 2015). Contextualised interventions incorporate strategies to address attrition in novices.

2.4.2.2   Addressing novice attrition

Novice meditators who experience difficulty when starting out, such as struggling to sustain focus, can find it harder to restart a practice later because of negative associations with their first attempt that are difficult to dispel (Russ et al., 2017).

Dwelling on past experience is problematic because it hinders the present-moment focus that mindfulness meditation aims to cultivate. Contextualisation can contribute to novice retention through nuanced messaging and explicit, supportive coaching. Such coaching also encourages individuals to view frustration as a natural part of practice, adding value to the learning journey. None of the studies in Table 2.1 mentioned novice meditators, which made space for incorporating messaging as a key part of the pilot program in my study, described in Chapter 6.

A common concern for novices is the uncertainty around whether they are practising mindfulness meditation correctly. The abstract nature of mindfulness can leave novices questioning their proficiency (Hunt et al., 2020)which can foster feelings of insecurity that obstruct adherence to a regular practice and routine (Banerjee et al., 2018; Sears et al., 2011). Clarifying and demystifying uncertainty is crucial to building confidence and fostering a positive and reassuring relationship between novice meditators and their practice. This is important because evidence suggests that novices who drop out of mindfulness-based interventions (MBIs) may be the ones who would benefit most from mindfulness practice (Crane & Williams, 2010). Novice meditators also often find themselves wrestling with the foundational concepts of meditation (Kabat-Zinn, 2001), such as mindfulness, present moment awareness, and non-attachment (Hunt et al., 2020), which can create barriers (Banerjee et al., 2018) that impede the integration of these principles into daily life. This is illustrated in the study by Hegney et al. (2021), whose participants felt frustrated with practices, found it too difficult or wondered if they were practising correctly. Supportive guidance, therefore, is crucial to assist novice meditators in navigating difficulties that arise in practice and enhance their capacity for regular meditation.

2.4.2.3 Intervention duration

Lengthy interventions have been shown to overwhelm novices and often lead to attrition (Osin & Turilina, 2022). The 12-week mindfulness-resilience intervention in Aggarwal et al.'s study (2017), as previously mentioned, reported the highest participant attrition rate (29%) of the nine studies in Table 2.1. Attrition in the 12-week intervention in Sood et al.'s (2014) study (25% of participants) hampered

data collection and intervention evaluation. Similarly, the time-intensive intervention in Moffatt-Bruce et al.'s study (2019), which spanned 14 hours over two sessions, three hours of discussion, and four online modules, reported an attrition rate of 25%. What seems evident is that contextualising resilience-focused mindfulness-based interventions for time-poor academics is crucial to improve their retention and adherence. A key to contextualisation is shorter interventions and practices.

2.4.2.4   Shorter intervention duration and briefer practices

Shorter mindfulness interventions are becoming more common because of time constraints contributing to attrition rates (Schumer et al., 2018). An abridged MBI contextualised for university students who, similarly to university academics, are time-poor and stressed challenge reported positive outcomes and improvement in overall wellbeing (Nolte et al., 2022). More concise intervention formats can be integrated more readily into academics' daily routines, addressing the link between longer programs and higher attrition rates (Creswell et al., 2014; Howarth et al., 2019). The rationale for briefer MBIs is, therefore, that they are grounded in a pragmatic understanding of the context and needs of academics. To illustrate with studies from Table 2.1, Sharma and Rush's (2014) self-directed mindfulness-resilience intervention delivered in book form was shown to increase mindfulness and resilience, reduce stress and anxiety, and improve overall quality of life in the short-term for its academic participants. Similarly, with a duration of four weeks, Raddon's (2023) short intervention showed improved levels of mindfulness and resilience in participants.

Brief mindfulness practices, in addition to shorter interventions, have been shown to significantly positively affect mental and physical health (Smith, 2020), in part because they help people incorporate practice into a long-term daily routine (Mantzios & Giannou, 2019). Even practices as short as five minutes, were effective in enhancing overall wellbeing (Howarth et al., 2019; Mantzios & Giannou, 2019). Eight of the nine studies (89%) in Table 2.1 effectively incorporated brief practices. Mindfulness practices ranged from two to three minutes (Hegney et al., 2021; Rahmat, 2024), while deep mindful breathing exercises ranged between five and 15 minutes (Raddon, 2023; Sood et al., 2014). Lacková et al. (2023) used 20-minute mindfulness exercises, which

fits within the criterion of a brief mindfulness practice. Evidence shows that brief mindfulness practices have similar beneficial effects as longer practices. For example, ten minutes daily mindfulness practice was as effective in lowering participant stress as a 20-minute practice double (Berghoff et al., 2017). Shortening practices, therefore, is an effective way to support time-poor professionals such as academics (Giurge et al., 2020), as is tailoring.

2.4.2.5   Tailoring

Tailoring fits under the broad umbrella of contextualisation (see Chapter 1). It is a strategic move away from one-size-fits-all interventions, involving purposeful contextualisation of interventions and practices to match users' specific characteristics, preferences and needs. Defined as the process of customising information to particular characteristics in each person (Ryan & Lauver, 2002), tailoring is usually undertaken by the intervention developer at the design stage. Studies increasingly advocate the benefits of tailoring mindfulness-based health and wellbeing interventions and practices (Arpaia et al., 2022; Bodenlos et al., 2015; Spears et al., 2017), such as bringing about better participant engagement and retention. Thus, the move towards tailoring interventions can be seen as end user-centric (Osin & Turilina, 2022).

Through tailoring, benefits can be extended to hard to engage and retain participants, such as academics, and boost effectiveness and engagement (Hyland, 2014; Ryan & Lauver, 2002). Studies show, furthermore, that participants prefer tailored intervention content, materials and teaching approaches, because they are both better suited to their needs, and also individually *speak to them* (Ryan & Lauver, 2002). The trend towards tailoring is evidenced in an integrated literature review examining the effectiveness of such interventions (Ryan & Lauver, 2002) that suggests that that participants engage with and retain more of the content in tailored interventions. The authors also found that participants tended to save the intervention content more readily and disseminate it to others outside the intervention. While none of the studies in Table 2.1 explicitly mentioned tailoring, one study employed a self-directed approach that enabled participants to select when, where and for

how long they practised (Sharma et al., 2014) and another referred to how participants could bring mindful practices into their individual research projects (Rahmat, 2024).

Correlations between tailoring mindfulness practice and program attrition rates have been identified. For example, around 30% of MBI participants drop out before completing half of the sessions (Anderson & Farb, 2018; Khoury et al., 2013), which is attributed to a failure to recognise potential mismatches between participant preferences and preferred practice style (Anderson & Farb, 2018), such as self-selection of anchors like the breath, sound or body that provide flexibility for participants to tailor their practice.

Tailoring practices in interventions is a strategy widely implemented across diverse fields, including education (Hatfield et al., 2023), and healthcare (Carlson et al., 2014; Saban et al., 2022; Wang et al., 2019). This approach is particularly central to behaviour change interventions (Noar et al., 2007), the key to which is tailoring the messaging within these interventions. Tailoring can be achieved through niche content development, behavioural approaches, or strategies to navigate specific barriers (Ryan & Lauver, 2002). Tailoring is pivotal to the intervention design in my study, of which a trauma-informed approach is part.

2.4.2.6 Trauma-informed approach

Trauma-Informed Mindfulness (T.I.M) is a particular approach to tailoring that contextualises intervention design particularly for individuals with a history of trauma. T.I.M recognises the impact and prevalence of trauma (Kim et al., 2021), and individualises meditation practices to be safe, flexible and supportive for each participant (Treleaven, 2018). The approach promotes a sense of safety and trust by incorporating practices that are non-triggering (Duane et al., 2021) that can be respectfully adapted to each participant's unique experience. T.I.M. approaches combine mindfulness techniques with trauma-specific psycho-education, with the objective of fostering awareness and preventing re-traumatisation (Kelly & Garland, 2016). The aim is to create an environment in which individuals feel more secure, which can enhance emotional regulation and adherence to practice (Treleaven, 2018).

By acknowledging and tailoring practices to mitigate trauma, T.I.M. can help participants develop skills to manage their emotional responses safely and more effectively.

T.I.M., furthermore, fosters inclusivity and accessibility because practices are designed to be adaptable to the needs of diverse participants with a different physical abilities, cultural backgrounds and trauma histories (Treleaven, 2018). Incorporating inclusivity and accessibility into practice through the provision of safe and less triggering environments enables more people to benefit from mindfulness interventions (Forner, 2017). Integrating a T.I.M. approach into intervention design fosters increased safety, better emotional regulation, inclusivity and empowerment for participants, through a more supportive and effective healing environment.

2.4.3 Critiques of contextualised interventions

Recent criticisms of contextualising MBIs centre on the selective adaptation of practices and the lack of evidence informing some interventions. Critics argue that this is a process of *cherry-picking* (Kabat-Zinn, 2019; Tateo, 2024), whereby only the most favourable or most easily implemented practices are selected. A selective approach can lead to the omission of critical components and undermine efficacy and rigour of the intervention (Kabat-Zinn, 2019). Cherry-picking leads to accusations of simplified reductive practices, sometimes referred to as *McMindfulness*, in which traditional practices are seen as a vehicle for a neoliberalist agenda (Walsh, 2016). An example of cherry-picking is when an MBI omits key teachings about the foundations of mindfulness. This is considered a form of cultural misappropriation (Kabat-Zinn, 2019; Tateo, 2024) because foundational Buddhist wisdom and teachings are lost. Simplification and selectivity without nuanced cultural and contextual understanding is not considered best practice (Cheung, 2020; Kabat-Zinn, 2019).

Scholars have also questioned the methodological rigour of contextualised MBIs because of the lack of robust research to support their design (van Dam et al., 2018), which can result in less effective offerings that diminish the field. Cherry picking and McMindfulness feed into these critiques, the solution for which lies in utilising

rigorous, evidence-based information to inform intervention design and delivery (Crane & Hecht, 2018; van Dam et al., 2018). It is imperative, therefore, for intervention designers to utilise sound research evidence to inform their approaches to MBI development (Crane, 2019; Van Dam et al., 2018).

2.5 Contextualised MRBis for academics

This section provides a rationale for developing a contextualised MRBi for academics. Regular mindfulness practice can lead to improved coping and resilience by fostering personal transformation. Such improvements often transform how academics teach (Bush, 2011; Lemon & McDonough, 2018b) by increasing focus, attentiveness and mindful engagement. Heightened focus and engagement often lead to a transformation in work practices, enhanced teaching and learning, and interaction with the academy more broadly (Hyland, 2014; Lemon & McDonough, 2018a). Studies also suggest that academics undertaking a regular mindfulness practice can better assist their students (Gardner & Grose, 2015). Together, these points provide a rationale for supporting academics through the development of a contextualised mindfulness-resilience intervention.

2.5.1 Academics need more support

Scholars have long noted the need for greater support for academics because current efforts by universities are insufficient to address the increased workplace pressures they face, particularly senior leadership (Fetherston et al., 2021; Husbands & Prescott, 2023). For example, 25% of academics suffer from burnout due to workload pressures (Ménard et al., 2023). Wellness interventions alone, however, will not address the wellbeing crisis in academics. Such interventions *must go hand-in-hand* with systematic change (Brewster et al., 2022). Universities need to establish more supportive and satisfying work cultures that include reasonable workplace expectations for academics (Darbishire et al., 2020). Universities could also

potentially consider reduced workloads for staff which can help to create more sustainable careers for these busy professionals (Kossek & Ollier-Malaterre, 2020). While systemic change is beyond the scope of my research, universities seem generally aware of the implications of the contemporary culture of neoliberalism (Carnegie et al., 2022; Corbera et al., 2020; Subban et al., 2022; Taberner, 2018; Wu et al., 2019) on academic ill-health (Johnson et al., 2019; Wray & Kinman, 2021). My research addresses criticisms that not enough is being done by universities to improve academics' health and wellbeing.

2.5.2 The need for resilience enhancement interventions for academics

To reduce the high rates of stress and mental ill-health experienced by academics, dedicated resilience training has long been called for to help them cope with workplace adversity (Chan et al., 2021; de los Reyes et al., 2022; van Der Feltz-Cornelis et al., 2020). For example, academics in the U.K. two decades ago requested stress management and resilience-enhancing initiatives (Tytherleigh et al., 2005). Similar calls are still being made (Hegney et al., 2021). A response to these calls would require senior management commitment and a long-term view to improving academic wellbeing (Tytherleigh et al., 2005). This is where MRBis specifically contextualised for academics provide plausible solutions. These interventions differ from their non-resilience-focused counterparts in that they *specifically focus on and interweave* resilience enhancement into mindfulness practices. My research will contribute to the relatively small number of such interventions (see Table 2.1) by developing and trialling a time-efficient, evidence-based, and co-designed intervention that is acceptable and feasible for academics. By co-designed, I mean together through AR cycles with other academics, including psychologists, doctors, mindfulness scholars, resilience researchers and counsellors, the intervention produced robust and reliable evidence of its efficacy.

2.6   Chapter summary and conclusion

In this chapter, I reported the scope and results of my literature search and review that found that contemporary work conditions universities operating under a neoliberal culture generate demands on academics that lead to increased stress, ill-health and, potentially, burnout. Generalised mindfulness training programs that can improve academic wellbeing are readily available, my literature review found that relatively few are contextualised specifically for academics, and even fewer explicitly incorporate resilience enhancement. Contextualisation in my study means that these programs need to be shorter in duration, engage participants in briefer exercises, and tailored to fit academics' circumstances, particularly for novice meditators. In sum, the chapter provides a strong rationale for developing and trialling the MRBi that is the focus for my research. The research process undertaken to develop the intervention will be discussed in the following chapter.

Chapter 3. Conceptual framework and methodology

3.1 Introduction

The literature review in Chapter 2 provided a background to studies investigating the effectiveness of mindfulness, resilience and associated interventions in general, and those that involved academics in particular. The review highlighted the benefits such interventions can bring to academics and identified the need for MRBis specifically contextualised for them. Developing such an intervention is the focus of my research, and this chapter discusses the conceptual framework and the research methodology. First, I revisit the concepts of mindfulness and resilience defined in Chapter 1 and explain how practices that enhance them can increase wellbeing. Second, I describe the methodology I used to design and trial the contextualised MRBi to addresses my research questions.

The conceptual framework that underpins my study articulates the interrelationships between the core constructs of mindfulness, resilience, and wellbeing. Characterised by its emphasis on present-moment awareness and cognitive insight, mindfulness is understood in my study as interwoven with the idea of resilience, which enhances one's capacity to rebound from adversity. When combined, mindfulness and resilience enhance wellbeing in individuals (Figure 3.1). Whilst mindfulness is the *primary concept* in my study, resilience is a vital secondary construct.

The research design incorporated a Behaviour Change Framework (BCF) in tandem with AR. The BCF represents an evidence-based, systematic process that guided the development of the MRBi. AR was chosen as the research methodology because it enabled an iterative and collaborative approach to designing and trialling the MRBi content and delivery. The combined BCF and AR research design engaged different cohorts of academics across three iterative phases of reflection and action.

The three phases both afforded multiple cycles of improvement across the project and generated the data to address my research questions.

3.1.1 Overarching Research Questions

To recap, the Research Questions that guided my study were:

Q 1. In what ways can a custom-designed online MRBi be contextualised to suit academics and their work?

Q 2. What are the effects (if any) of the intervention on the academics' mindfulness and resilience?

Question 1 guided the development of the custom-designed *online* intervention in relation to the components, such as key practices, messaging and timing, and the adaptations needed to contextualise it for this specific audience.

Question 2 framed the evaluation of the MRBi to determine its effectiveness in increasing the participating academics' levels of mindfulness and resilience and identifying other impacts on their wellbeing and work.

3.2 Conceptual framework

This section outlines the conceptual framework of my study, which extends the definitions of mindfulness and resilience, and their associated elements identified in Chapter 1. The purpose is to explain the relationship between these constructs and wellbeing.

Mindfulness is the key element of the conceptual framework that underpins the practices of interest in my research. Mindfulness is a practice, which can be understood through both its Buddhist influences (Bishop et al., 2004) and the

cultivation of present moment awareness without judgment, and decreased suffering through equanimity (Visted et al., 2015). Mindfulness is a process that involves bringing one's attention and awareness to the present moment, without judgment or attachment (Kabat-Zinn, 1996). Mindfulness is also a state of conscious awareness, in which practitioners focus on the present-moment experience, while acknowledging and accepting the thoughts, emotions, and bodily sensations that arise (Roche et al., 2020). Research suggests that mindfulness can be both conceptualised and also measured in four ways, as a: temporary state that varies from moment to moment; trait that reflects a stable or fixed disposition; period of practice in which one undertakes mindfulness meditation; and formalised intervention designed to cultivate the practice of mindfulness (Roche et al., 2020). Identifying ways to cultivate mindfulness practices in busy academics was central to Research Q 1 and assessing the impact of these practices was central to Research Q 2.

3.2.1 Mindfulness as state

As previously discussed in Chapter 1, mindfulness can be conceptualised as both a state and a trait. State mindfulness refers to a temporary and often short-lived experience of being aware of the present moment (de Bruin et al., 2015). The mindful state connotes awareness of one's thoughts, feelings, bodily sensations, and the surrounding environment, all without judgment (Kabat-Zinn, 2001). State mindfulness, therefore, involves actively paying attention, over and over again, to the present moment with an open and accepting attitude (Siegel, 2010). A mindfulness state can be cultivated through various practices, such as meditation, breathing exercises, and mindful eating or walking (Siegel et al., 2009; Williams & Penman, 2011). The conceptualisation of mindfulness as a state was clarified during the expert interview phase of the study (Chapter 4), which helped inform the design and the techniques in the practices of the MRBi.

3.2.2 Mindfulness as trait

Mindfulness as a trait refers to a characteristic or disposition that individuals possess to varying degrees in their daily lives (Fridhandler, 1986). Trait mindfulness, therefore, represents a person's overall tendency to be mindful across different life situations and contexts (Ameli et al., 2020; Mesmer-Magnus et al., 2017). Studies have shown that enhancing trait mindfulness has been associated with positive psychological outcomes (Bush, 2011), including improved wellbeing, emotional regulation, cognitive ability, and interpersonal relationships (Ingram et al., 2019; Shahidi et al., 2017). Central to my study is the improvement in wellbeing that results from enhanced trait mindfulness, because of how it assisted with messaging to novice meditators, particularly during the Working Group (WG) and Pilot Group (PG) phases.

State and trait mindfulness are interconnected (see Figure 3.1). The interconnection arises through mindfulness practices, which help individuals develop their trait mindfulness, thus leading to more frequent states of mindfulness (Kiken et al., 2015; Thomas, 2017). Conversely, regular practices that generate state mindfulness can reinforce and strengthen trait mindfulness (Kiken et al., 2015). Integrating state mindfulness more deeply into one's way of being ultimately leads to increased wellbeing (Siegel, 2010). Interventions that recognise the interconnection between state and trait mindfulness represent evidence-based methods that effectively cultivate both in participants (Hülsheger et al., 2013; Jamieson & Tuckey, 2017). The interconnectedness of state and trait mindfulness manifests as bespoke practices in the MRBi design that incorporate present moment awareness without judgment, equanimity, and mind-body practice. These elements will be discussed next.

3.2.3 Four elements of mindfulness

The four elements of mindfulness as defined by Professor Jon Kabat-Zinn are attention, acceptance, and awareness, without judgment (Kabat-Zinn, 1996). Although foundational to mindfulness, I felt these concepts might be confusing for novice

meditators. For example, distinguishing between attention and awareness might be challenging for the participants in my study that were new to mindfulness practice. To address this, I refined these elements to offer clarity for my participants. My conceptualisations, therefore, are present moment awareness without judgment, equanimity, and mind-body practice. These terms reflect Kabat-Zinn's original ideas expressed in a way that is easier to understand and that emphasises the mind-body connection. This refinement makes the elements more accessible for participants, which helps them engage with mindfulness practices. Defined in the following sections, these four refined elements provided a conceptual framework that guides my research approach and methodology and significantly influenced the design and development of the MRBi and its key practices in this study.

3.2.3.1   Present moment awareness

The concept of present moment awareness is fundamental to mindfulness. Mindfulness involves awareness and attention to the present moment in a non-evaluative, non-reactive way (Roche et al., 2020). Present moment awareness emphasises the importance of fully engaging in the moment, rather than dwelling on the past or ruminating about the future. The attention to the present moment is key in mindfulness practice, because of the tendency for the human mind to wander (Roche et al., 2020). The practice of mindfulness, therefore, involves repeated and directed attention to focusing on what is happening right now (Kabat-Zinn, 2001). The focus is both internal, in bringing one's attention to thoughts and emotions, and external, in paying attention to one's surroundings (Schonert-Reichl & Roeser, 2016). Focus is achieved through cultivated practice (Jamieson & Tuckey, 2017; Schonert-Reichl & Roeser, 2016), involving intentionally focusing on a chosen object, such as the breath, bodily sensations, or an object in one's environment. These objects are often referred to as *anchors* (Anderson & Farb, 2018; Kabat-Zinn, 1996). Anchors are crucial in assisting present moment awareness during MRBi practices. When anchored in the present moment, the human mind's tendency to ruminate, react or evaluate is reduced, enabling increased attention to the present moment (Roche et al., 2020). Sustained attention to present moment awareness involves observing the mind and its tendencies (Jamieson & Tuckey, 2017). Such observation generates a range of benefits,

such as reduced rumination and reactivity, and improved emotional regulation, as previously mentioned (Chapter 2). The concept of present moment awareness is therefore embedded within the piloted MRBi content and practices.

3.2.3.2 Awareness without judgment

Mindfulness practice encourages awareness without judgment of thoughts, feelings, and sensations that arise, without labelling them as good or bad, right or wrong. Awareness without judgment was emphasised for the novice meditators in my study, who may have been unfamiliar with the concept. Nonjudgmental mindful practice involves cultivating an attitude of curiosity, openness and acceptance (Kabat-Zinn, 1996), allowing experiences to unfold without clinging to or pushing away particular aspects of the present moment experience (Correia, 2020). Conceptualising nonjudgmental mindfulness requires practitioners to observe and experience the present moment without evaluating or trying to change or control what is being observed and experienced (Siegel, 2010; Williams & Penman, 2011). By practising nonjudgmental mindfulness, individuals can cultivate greater clarity and objectivity in their perception of reality (Kennedy et al., 2022), as they become more fully engaged with the present moment without being distracted by personal bias or judgments (Kabat-Zinn, 1996; Schonert-Reichl & Roeser, 2016). Such engagement typically leads to reduced stress and improved emotional wellbeing (Hülsheger et al., 2013), less reactive behaviour (Crane et al., 2017), enhanced self-compassion, and increased general wellbeing (Kennedy et al., 2022). Nonjudgmental mindfulness, therefore, was central to the development of the MRBi in my study.

3.2.3.3 Equanimity

Equanimity refers to the state of mental stability and calmness (Pinto et al., 2018) amidst the changing and challenging circumstances of life (Shaner et al., 2017). Mindfulness practice improves equanimity by cultivating a non-reactive and non-attached awareness of the present moment (Crane et al., 2017). In practice, this means observing experiences, thoughts, emotions, and sensations with a sense of calmness and acceptance, without getting overly attached or reactive to such

experiences (de Allicon, 2020). Practising mindfulness with equanimity involves acknowledging the ever-changing and fleeting nature of the human experience (Kabat-Zinn, 2001) while maintaining calmness, balance, and non-reactivity. Mindfulness practice allows the flow of thoughts, emotions, and sensations to occur, without clinging to, rejecting, wanting them to be different or resisting their reality (Siegel et al., 2009), enabling a beginner's mindset in particular, to become more open to the present moment experience (de Allicon, 2020). Cultivated equanimity in mindfulness can lead to reduced reactivity to stressors, enhanced emotional regulation (Brown et al., 2007), increased resilience (Correia, 2020; Hwang et al., 2017), and a greater sense of inner peace and wellbeing (Kabat-Zinn, 2003). Incorporating these benefits into the key messaging to participants in the MRBi was key to its success because equanimity equips individuals with the capacity to approach life's circumstances with a more balanced perspective, and to more skilfully respond rather than impulsively react (Shaner et al., 2017). Equanimity was, therefore, interwoven throughout the MRBi practices and its core messaging.

3.2.3.4   Mind-body practice

Mindfulness is conceptualised in my study as a mind-body practice focused on achieving integration between the body and the mind (Greenberg et al., 2018; Romcevich et al., 2018). Its practice fosters a deep connection between an individual's thoughts, emotions, bodily sensations and external stimuli (Romcevich et al., 2018; Tang et al., 2020), and mutual influence (Carlson et al., 2014). The interconnectedness of mind and body emphasises the importance of anchoring awareness in the present moment by grounding oneself in the body's physical sensations (Kelly, 2017). Grounding and interconnectedness are realised through bringing conscious attention to bodily sensations, such as breathing, bodily movements, or sensations of touch. In these ways, mindfulness heightens mental awareness of one's physical experiences (Romcevich et al., 2018). Mind-body interconnection was interwoven within the MRBi so that participants in my study could practise observing thoughts and emotions without becoming overly identified or attached to them. Nonjudgmental mind-body practice helps develop a greater self-awareness and resilience (Correia, 2020; Montero-Marin et al., 2015) as practitioners become more attuned to patterns

and habits in their bodies and minds. By interweaving a nonjudgmental attitude to mind-body practice, individuals in my study learned how they could observe their experiences with curiosity and acceptance, allowing emotions, thoughts and sensation to arise and depart without getting caught up in them (Kabat-Zinn, 2018; Siegel, 2010). This brings me to the concept of resilience.

3.2.4 Resilience

Resilience is a complex construct (Davoudi et al., 2012; Shiner & Masten, 2012) that has been defined and understood in multiple ways (Robertson et al., 2015). As mentioned in Chapter 1, resilience is both a trait that an individual is born with and a dynamic process (Robertson et al., 2015). Resilience as trait and process refers to as individual's ability to cope with adversity and recover from challenges.

To briefly recap, first, trait resilience is an inherent human ability, which can be enhanced via an intervention. Characteristics of trait resilience include perseverance, adaptability, flexibility (Robertson et al., 2015), and a positive outlook (Connor & Davidson, 2003; Fletcher & Sarkar, 2013). The trait of personal resilience refers to the relative stability in an individual's disposition that influences their overall ability to cope with and recover from adversity (Fletcher & Sarkar, 2013; Johnson et al., 2019; Luthar et al., 2006). Stability is achieved by remaining psychologically and emotionally robust in the face of challenge (Luthar et al., 2006; Masten, 2001). Research has shown that personal trait resilience can be operationalised, enhanced and learnt to boost personal growth (Fletcher & Sarkar, 2013; Robertson et al., 2015). Mindfulness is the practice operationalised in my study to support participants to become resilient in challenging situations by reflecting on and learning from previous failures (Connor & Davidson, 2003) to build coping skills over time (Helmreich et al., 2017). Building personal resilience can enhance an individual's ability to navigate adversity, foster personal growth and success, and promote wellbeing (Grant & Kinman, 2013). The operationalisation of enhanced resilience practice to help participants navigate adversity was a key message in my MRBi.

Second, resilience is a dynamic process that can fluctuate over time and situations (Fletcher & Sarkar, 2013; Robertson et al., 2015; Rutter, 2012; Siambabala et al., 2011). This means that resilience can be operationalised in some circumstances and not others (Robertson et al., 2015; Rutter, 2007). An evidence-based process resilience model (Figure 1.2) grounded in psychological therapy and behaviour change (Baker et al., 2021) articulates the cognitive, emotional and behavioural skills and processes needed to develop enhanced resilience skills across circumstances that can be learned, practised, and developed in response to stress. This skills-based model focuses on flexible thinking, optimism, self-care, balancing demands, social connection, positive emotions and emotion regulation. The model also acknowledges the importance of contextual factors, such as social support, coping strategies, self-efficacy, and the individual's physical and emotional wellbeing for resilience development (Baker et al., 2021). Contextual factors, furthermore, fluctuate over time and can influence the process of developing resilience. The development of the MRBi in my study was influenced by this model, and many of its elements have been incorporated into the MRBi practices.

3.2.5 Relationships between mindfulness and resilience

Conceptualising resilience through mindfulness involves understanding how mindfulness practices can enhance one's ability to deal with adversity. Mindfulness practice focuses on intentionally paying attention to the present moment with a nonjudgmental and accepting attitude (Ingram et al., 2019) in ways that can enhance resilience, which enables a greater sense of personal control (Li & Hasson, 2020; Luken & Sammons, 2016). Enhancement involves cultivating the psychological and emotional resources needed to cope and thrive (Riepenhausen et al., 2022), which are beneficial for stressed academics. Resilience is enhanced through the intersection of core outcomes of regular mindfulness practice (Birchinall et al., 2019; Lomas et al., 2019), such as emotional regulation, cognitive flexibility, and stress reduction.

Emotional regulation involves acceptance of one's feelings, which leads to an increased likelihood of being less overwhelmed by them (Gardner & Grose, 2015; Ingram et al., 2019). MRBi participants were reminded that by observing one's emotions without judgment, it becomes possible to better acknowledge and accept one's feelings without judgment or reactivity. Cognitive flexibility is the ability to adapt and shift perspectives when faced with adversity. Mindfulness enhances cognitive flexibility by encouraging the observance of thoughts and beliefs without automatically accepting them as true or valid (Godara et al., 2021; Joyce et al., 2018). Non-attachment to thoughts and the ability to recognise alternative perspectives fosters resilience by opening up possibilities for finding new ways to approach difficulties. Regular mindfulness practice reduces stress (Crane et al., 2017; Gardner & Grose, 2015; Kabat-Zinn, 2003; Poulin et al., 2008) by helping individuals develop an increased awareness of stress triggers and bodily sensations associated with stress (Lutovac et al., 2017). Heightened awareness is therefore a stressor-response tool (Jackson, 2019) for building personal resilience. Enhanced resilience from regular mindfulness practice promotes *improved wellbeing* (Bajaj & Pande, 2016; Bright & Pokorny, 2013; Helmreich et al., 2017; Kriakous et al., 2021; Verhaeghen & Aikman, 2022). In short, mindfulness leads to resilience enhancement, which in turn leads to increased wellbeing. This relationship is illustrated in Figure 3.1.

Figure 3.1 The relationship between mindfulness, resilience and wellbeing

62
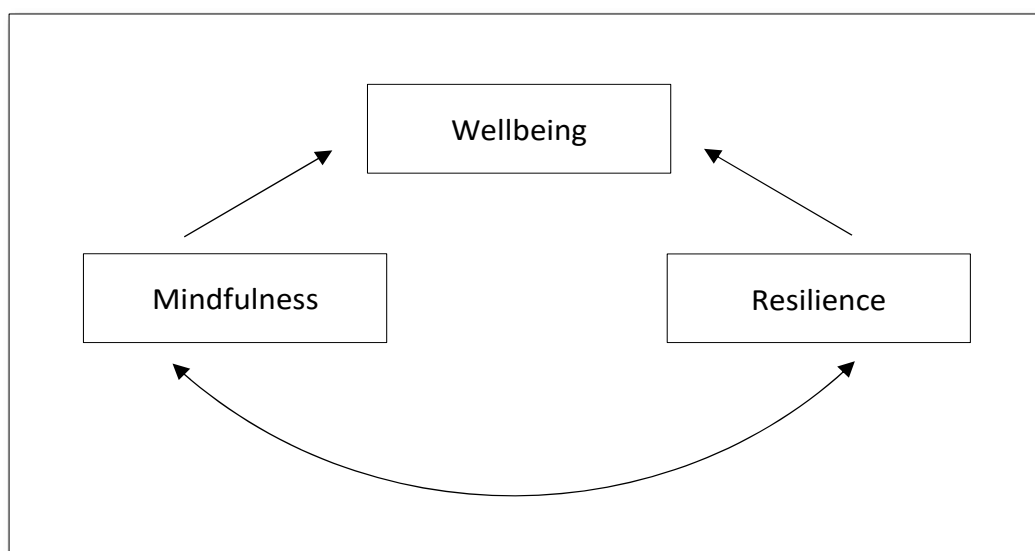
3.2.6 Mindfulness, resilience and wellbeing

A key aim of my study was to investigate how a custom-designed MRBi might bring help about improved wellbeing in its academic participants. Well-being, as previously defined, refers to individuals' overall mental, emotional and physical health, including satisfaction at work, while also being able to adapt positively to life's highlights and challenges (Brazeau et al., 2020). Previous studies have shown that improved wellbeing is a by-product of mindfulness practice and resilience enhancement (Ingram et al., 2019; Shahidi et al., 2017). While measuring wellbeing is beyond the scope of my research, the MRBi content encourages participants to pay attention to and reflect on the mindful-resilient benefits that arise from mindfulness practices that contribute to improved overall wellbeing. Consequently, the interconnectedness of mindfulness, resilience and wellbeing is important.

The MRBi developed in my study was based on the key premise that bringing about wellbeing requires active and ongoing practice, which is facilitated by the interrelationship between mindfulness practices and resilience enhancement (Figure 3.1). Mindfulness practices lay the groundwork for heightened self-understanding and emotional regulation (Basso et al., 2019; Cooper et al., 2018; Wilson et al., 2022). As individuals regularly practise mindfulness, they build a foundation of equanimity and present-moment awareness (Kabat-Zinn, 2003). This foundation bolsters their ability to engage in resilience-enhancing strategies that foster adaptability and personal growth (Wald, 2020). The integration of mindfulness practices and resilience enhancement represents a synergy of practices to develop the self-awareness and emotional regulation needed to navigate stressors, leading to better wellbeing. This interrelationship acknowledges that wellbeing is not a passive state; instead, wellbeing is an active and ongoing outcome of mindfulness practice and resilience enhancement.

3.3   Intervention design

I begin this section by describing the two approaches that drove the development and contextualisation of the MRBi. The first is Colquhoun et al.'s (2017) Behaviour Change Framework (BCF), which is discussed in Section 3.3.1. The second is Action Research (AR) reflective cycles, which is a methodological approach introduced in Section 3.3.2. that explains how reflective cycles were operationalised in tandem with the BCF. My rationale for using this tandem approach is explained in Section 3.3.3. The two approaches are summarised in Table 3.1.

Table 3.1   Integrated approaches used in the development of the MRBi

Approach 1	**Behaviour Change Framework**	Guided the overarching high-level intervention development process from planning to end user testing.
Approach 2	**Action Research reflective cycles**	Worked in tandem with the BCF and enabled the detailed niche contextualisation relating to specific MRBi content, messaging and delivery.

3.3.1 Behaviour Change Framework

The use of a Behaviour Change Framework (BCF) to guide the process of developing a structured and evidence-based mindfulness intervention is becoming more commonplace (Roche et al., 2020). The BCF process spans from initial planning to end user testing. Colquhoun et al.'s (2017) BCF offered a logical and systematic approach to structuring planning and developing interventions or programs that are aimed at changing behaviour. The authors developed the framework to counter problems with haphazard design, poor specification, and lack of guidelines in behaviour change interventions that limited their replication and generalisability.

BCFs represent a structured, rigorous approach for identifying and understanding the factors that influence human behaviour and guiding the development of effective interventions to promote behaviour change (Michie et al., 2011; Roche et al., 2019; Roche et al., 2020). Colquhoun et al.'s (2017) BCF framework comprises a four-step evidence-based approach that is aligned with a health scientist approach to intervention design (Schuman-Olivier et al., 2020) and can be used in diverse professional contexts. The four steps are: identifying barriers to the intervention; selecting intervention components; applying theory and evidence-based practice; and engaging end users in the intervention development. Colquhoun et al.'s (2017) BCF does not, however, specify the methods for undertaking these tasks. The adoption of the BCF in my study provided a structured, evidence-based guide to the intervention development.

Adopting an iterative AR reflective cycle approach meant the MRBi content underwent continuous improvement. Content included core practices, messaging and supporting materials, such as reflection journals, which are referred to as artefacts. The reflective cycles enabled participants from each phase to provide insights that addressed Research Q 1, that investigated ways to customise and contextualise the MRBi content, practices and user engagement levels. A mid-phase redesign cycle, indicated in Figure 3.2 shown by the small grey cycles and dotted lines between the main cycles, enabled me to analyse the collected data, amend the MRBi design based on data analysis, and prepare updates, modifications and new content as required.

3.3.2 Action Research

Action Research (AR) is the approach used in tandem with the BCF in my study. AR is rooted in Kurt Lewin's pioneering education work in the 1940s (Adelman, 1993). AR is a collaborative and participatory research methodology that empowers practitioners and stakeholders to address real-world problems (Dick et al., 2009), which has gained popularity, particularly in education and social sciences (McNiff, 2017). As a research method, AR enables educators and social scientists to: improve

practices (Campbell, 2013); implement interventions (Bourbonnais et al., 2020); and generate relevant knowledge for positive societal change (Dick, 2015). AR constitutes an iterative approach in that it employs cycles of continuous improvement, reflection and adaptation, which makes it ideal for intervention development (Bourbonnais et al., 2020). Albeit designated different labels (McNiff & Whitehead, 2011), AR involves a process of multiple cycles of planning, action, observation, reflection, and modification. AR thus allows for the systematic incorporation of new insights and ideas that maintain the relevance of effectiveness of the intervention.

I used AR to specifically engage end users in the process of contextualising MRBi content, practices, messaging and delivery modes for academics. My research design comprised three phases of AR reflective cycles that identify and implement evidence-based methods to guide the contextualisation of the MRBi (Figure 3.2). Each phase involved different groups of academics, although the process was consistently guided by AR cycles of continuous reflection—observe, reflect, evaluate—identified by McNiff (2017). The three reflective cycle phases involving experts, the WG, and the PG are shown in Figure 3.2.

Figure 3.2   Three phases of AR reflective cycles
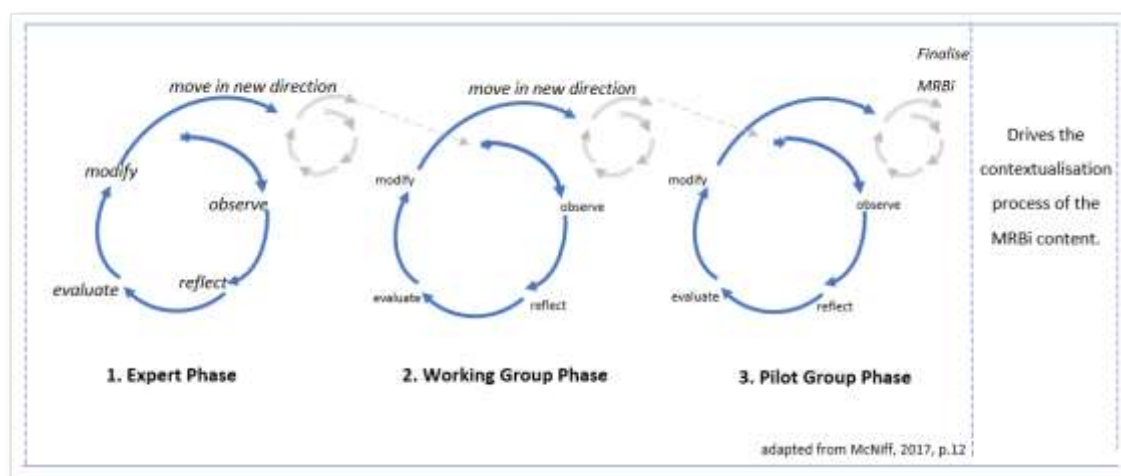
3.3.3 Tandem approach rationale

The BCF and AR reflective cycles were used in tandem to develop and trial the MRBi in an iterative feedback loop. In short, the BCF guided the intervention development processes and the AR reflective cycles informed the detailed contextualisation required to customise the MRBi practices, content and delivery for its academic participants. The reflective cycles across each of the three phases involved five steps: observation, reflection, evaluation, modification, and moving in new directions. Together, the two approaches ensured effectiveness of the MRBi and its responsive to continuous improvement.

Participants in each of the three AR reflective cycle phases provided insights to address Research Q 1, which sought ways to contextualise and improve the MRBi content, practices and user engagement levels. The phases operated simultaneously, guided by the BCF, as shown in Table 3.2.

Table 3.2   BCF and AR reflective cycles used in tandem

Approach 1.	Colquhoun's et al's (2017) Behaviour Change Framework:	Expert Phase	Working Group Phase	Pilot Phase
	Step 1. Identified barriers to participation	✓	✓	✓
	Step 2. Selected intervention components	✓	✓	✓
	Step 3. Used theory/ evidence-based practice	✓	✓	✓
	Step 4. Engaged end-users	✓	✓	✓
Approach 2.	Action Research Reflective Cycles	move in new direction / modify / observe / evaluate / reflect		

The following section explains how the tandem approach was operationalised throughout my study, using Colquhoun et al.'s (2017) four-step behaviour change framework in tandem with the AR reflective cycles.

Step 1   Identify barriers to intervention participation

The first step in the BCF involved conducting a thorough needs assessment and identifying barriers to academics' participation in the MRBi, such as retention issues, understanding the target audience, and strategies to encourage active participation. The step was enacted in the AR reflective cycles, in which I gathered in-depth insights into the barriers to participation by academics and assess their needs. Barriers to participation were identified primarily during the expert phase but were revisited during the WG and PG phases. Semi-structured interviews were used in the expert phase, and group discussions were used in the working group phase to elicit feedback that helped me understand how to contextualise the MRBi.

Step 2   Select intervention components

Step 2 of the BCF emphasised selecting the MRBi components; that is, evidence-based practices, appropriate messaging, and the intervention artefacts, such as reflective journals. The step involved discussions about evidence-based mindfulness-resilience practices and research investigating behaviour change through mindfulness-resilience enhancement, prototyping practices and artefacts, and refining the intervention messaging. Step 2 was enacted through the AR reflective cycles to gain the contextualisation insights and data I required. My analysis of data collected in this step (Table 3.2) assisted the development and contextualisation of the MRBi content and delivery. Both the expert and WG phases were pivotal to selecting the MRBi components. MRBi practices were discussed and explored in both expert and WG phases as explained in Chapter 4 and 5, after which the evidence-base core practices were further contextualised by myself. The WG phase extended this iterative process of refining the intervention components by testing the prototyped MRBi practices and suggesting feedback and refinements. During the pilot phase, these evidence-based mindfulness-resilience-based practices were incorporated within the pilot MRBi. This iterative approach across the three research phases helped me to select and refine the intervention design and its components, which contributed to its continuous improvement.

Step 3   Use appropriate theory

Step 3 in the BCF involved selecting appropriate theory and evidence-based knowledge to underpin the intervention development, including AR reflective cycles as the appropriate methodological approach for addressing Research Q 1. The reflective cycle approach enabled me to utilise AR methods, such as conducting interviews with experts, and facilitating WG discussions to collect data.

Step 4   Engage end users

The final step of the BCF involved engaging each of the three groups of end users to evaluate how effectively the intervention achieved its intended outcomes. Firstly, in Phase 1, the experts contributed knowledge of evidence-based theory and practice that shaped the intervention development. The WG participants in Phase 2 and the pilot phase participants in Phase 3 engaged deeply with prototyped versions of the intervention, which generated several data collection that further assisted my contextualisation process. The involvement of end users in all three phases of the AR reflective cycles enabled me to iteratively and responsively make informed and nuanced changes to the intervention.

One of the advantages of combining AR and the BCF is that the former is both a rigorous participatory and collaborative research methodology (Dick et al., 2009) in which participants actively influence and contribute to the research process (Tomal, 2010) and also a form of professional enquiry to investigate solutions to challenging problems (McNiff, 2017; McNiff & Whitehead, 2011). The three distinct iterative phases with different end user participants were a key feature of the research design, in which data were collected, that enabled me to address the Research Questions. The structured process of the BCF guided my development of the intervention used in tandem with the AR reflective cycles guided a rigorous design process in which the diverse perspectives, experiences, and expertise of each group were considered. Such consideration leads to more effective and contextually relevant interventions that are responsive to the needs of the target population (Costello, 2011).

3.4 Research design

In this section, I describe the epistemological assumptions (Section 3.4.1), the mixed-method approach used (Section 3.4.2), and participants and how they were recruited across the three phases of my study (Section 3.4.2).

3.4.1 Epistemological assumptions

A constructivist epistemological position underpinned my research. This position sees knowledge as situated and context-dependent (Creswell & Plano Clark, 2018). Central to constructivism is the belief that knowledge is socially constructed and that individuals actively participate in creating meaning and understanding. The AR research design facilitated an iterative and collaborative constructivist inquiry (Trunk Sirca & Shapiro, 2007), which unfolded across three specific phases and allowed me to explore how to contextualise the MRBi, assisted by participants' insights. The constructivist epistemology and AR methodology enabled an interpretation of the interwoven meanings and understandings that were co-created by researcher and participants throughout the research phases (Creswell & Plano Clark, 2018). A mixed-method approach to data collection and analysis aligned with the epistemological position and research design.

3.4.2 Mixed method approach

A mixed-method approach was used to collect and analyse data to evaluate the effectiveness of the contextualised MRBi designed in my study. The qualitative methods of semi-structured interviews and discussion groups allowed me to address Research Q 1, by gaining an understanding of the academic participants, their work settings and the mindfulness and resilience enhancement practices that suited them. Quantitative methods enabled me to address Research Q 2, through statistical analysis

of pre- and post-intervention participant surveys using validated instruments, by evaluated its effects in relation to the elements of interest in the study. A further benefit of a mixed method approach is that it provides a rich overview of the intervention's impact, which leads to more robust and reliable conclusions (Tashakkori et al., 2021). The next section provides an overview of the participants in my study, which will be elaborated in Chapters 4, 5 and 6.

3.4.3 Participants

Academics from a range of disciplines participated in my study. The participants worked in universities in Australia, New Zealand and the U.K., and represented a diversity of cultures. Their roles included professors, research directors, senior lecturers, and lecturers, and they were employed as full-time tenured staff members, and part-time and casual academics. The sample size of participants in each of the three phases are shown in Table 3.3.

Table 3.3   Participants across the three research phases

Phase	Group	Participants
Phase 1	Experts	11
Phase 2	Working group	6
Phase 3	Pilot group	15

The following sections describe the academics who participated in each research phase, and the recruitment and participant consent processes.

3.4.3.1   Expert participants

Eleven academics were interviewed in the expert phase of the study to elicit specialist knowledge that would inform the contextualisation process. The experts worked in higher education institutions, mostly universities, in Australia, New Zealand and the

U.K. The selection criteria for interviewees included that they were well-regarded academic or professional researchers with a strong publication record and able to draw on expert viewpoints and evidence-based research. Two of the experts were particularly highly awarded academic researchers, one was awarded an Officer of the Order of Australia, and another a Medal of the Order of Australia. The other nine experts were prominent published researchers in their chosen fields. Participants' expertise was in mindfulness, resilience and wellbeing or understood these constructs as interwoven. *Many experts had professional backgrounds*, including two psychologists, one former general practitioner (GP), two former nurses, and two counsellors. Further details of these participants are provided in Chapter 4.

The relatively small number of interviewees allowed me to focus on analysis of the in-depth insights and knowledge gleaned during data collection, which enabled me to extract rich, deep data (Mason, 2010). Experts were recruited through purposive sampling (Palinkas et al., 2015) because of their knowledge and experience in relation to mindfulness, resilience enhancement and academic wellbeing. The selection process involved identifying 16 potential experts from a search of their published works, through professional networks and recommendations from other academics. Invitations to participate in the study were emailed by my second supervisor to ensure arm's length recruiting. The email detailed the purpose of the study and emphasised participants' anonymity and confidentiality in relation to collected data. In total, 11 experts agreed to participate.

Before the interviews commenced, participants were provided with a comprehensive participant information sheet (P.I.S.) and digital consent form (Appendix A). The P.I.S. detailed the research objectives, the nature of their anonymised involvement, the process and de-identification of data collection, and their rights as participants. Each participant completed the informed digital informed consent form, and while they were informed that their participation was voluntary and they could withdraw at any time, none did.

3.4.3.2   Working group participants

A working group (WG) was formed in Phase 2 of the study, to investigate ways of contextualising the MRBi and address Research Q 1. Flyers promoting the study (Appendix C) were posted in staff areas of selected UTS faculties and a pdf of the flyer was disseminated through staff email lists in several faculties. The email invitations explained the purpose of the research, the contextualisation rationale, and the potential value of participants' contributions. Participants were recruited according to their interest in the study and willingness to contribute to the development and my contextualisation of the MRBi. They were also required to be willing to participate as fully as possible in a four-week process that involved meetings of up to one-hour per week, and to share their insights about the MRBi prototype with the group and me.

Six academics were selected after they responded to a recruitment campaign calling for volunteers. Before the WG phase began, participants were provided with a comprehensive participant information sheet (P.I.S.) and completed digital informed consent documents. The P.I.S. (Appendix B) detailed the research objectives, the nature of their anonymised involvement, the process and de-identification of data collection, and their rights as WG members, that their participation was voluntary and they could withdraw at any time, and the ethics approval. The WG comprised academics with diverse expertise and backgrounds from different faculties at UTS, including health, science, information technology, architecture, and education. WG members included full-time and part-time academics, including two casuals. All participants actively engaged in the discussions and contributed to the contextualisation strategies of the prototyped MRBi. There was no participant attrition during the four-week WG sessions.

The advantages of having a small WG afforded diverse and interdisciplinary perspectives to be shared, which gave me a comprehensive and rigorous understanding of the contextualisation process required. The rigour in the WG process meant that the MRBi was more sensitive to a range of contextual factors in academic working and life settings. The WG discussions enhanced the robustness of the contextualisation process through informal peer-review.

3.4.3.3   Pilot group participants

Participants in the PG phase of the study were recruited through flyers posted in staff areas and noticeboards in selected UTS faculties (Appendix C), and a pdf of the flyer was disseminated via selected faculty staff mailing lists. The emails explained the purpose and requirements of the PG and emphasised its contribution to shaping the intervention. Interested participants were sent a participant information sheet (P.I.S). The P.I.S. (Appendix D) detailed the research objectives, the ethics approval, the nature of their anonymised involvement, the process and de-identification of data collection, their rights as PG participants, including that their participation was voluntary and they could withdraw at any time.

Fifteen academics from a range of UTS faculties participated in the PG phase of the study. Participants' academic roles included professor (one), senior lecturer (three), research director (one) and lecturers (ten). Tenure varied amongst participants, including eight full-time academics, five part-time and two casual academics. PG participants were selected on the basis of an expressions of interest to join the MRBi PG phase. Inclusion criteria were that participants were willing to: partake in the intervention across its entirety; complete pre- and post-intervention surveys; and provide feedback during the contextualisation process. There were no exclusion criteria, other than participants had to be UTS academic staff members and be mentally well.

After completing the digital informed consent document, participants were emailed an information pack comprising a self-administered validated mental health assessment tool to check their suitability for the intervention (Appendix E). Eligible participants were next emailed a second information pack containing a MRBi guide, a list of counselling support services, a mental health protocol approved by the UTS Ethics Committee, a guide for the WhatsApp/Zoom group discussions, and a withdrawal protocol.

Approximately one week before the PG commenced, participants completed the Five Facet Mindfulness Questionnaire (Baer et al., 2006), validated tool that measures

trait mindfulness (Appendix F), and the Connor Davidson Resilience Scale-2, also known as CD-RISC2 (Appendix G), which is a validated tool that evaluates stable qualities of resilience, which primarily means trait resilience. The tool measures an individual's ability to cope with difficulty and maintain psychological wellbeing despite experiencing adversity (Vaishnavi et al., 2007). The tools were disseminated to participants via a Qualtrics online survey. Each participant completed the digital informed consent document before the PG began. The decision to pilot test the intervention with a small group of 15 academics was grounded in several reasons. Firstly, a small group aligned with a user-centred design approach, that enabled contextualisation of the intervention to suit end users' needs and contexts. Secondly, the Phase 3 PG enhanced the pilot intervention's real-world applicability, feasibility and acceptability to end users, because of the valuable enhancements the small group of academics provided.

3.5   Data collection methods and procedures

In this section, I describe the data collection methods, instruments, and procedures used in my study, organised according to each of the three research phases. These methods are summarised in Table 3.4.

Table 3.4   Data collection methods across the three research phases

Phase	Participants	Approach	Method
Phase 1	Experts	Qualitative	− Semi-structured interviews
Phase 2	Working group	Qualitative	− Discussion groups − Feedback sheets
Phase 3	Pilot group	Qualitative and quantitative	− WhatsApp chat text − Zoom chat text − Mindfulness and resilience surveys − End of pilot feedback survey − Two-month post-pilot feedback survey

3.5.1 Phase one -Experts

Semi-structured interviews were conducted to explore and elicit the experiences of experts and their perceptions of my development and contextualisation of the MRBi. Their semi-structured form represents a participant-centred approach to the interviews, which allowed me to talk to each expert in depth, elicit their insights and knowledge, and ask additional questions if they arose.

An interview guide was developed, comprising 13 open-ended questions and their justification (Appendix J). Their open-endedness allowed for a better understanding of the contextual meaning of the responses (Adams, 2015). Interviews were standardised for consistency and comparability of responses. To allow for flexibility, interviewees were asked 11 core questions from the 13 listed in the interview guide (Adams, 2015). The questions were designed to gather insights on a range of relevant topics, such as fundamental stressors for busy academics, ways of contextualising the intervention, effective mindfulness-resilience practices, and what to avoid. To some extent, such an approach allows participant's responses to shape the interview (McGrath et al., 2020) by capturing nuanced responses, including facial expressions, intonation and emphasis on words and body gestures, that enabled a deeper understanding of meanings.

Interview duration was, on average, approximately 60 minutes. Some were conducted face-to-face in the expert's office, some were conducted online through Zoom, and two were conducted on the telephone, providing flexibility for geographically distant interviewees. A two-fold approach to data capture ensured a comprehensive record of the interviews. First, I audio-recorded the interviews, and second, I wrote detailed notes during the interviews to complement the audio recordings and capture nuanced verbal and non-verbal cues (see Appendix K for an example of my handwritten notes). These notes detailed participants' tone and body language, and other contextual observations that enriched my understanding of their responses. Notes detailing participants' tone, body language, and other contextual observations were used to add depth and nuance to the interpretation of their verbal responses. These nonverbal cues helped to capture emotional intensity, hesitation, enthusiasm, or discomfort,

which might not have been fully conveyed through words alone. For instance, a participant's hesitant tone or body language could suggest uncertainty or reluctance, enriching the analysis by indicating areas where deeper probing or further clarification might be necessary.

Additionally, contextual observations provided insights into how participants engaged with my interview questions, their level of comfort, and any environmental factors influencing their responses to me. This helped me to triangulate findings, ensuring that responses were not analysed in isolation but were interpreted within the broader communicative context of their responses. By integrating these observations with verbal data, my analysis allowed me a more holistic understanding of the participants' experiences, emotions, and perspectives. All audio-recordings were digitally transcribed, and handwritten notes were typed up.

3.5.2 Phase two – Working Group

The WG met for one-hour sessions each week over four concurrent weeks. Each session was designed to discuss participants' experiences in the preceding two weeks of the prototyped MRBi content. Two data collection methods were used. First, group discussions, in which members talked through and refined the MRBi content and design. Second, feedback comment sheets, which members completed after the sessions. Table 3.5 presents an overview of the WG sessions by week.

Table 3.5   Working group weekly content

Week no. and duration	Activities
Week 1 (60 mins) *Covers weeks 1 and 2 of the MRBi prototyped content*	– Intros – Discussion item: top 10 things academics struggle with throughout their day + link to mindfulness-resilience – Listen and practise with 5 min prototyped mindfulness-resilience mp3 recording – focused critique/refine

	– Workbook review – redesign/refine /feedback sheet + group discussion
	– Listen and practise with 10 min mp3 recording – focused critique/refine
	– Questions/ comments /wrap up
Week 2 (60 mins) *Covers weeks 3 and 4 of the MRBi prototyped content*	– Intros – Discussion item: barrier to practicing mindfulness and resilience as a busy academic + link to mindfulness-resilience – Listen and practise with 5 min prototyped mindfulness-resilience mp3 recording – focused critique/refine – Discussion item: design of resilience enhancement practices – redesign/ feedback sheet + discussion – Listen and practise with 10 min mp3 recording – focused critique/refine – Questions/ comments /wrap up
Week 3 (60 mins) *Covers weeks 5 and 6 of the MRBi prototyped content*	– Intros – Discussion item: how to contextualise the mindfulness journal – Listen and practise with 5 min prototyped mindfulness-resilience mp3 recording – focused critique/refine – Discussion item: how to promote the MRBi to academics; feedback sheet + discussion – Listen and practise with 10 min mp3 recording – focused critique/refine – Questions/ comments /wrap up
Week 4 (60 mins) *Covers weeks 7 and 8 of the MRBi prototyped content*	– Intros – Discussion item: how to bring mindfulness and resilience into our busy lives -practical ways – Listen and practise with 5 min mp3 recording – focused critique/refine

	– Mindful eating & drinking practice - feedback sheet + group discussion
	– Listen and practise with 10 min mp3 recording – focused critique/refine
	– Questions/ comments /wrap up

During these sessions, participants engaged in discussion and activities designed to elicit their understanding of the MRBi content and materials, to help with the refinement of the MRBi and my contextualisation. This will be explained in Chapter 5.

3.5.2.1   Group discussions

A weekly group discussion was the primary data collection method in Phase two, chosen to encourage open dialogue among WG participants. Guided by a fixed agenda I facilitated these discussions in reviewing sections of the prototyped MRBi, week by week. Discussions covered how I could best contextualise aspects of the MRBi messaging and practical exercises, such as the MP3 audio meditations. All discussions were audio-recorded, supplemented by my detailed notes made during the sessions. Together, these data informed my contextualisation of specific parts of the MRBi, such as the journal artefacts, promoting the MRBi, and the resilience-enhancement reflections design.

3.5.2.2   Participant feedback sheets

Each meeting, feedback sheets were distributed to WG members, which constituted a time-saving device through which to review the prototyped MP3 audio meditations and journal artefacts. The feedback sheets captured participants' reactions to the MP3 audio practices and collated participants' contextualisation ideas (see the example in Appendix L). The feedback sheets were anonymous to facilitate confidential feedback and save time in gathering participants' instant reactions to the prototyped content. After feedback was completed, a brief discussion that summarised collective thoughts followed. Together, these methods streamlined the feedback process, making it more

efficient for participants. Data gleaned from the feedback sheets were subsequently thematically analysed.

3.5.2.3   Feedback on prototyped artefacts

The WG sampled the prototyped MRBi audio meditations, each no longer than ten minutes in duration, and accompanying handbook artefacts in each weekly session. Over the four weeks, all prototyped MRBi meditation audio recordings were previewed by the WG. Each week, feedback about and suggestions for improving the MP3 audio recording were taken into account in developing the following week's audio recording. The prototyped practices and content featured terminology that mapped onto the surveys, which meant that terms like observing, being nonjudgmental, equanimity, describing and letting go became part of the WG vernacular.

3.5.3 Phase three – Pilot Group

The PG comprised 15 academics who engaged in a revised version of the MRBi, which will be discussed in detail in Chapter 6. This version was more streamlined than the original to accommodate six-weeks' duration, as a result of my contextualisation process from the previous WG phase of the study. The PG met online via Zoom for 60 minutes once a week, across the six weeks. I facilitated the online weekly meetings, and together with PG members, practised the MRBi core concepts of mindfulness and resilience building, of which, practical and feasible exercises were the cornerstone. The group used the Zoom chat feature during the sessions, and a concurrent WhatsApp group outside the sessions, to share reflections and pose questions in a collaborative learning environment. The WhatsApp group served multiple purposes: it provided a platform for sharing practices with all participants, functioned as an online reflection journal where individuals could comment on and reflect upon their daily experiences, and allowed participants to demonstrate how they were integrating

mindfulness into their lives. Additionally, it facilitated the sharing of unique insights and unique ways of the academics embedding mindfulness into their daily lives. Participants also practised meditation guided by MP3 audio recordings in their own time every day, sharing their experiences and feedback in the WhatsApp group chat.

A two-fold mixed-method data collection approach captured the PG members' insights. First, all Zoom meetings were recorded to document discussions, exercises and interactions. Transcripts of the Zoom and WhatsApp chats captured participants' synchronous and asynchronous interactions during and after their engagement in the MRBi. At the end of the piloted MRBi, participants completed a feedback survey that asked open-ended questions about their experience and elicited suggestions for further contextualisation (see Chapter 6). Second, participants' mindfulness and personal resilience levels were assessed using pre- and post-intervention mindfulness and resilience surveys, respectively the Five-Facet Mindfulness Survey (Appendix F). and the Connor-Davidson Resilience Scale 2 (Appendix G). The surveys were administered via email, which included a hyperlink to the Qualtrics online survey platform. This comprehensive approach to data collection promoted deep understanding of participants' experiences and statistical evidence to support the efficacy of the intervention.

3.6   Data analysis

Qualitative data generated in the three research phases were analysed using a thematic approach, which is described in Section 3.6.1. Descriptions of how this approach unfolded in phases one and two appear respectively in Section 3.6.2 and Section 3.6.3. Two analytical approaches were used in phase three: thematic analysis of qualitative data and statistical analysis of quantitative, which is presented in Section 3.6.5.

3.6.1   Thematic analysis

Thematic analysis is a widely used method for analysing qualitative research data (Braun & Clarke, 2006; Clarke & Braun, 2017). The method is used to identify patterns of meaning within a dataset (Braun & Clarke, 2019; Byrne, 2022), providing valuable insights into participants' experiences and perspectives. Thematic analysis offers several benefits for my study. First, it allows for in-depth exploration to uncover complex patterns and themes in the data that provide a nuanced understanding of the subject in a flexible and adaptable way (Nowell et al., 2017). Second, the rigorous and systematic identification of categories, patterns and themes in thematic analysis (Clarke & Braun, 2013) enhances the trustworthiness and credibility of the findings (Braun & Clarke, 2019). Credibility arises from using a structured analytical process that ensures consistency and thoroughness, thereby enhancing reliability. Thematic analysis was used in all three phases of the research, each of which is described in the following sections.

3.6.2 Thematic data analysis in Phases one, two and three

The expert interview transcripts from Phase one were first to be analysed, followed by the transcribed audio recorded data generated in Phase two WG discussions, and transcribed weekly PG meeting data in Phase three.

Thematic analysis for all three datasets involved iterative stages. Familiarisation was followed by digital transcription, and initial categorisation into broad themes. I then excerpted data from transcripts onto digital post it notes (DPIN) that I created in Word for Windows and PowerPoint. DPINs were then digitally grouped (Figure 3.2) and coded in the following way. First, the initials of each interviewee's pseudonym were colour-coded for easier identification and incorporated into the relevant DPIN. A heading was inserted in each DPIN to streamline the grouping process, as well as a page and line number that corresponded to the transcription from which the data were excerpted for future reference.

Figure 3.2   Example of grouped DPINs of expert interview data
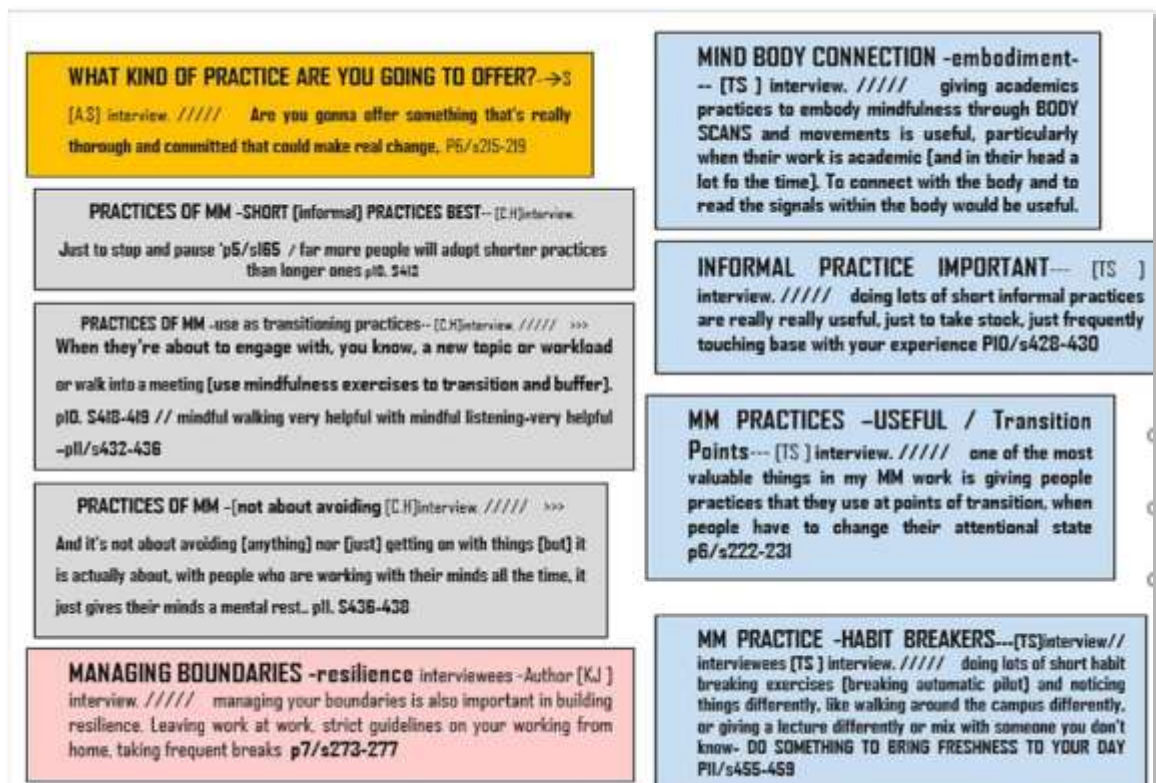
The coded DPINs represented broad classification of data. This was followed by inductive coding (Nowell et al., 2017), through which I grouped the DPINs into themes. Patterns, overlaps, categories and anomalies in the themes were made visible through these groupings, which I refined several times using Braun and Clarke's (2006) six-step reflexive and iterative process of thematic analysis. This process allowed me to move back and forth between data and analysis, refining codes and key themes as my understanding of the themes emerged reflexively (Braun & Clarke, 2019).

Throughout the process of thematic analysis, I maintained a detailed audit trail in an Excel spreadsheet, recording key decisions and analytical moves to ensure transparency and credibility. I also discussed the process and emergent themes with peers and supervisors, to validate their authenticity. Finally, I collated the themes into Excel spreadsheets, from which data could be easily extracted and reviewed.

3.6.3 Statistical analysis of Phase three survey data

R software was used to statistically analyse the pre- and post-intervention survey data and identify relationships and patterns. This section outlines the methodological process, which is discussed in more detail in Chapter 6. The data were first exported from the Qualtrics online survey into an Excel spreadsheet and checked for accuracy, then imported into R software (Version 4.2.2). Descriptive statistics were used to summarise the data, to give an idea of the median value and range (standard deviation) in the data. Frequency counts were used in categorical data to identify key features. Histograms were generated and used to compare pre- and post- data from the FFMQ and CD-RISC2 survey responses, the purpose of which was to check if the data were normally distributed. The median values were calculated to illustrate the scale of changes between the pre-and post-intervention datasets. Finally, the Wilcoxon Rank Sum test was used to compare the pre-and post-intervention data and identify any significant differences (Scheff, 2016; Xia, 2020). Analysis followed a standard significance level (α=0.05) to determine if the findings were statistically important. Overall, statistical analysis of the data enabled valuable insights into

how participants' levels of mindfulness and resilience varied after the intervention. These insights will be discussed in detail in Chapter 6.

3.7   Ethical considerations

The ethics approval process involved two applications. The first application (ETH19-3609) was approved by the UTS Ethics Committee that allowed the expert and WG phases to be undertaken (Appendix H). A second ethics application (ETH20 -5285) was approved by the Medical Research Ethics Committee (MREC) (Appendix I), which allowed the PG phase to go ahead. The latter was required for studies involving humans in medical interventions, of which the prototyped MRBi was considered to be. A full description of the research design, its safety protocols and assurances of participant safety were documented and approved.

A significant risk to participants was identified in all three research phases, in relation to inconvenience and the challenges of coordinating schedules to accommodate participation and the risk of discomfort associated with potentially expressing negative emotions about participants' professional experiences. A multi-faceted risk mitigation strategy was used to counterbalance these potential pitfalls. For example, participants were supplied with a comprehensive code of conduct before the study began to address concerns about inadvertent disclosure of information and to ensure participants understood their roles. The responsibilities, confidentiality requirements, risks and the overarching purpose of the research were documented in the P.I.S. for each phase of the study.

Informed consent, confidentiality, privacy and reputational risk were all carefully considered and appropriate actions were taken during all phases of the research. Prior to their commencement, participants were provided a P.I.S specific to each phase of the study and encouraged to ask questions of the researcher or the principal supervisor before agreeing to be involved by completing informed consent documents. To protect participants' confidentiality and anonymity, all identifying information was

replaced with coded initials and/or pseudonyms during the data analysis and reporting process. Data security was paramount. Participant consent forms were digitally signed and returned for secure storage in line with the UTS data storage protocols. Audio recordings, transcripts and digital copies of handwritten notes were also securely stored in password-protected online sites. Hard copies of the notes were stored in a locked filing cabinet in a safe location. The specific ethical considerations in each phase are outlined next.

3.7.1 Phase one - Experts

Several aspects of confidentiality and anonymity applied to the expert interview phase of the study. Before the interviews, participants were informed about the privacy of their responses and safeguarding of data. This is particularly important because some participants may have been conscious of the risks associated with expressing views that were critical of their university, profession or peers. Assurances that their responses would be confidential to eliminate reputational risk were provided. Strategies to achieve this included deidentification through the use of pseudonyms, confidentiality assured by not sharing information or details with others, and that they could not be identified by other means, such as naming a particular faculty or university. These considerations were included in the P.I.S. (Appendix A).

3.7.2 Phase two – Working Group

Ethical considerations for WG participants related to informed consent, conduct during the sessions, respecting privacy and reputational risk. Before the WG began, participants were informed about how their responses would be safeguarded, particularly those in my handwritten notes. The WG sessions encouraged honest and respectful feedback and behaviour from all members to maintain ethical and productive sessions. Group dynamics were monitored by me to address power imbalances and minimise tensions if they arose. Respect for participants' opinions

and experiences were paramount, particularly the possibility of participants divulging confidential information to external parties. Participants may also have felt apprehensive about sharing negative sentiments or expressing critical views about their workplace, profession or colleagues, which could potentially lead to feelings of discomfort or stress. The probability and severity of these risks were rigorously assessed during the ethics approval process, and steps were taken to thoroughly ensure participant wellbeing and data confidentiality. Similarly to Phase one, all ethical considerations in Phase two were documented in the P.I.S. (Appendix B).

3.7.3 Phase three – Pilot Group

Comprehensive documentation of Phase three, its safety protocols, and assurances regarding participant safety were provided to participants to meet the requirements of an MREC application. Similarly, to Phase two, the PG phase encouraged honest and respectful feedback and behaviour from all members; group dynamics were carefully monitored to address tensions as they arose; respect for opinions and experiences were upheld; and concerns about the expression of potentially negative or critical views were addressed through deidentification and confidentiality assurance, especially in relation to unintended information disclosure. I implemented a robust framework of guidelines, communication, and mental health support provisions to foster a protective environment in the ethical execution of the study. To ethically minimise the risk of personal data exposure in a WhatsApp group, I ensured informed consent before adding members and clearly communicated the privacy expectations and confidentiality expectations of this data. I remained committed to prioritising the mental wellbeing of PG members by recognising and mitigating the emotional toll of discussions through information and access to mental health support services. Consistent with my previous phases, all ethical considerations were provided to participants in a P.I.S. (Appendix D).

3.8   Chapter summary

This chapter has presented the conceptual framework and research design of my study. The core construct in the study is mindfulness, focusing on present-moment awareness, equanimity and nonjudgmental acceptance. The supporting construct is resilience, which is the ability to recover from adversity. My Research Questions sought to investigate whether, and to what extent, mindfulness practices that incorporate dedicated resilience enhancement strategies positively impact participants' capacity to cope with challenges and stressors and improved wellbeing. A tandem approach involving a Behaviour Change Framework and AR reflective cycles guided my MRBi development process, its acceptability and effectiveness and emphasised iterative problem-solving, and active involvement which enhanced my contextualisation decisions. A systematic process across three research phases (expert, WG and PG), generated data that were thematically and statistically analysed to address my Research Questions. The following chapter presents the findings that emerged from analysis of the expert interview data in Phase one of the research.

Chapter 4. Phase 1: Expert interviews

4.1   Introduction

The conceptual framework and research methodology used in my study was outlined in Chapter 3, which provided the context for the three findings chapters, each of which represents one of the three research phases (Chapters 4, 5 and 6). Chapter 4 is the first of these chapters. The three research phases represent a coherent sequence of planning, prototyping, and testing the MRBi. The phases are summarised in Table 4.1.

Table 4.1   Overview of three research phases

Phase no.	Who was involved	Purpose /Aim	Chapter
Phase 1	Experts	Planning and contextualising	Chapter 4
Phase 2	Working group	Prototyping and contextualising	Chapter 5
Phase 3	Pilot group	Testing and contextualising	Chapter 6

The findings emerging from analysis of the Phase 1 data generated through semi-structured interviews with experts in mindfulness, resilience, and professional wellbeing. The aim of the interviews was to understand how the planning, selection and evidence base relating to mindfulness and resilience (MMR) based practices could contribute to my contextualisation of the bespoke MRBi. The experts had lived experience of academic work, which, coupled with their formal expertise in mindfulness and related domains, allowed for rich insights to be gleaned from the interviews.

In this introductory section, I first outline version 1 of the MRBi (MRBi v1), which was current when this phase began, then recap the methods of data collection and analysis used in this phase. Following this, I identify the four core themes that emerged from the analysis, and show how these findings address the Research Q 1: In what ways can

a custom-designed online MRBi be contextualised to suit academics and their work? The four themes described in this chapter demonstrate a significant, novel impact on the process of contextualising the MRBi.

4.1.1 The MRBi design version 1

The design of the MRBi curriculum, its practices and content were in early development at the start of Phase 1. The MRBi curriculum consisted of a first draft version (v1), which I had created prior to data collection. The curriculum was developed from having researched evidence-based interventions and practices and my experience as a long-term meditator and casual academic, facilitator of mindfulness, a doctoral candidate, a former MBSR participant. My practical and research experience equipped me with a sound understanding of how to craft the initial MRBi curriculum for novice academic meditators.

The MRBi (v1) was an eight-week program that included both formal (taught) and informal (self-led) mindfulness and resilience (MMR) practices. In developing the MRBi (v1) curriculum, I drew initial inspiration from the Mindfulness-Based Stress Reduction (MBSR), which is considered a gold-standard intervention because of its rigour and efficacy (Bravo et al., 2019; Shahidi et al., 2017). The MRBi (v1) was not a facsimile of the MBSR intervention, although there were similarities in terms of program duration, types of mindfulness and resilience practices, teaching themes, and the focus on the four key elements of mindfulness (Section 3.2.3). This initial version was not intended for sharing, discussion or review during Phase 1 of my study, because the goal was to leverage the experts' knowledge and expertise, rather than have them review a document I had created. I did, however, prepare a draft curriculum overview (Appendix M).

4.1.2 Phase 1 research methods

As previously outlined, I recruited 11 academics from a range of Australian and international universities and educational institutions for Phase 1 of my study. The academics specialised in mindfulness, resilience, and professional wellbeing, so are considered and will be referred to as *experts*. The experts' experience and expertise are outlined in Table 4.2.

Table 4.2   Phase 1 participants' expertise

Experience and expertise	Pseudonyms
Combined mindfulness and wellbeing background	Christian, Tallulah, Tate, Sarah
Combined resilience and wellbeing background	Dana, Kiara, Gemma, Freya
Combined mindfulness and resilience knowledge	Alana, Felicity, Juliana

I conducted individual semi-structured interviews with each expert to gather their insights into how I could contextualise the MRBi for busy academics. Together, the experts contributed practice-based evidence that informed my contextualisation of the MRBi. The audio recordings of the interviews were transcribed and thematically analysed, as previously discussed (Section 3.6.2). In this chapter, I present and discuss the key themes and subthemes that emerged from data analysis and their implications. The chapter is organised into three sections: themes (Section 4.2), discussion (Section 4.3), and implications (Section 4.4). Section 4.5 summarises and concludes the chapter.

4.2　Themes

Four key themes emerged from my analysis of the expert interview data, which are presented in Table 4.3. Each of these themes will be discussed as follows: the MRBi and time poverty (Section 4.2.1), the MRBi and academic work – space and boundaries (Section 4.2.2), rigour in the MRBi (Section 4.2.3), and the MRBi and depth at speed (Section 4.2.4).

Table 4.3　Key themes emerging from Phase 1 expert interview data analysis

No.	Themes linking findings to the literature
1	Time poverty
2	Academic work: space, boundaries and restoration
3	Rigour: traditional wisdom and evidence-based practice
4	Depth at speed

4.2.1　Time poverty

A critical finding that emerged from interview data analysis was that academics are extremely time poor. Time poverty points to the need for mindfulness-resilience (MMR) practices that are brief, time-saving, and constitute no extra burden on academic workloads. By discerning the relationships between time poverty and the need for appropriate MMR practices, I identified four subthemes relating to time poverty (Table 4.4).

Table 4.4   Subthemes relating to time poverty

No	Subtheme
1.1	Time poverty/little time for traditional interventions
1.2	The need for MMR enhancement – despite being busy
1.3	Achievable MMR practices embedded in/around academic work
1.4	MMR does not have to equal more work

In the first four sections that follow, I discuss and support the four subthemes with excerpts from my interviews with experts. The final section brings together the four subthemes.

4.2.1.1   Time poverty/little time for traditional interventions

Each expert talked about the extreme lack of time they experienced in their academic work, frequently commenting on the overwhelming demands and excessive workloads in their lives and in academia more generally. Poor academic work-life balance was the term they used to describe the demands of academic workloads. I frame poor work-life balance as *time poverty*, as previously discussed in the literature review (Chapter 2). The following data excerpts show how time-poverty negatively impacted the experts' capacity to engage in lengthy traditional MMR interventions. To illustrate, Christian commented:

> Workloads are very high and linked with high expectations and expected output, leaving us with little time.

Similarly, Felicity talked about the increasing stress and impacts on physical and mental wellbeing, and the lack of available time to commit to lengthy extracurricular activities:

> We have no available time when all the marking comes in, and then the exams and all the assessments are due. Everyone gets all so stressed, and you could

just mark for 12 hours a day for a week, and it just doesn't get done. We all

just get snappy, get jumpy and just tired and sick, there's just no time.

Juliana supported claims about the excessive time demands that impinge on academics:

The hours for academics are just HUGE, there's incredible pressure to meet

the demands of the job, how to balance research and teaching … there's just

huge hours outside of normal hours too.

The excerpts above show a clear relationship between academics' lack of time,

excessive demands, poor work-life balance, and general lack of capacity for

lengthy extracurricular commitments such as health and wellbeing interventions

and practices.

4.2.1.2   The need for MMR enhancement – despite being busy

Many of the interviewees said that MMR practices were needed in academia,

despite the busyness of their workloads. A number of experts identified MMR

practices as a valuable way to tend to their wellbeing that was impacted by workload

challenges. For example, Sarah commented that MMR practices were necessary

because universities were unlikely to change how they operate in the foreseeable

future. Christian affirmed this statement as follows:

Expectations of staff are very high at universities, and high outputs are expected

despite the casualisation and reduction in staffing and therefore you need to

look after your wellbeing in such a system.

Juliana added:

MMR practices were an absolute no-brainer in such a demanding system

as universities.

These excerpts illustrate a pattern in the data suggesting that, despite their busyness,

MMR practices were *even more necessary* to look after oneself as an academic.

The resilience experts expressed similar views about the need for resilience enhancement for busy academics. For example, Kiara stressed the importance of doing this during the semester:

> If academics are not frequently doing something to invest in their wellbeing and resilience building before the proverbial fan hits, they will not be strong enough to handle some of what academic life throws at them.

The excerpt above sums up the resilience experts' views that resilience enhancement was an absolute necessity for academics to be able to perform to expectations in the university.

4.2.1.3   Achievable MMR practices embedded in and around academic work

The experts commented that MMR practices could be conducted effectively through briefer practices that were embedded into and around academic work. Despite finding that extreme busyness was problematic for such practice, the experts said it was possible to undertake brief MMR practices. For example, Juliana stated:

> Mindfulness practices do not have to take long; they can be done in just a couple of seconds or minutes whilst at work.

This view was supported by Felicity, who said:

> We're sick of hearing that, you know people saying to us "take time out", because there's periods in the semester when you just can't ... But you can always squeeze in that mindfulness practice, that mindful breathing. It's just so quick to do.

These excerpts encapsulate the experts' view that it was possible to engage in MMR practices by embedding them in or around busy, daily work activities. Tallulah affirmed this view, in the following comment about her busy daily work schedule:

Doing lots of informal and relatively quick mindfulness and resilience habit-breaking practices is a very effective approach to employ throughout the day as a busy academic.

The excerpt above reflected the experts' brief MMR tools being beneficial for busy academics, which is demonstrated in Julian's comment that doing frequent (i.e., daily) mindfulness practices during work and embedding them within work:

… supports academics to continue to work in a challenging intellectual environment.

Thus, Juliana's comment supports the finding that embedding brief MMR practices within and around busy academic workloads can be achieved.

4.2.1.4   MMR does not have to equal more work

Interviewees noted that MMR practices do not necessarily have to cause additional work for already busy academics. Overall, the mindfulness experts agreed that undertaking mindfulness practices during or around academic work tasks need not add to workloads. Several interviewees provided examples of how they routinely and successfully embedded mindfulness into their daily work lives without adding to the load. Such practices included paying mindful attention to the five senses during work and undertaking focused single-tasking during challenging moments to reduce the sense of being overwhelmed. For example, Juliana claimed that quick and simple practices such as mindful walking, paying attention to your breath at your desk, and paying mindful attention to external sounds in the office created no extra burden of work.

Echoing the mindfulness experts, the resilience experts also talked about successfully embedding quick resilience practices without adding to workloads. Some examples included: positive and encouraging self-talk; reaching out to and developing supportive networks within faculty/campus; drawing boundaries around excessive workloads; and being more comfortable saying no to offers/expectations of more work. These

commonplace, yet versatile techniques, they said, could be easily accommodated within and around academic work during the semester without adding to workloads.

4.2.1.5   Section summary

The findings discussed in this section demonstrate that academics experience extreme time, work, and wellbeing pressures that leaves them time-poor, in other words, little time or space for partaking in lengthy traditional interventions, such as the eight-week MBSR. The experts claimed that MMR practices are important for their wellbeing as busy academics and can be successfully embedded in and around busy academic work without adding to existing workloads.

4.2.2 Academic work: space, boundaries and restoration

The second key theme emerging from data analysis is presented in this subsection. This theme focuses on the relationship between academic work and the creation of much-needed space and boundaries in which to practice MMR. The findings that are discussed as follow relate to the notions of space, boundaries, and restoration that comprise theme two (Table 4.5).

Table 4.5   Creating space and boundaries for restorative MMR practices

No.	Subtheme
2.1	Creating space and boundaries in academic work through MMR practices
2.2	Interrelationship between space and boundaries, and restoration

In the sections that follow, I first clarify the terms space, boundaries, and restoration, and then discuss the two subthemes.

4.2.2.1 Space, boundaries, and restoration

The experts used particular terms during the interviews, which I now clarify. The use of the metaphors, space and boundaries, refers to buffers around the work demands in academic roles (Chapter 2). Here, *space* refers to having time for thinking, reflecting, and just being. In other words, being able to make space in the day away from work pressures. *Boundaries* refers to putting limits on the encroachments of academic work, so that there is time for restoration. The term *restoration* referred to practices that offered academics relaxation and refreshment.

The terms space, boundaries and restoration represent a finding that is vital for contextualising the MRBi within academic work and workplaces. This finding is interconnected with MMR practices in general, and experiences of present-moment awareness in particular. The finding suggests that having thinking space during busy workdays is essential for restoration. Thinking space connects to boundaries in that academics need buffers from heavy workloads and demands. The use of boundaries to create space leads to restorative MMR practices (and vice versa). This relationship is depicted in Figure 4.1.

Figure 4.1   Interrelationship between restorative MMR practices, space and boundaries
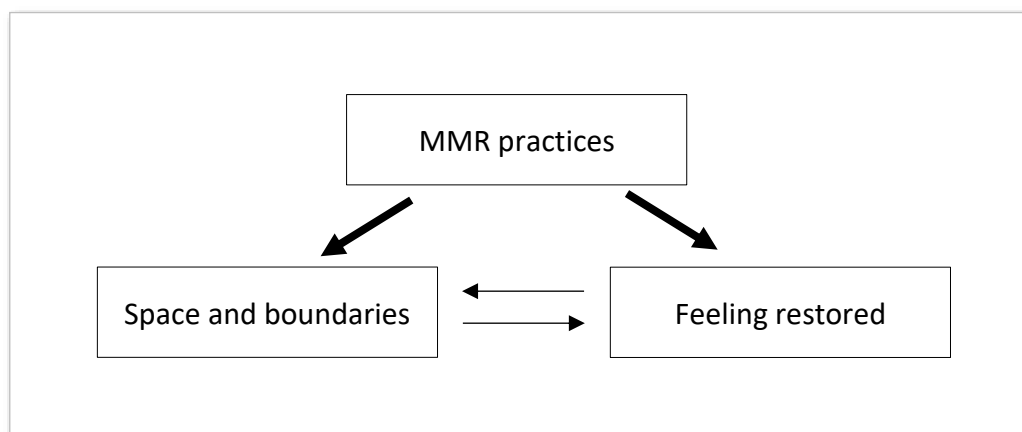
4.2.2.2   Creating space and boundaries through MMR practice

My findings suggest that the experts saw creating space and making boundaries was paramount for MMR practices. The mindfulness experts talked about space and boundaries more than the resilience experts. This may be attributed to one of the aims of mindfulness, which is to achieve present-moment awareness. Present-moment awareness both represents and creates space from work and distractions, as previously discussed in Chapter 2. In contrast, the resilience experts spoke about creating boundaries to be able to practice resilience enhancement, and using resilience to create boundaries around constant work demands.

Using the experts' understanding of the term space, I discovered that it was important for academics to create space (time) for enhancing wellbeing, specifically because of their high workloads, while space also referred to resting or pausing during the workday to restore mental and emotional wellbeing. By using space, academics can address the work burden. For example, Alana said:

> Mindfulness practices help relieve the burden from work, they help to create mental space.

The comment above suggests that mental space can be created through the practice of mindfulness, yet it also signals the need for respite, which another expert noted was:

> Non-stop workloads and pressure associated with our academic work.

Christian also noted:

> It's actually all about using mindfulness and resilience just to stop and pause, to put a break, to create a pause, with some mindful moments into your day, so to speak.

I interpret this excerpt to mean that embedding MMR practices within academics' everyday work activities and situations can generate space that enhances their

wellbeing. The experts' occasional use of the term boundary, was in the context of managing or creating boundaries around work activities so that space for enhancing resilience and improving wellbeing could be created, as Juliana stated:

> Managing your boundaries is also important in building resilience, ensuring that you're leaving work at work, having strict guidelines, on your working from home, on taking frequent breaks.

Together, these excerpts suggest that the experts saw MMR practices as helping create boundaries that generate space for enhancing resilience practices. This is evidenced in Juliana's statement:

> Mindfulness helps create boundaries … it allows us to be clearer about our boundaries as an academic, and to ensure that we take time to look after ourselves.

These findings illustrate the relationship between space and boundaries for enhancing wellbeing through MMR practices.

4.2.2.3   Interrelationship between space and boundaries, and restoration

The experts saw restoration, defined as "the fact or state of being restored, or bringing back to an original, normal, former, or unimpaired condition" (Macquarie Dictionary, 2024) as much needed for academics' wellbeing. They talked about the need for restoration in terms of having space and boundaries to be able to look after oneself in the context of demanding workloads. The reason for restoration was to enhance resilience in the face of challenges and stress associated with academic work. Their comments suggest that space and boundaries, restoration and MMR practices were interchangeable. This enabled me to identify the interrelationship between space and boundaries, and MMR practices and restoration, as depicted in Figure 4.1. To illustrate, Alana said:

> We all need some time out, some space, just to stop and catch our breath
> and recalibrate.

Here, "recalibrate" refers to the process of restoration. In turn, Dana commented that restoration can *create* space:

> We all need to take some time to restore, just to put some space back
> in from our non-stop work.

There was also a relationship between poor restoration and lack of space and boundaries. The experts stated that academics' stress and anxiety were often at extreme levels due to the lack of restoration, space, and boundary creation, and because of the perceived need to push through these complicated emotional states without taking the time for adequate breaks (space) or rest (restoration). Juliana said:

> Being an academic is a never-ending role …. this lends and invites people to
> constantly feel anxious and feel like they have just to push on and keep going.

The open-endedness of the academic role is stressed in this excerpt. Juliana's comment supports my argument, in Chapter 2, that academics are struggling to cope with the demands of contemporary university workplaces, expressed above as "just to push on and keep going".

4.2.2.4 Section summary

My findings suggest their busy and demanding work environments prevents academics from feeling restored or participating in restorative practices such as MMR. The restoration deficit is clearly linked to the lack of space and boundaries around academics' work activities and commitments. This finding highlights the close interrelationship between the notions of space and boundaries, and restoration, which has informed the process of contextualising the MRBi in my study.

4.2.3 Rigour

The mindfulness experts emphasised instilling rigour in the MRBi. By rigour, I mean the importance for the content, teachings, and practices of the MRBi to *pay homage* to the rich heritage of traditional Buddhist mindfulness practices. The mindfulness experts were particularly keen to stress that mindfulness has a proud lineage that needs to be respected during contextualisation, which as Christian noted:

Does not deviate into simple relaxation or McMindfulness territory.

My interpretation of the experts' comments is that rigour refers to the importance of maintaining the traditional wisdom and historical Buddhist lineage from which mindfulness practices stem.

In this section, rigour in the MRBi emerged from analysis two subthemes, which are presented in Table 4.6.

Table 4.6   Rigour in the MRBi

No.	Subtheme
3.1	Traditional wisdom into design and content
3.2	Evidence-based research, content and practices

The two subthemes of rigour in the MRBi are discussed in the following two sections, supported with reference to data excerpted from the expert interview transcripts.

4.2.3.1   Rigour in the MRBi: incorporating traditional wisdom

The experts stressed that the MRBi be respectful of traditional mindfulness concepts, such as non-striving, equanimity, and gratitude. The reason they offered was that for MRBi participants, *perceptions of integrity* in terms of traditional Buddhist wisdom would be conveyed. For example, Alana said:

It's really important to honour the traditional wisdom within these practices, not to corporatise or McMindfulness them in any way.

Alana's comment emphasises the importance of founding the MRBi practices on traditional wisdom, rather than, as she put it, "corporatise or McMindfulness them". I take this to mean that integrity can be conferred on the MRBi practices through adherence to Buddhist principles, as opposed to oversimplification or commodification of such practices to the point where they lose their deeper meaning.

My analysis of the interview data suggested that the experts were keen to emphasise that mindfulness should not be overly diluted or distanced from its traditional legacy and origins, to which the term "McMindfulness" refers. The incorporation of rigour through traditional wisdom and historical lineage, they claimed, could be achieved using secular language and metaphors. To illustrate, Sarah suggested:

Just use secular language to draw on the underlying wisdom of the Buddhist concepts.

Christian and Juliana affirmed Sarah's suggestion that secular language might resonate with and be understood by novice academics is affirmed by Christian as follows:

Keep away from Buddhist terms like noble eightfold path, Metta meditation, or too much about the Buddha, instead use secular language and research evidence to say the same thing.

Secular language would be particularly beneficial to novices, according to the experts, who suggested they may be unfamiliar with foundational mindfulness concepts, such as: Metta meditation (loving kindness meditation); Sammā (right mindedness); and Dharma (teachings of the Buddha on how to practice) (Anālayo, 2016).

4.2.3.2 Rigour through evidence-based research, content and practices

The need for incorporating a scientific evidence-based approach to the contextualisation of the MRBi as suggested by the experts was unsurprising, yet what was surprising was the explicit emphasis on doing so. My analysis of the interview data shows that the experts believed an evidence-based approach would enhance participants' perceptions of rigour, quality, and trust in the MRBi in the following ways:

- Assist in perceptions of rigour, quality, and viability.

- Deflect possible scepticism that mindfulness and resilience enhancement practices are unscientific; and

- Align with participants who expect and value a wellbeing intervention to be comprehensively informed by research.

To illustrate, Gemma and Christian agreed that any intervention designed for academics is likely to closely scrutinised, as Christian said:

> You need to show them that this stuff really works, is underpinned by science. Just hit them over the head with all the evidence … keep that up front in your teachings.

Sarah added:

> Academics expect thorough research and evidence to underpin what they're being told, that's just taken for granted … so your design must explicitly display that.

These excerpts show the importance of academics being able to see rigour in the MRBi and its practices through evidence-based research. This key finding was crucial in my strategies to contextualise the intervention.

4.2.3.3   Section summary

The findings identified in this section emphasise that the MRBi must incorporate rigour through traditional wisdom, albeit expressed in secular language, and that contextualisation based on research evidence would assist in the perception of rigour.

4.2.4 Piquing curiosity: Depth at speed

The final theme that emerged from interview data analysis is the relationship between the MRBi and the pace and depth of mindfulness practice, which is referred to in this section as *depth at speed*. Depth at speed refers to the experts' suggestion for engaging participants quickly and deeply through piquing their curiosity about what the MRBi could offer them. There are two subthemes in depth of speed, summarised in Table 4.7.

Table 4.7   Depth at speed in the MRBi

4.1	Evidence-based MMR practices arouse curiosity
4.2	Speedy and embodied experiences create present moment awareness

4.2.4.1   Evidence-based MMR practices arouse curiosity

In the interviews, the experts stressed the importance of arousing curiosity in novice academic meditators to encourage their engagement. The thinking was that engagement would stem from participants' academic curiosity about how research supported the beneficial outcomes of MMR practice. Intellectual curiosity, in turn, would help participants become more receptive to and, therefore, interested in trying the practices to see the benefits for themselves. The incorporation of related research into the MRBi curriculum represented a potential contextualisation strategy. An example of related research was provided by Christian as follows:

Explain how mindfulness affects the brain, how it helps cognition, working memory, decision-making, that sort of thing. These people are smart, and they should be interested in knowing that these sorts of practices improve brain health.

Christian's comments acknowledge academics' inherent intellectual curiosity, which, he claimed, would rouse their interest in the MRBi. He added:

Show and tell them that this stuff work, give them a deep dive into the practices and support the practices with evidence to show that they work and get the academics interested.

The data excerpt above exemplifies the experts' suggestion to incorporate evidence-based research into MMR practices to arouse curiosity. Other suggestions included embedding the research evidence within MMR practices to demonstrate their positive effect on the brain, cognition, performance, and emotional regulation. For example, Juliana claimed:

… that sort of evidence should interest people who work with their brains a lot.

The reference to intellectual curiosity above was reflected in Felicity's comment about what could be gained through MMR practice:

I wish I'd known about these [MM] practices long ago; I benefit from them so much, I tell everyone … and so should you.

Felicity's comment is reflected in her encouragement to me to "tell everyone … and so should you" in contextualising the MRBi in my study.

4.2.4.2 Speedy and embodied experiences

The importance of MRBi participants being able to quickly experience present-moment awareness through MMR practice was stressed by the experts. They claimed such an experience would boost engagement and deepen participants' interest in the MMR practices and the intervention itself. Thus, they urged that practices should be designed to quickly and effectively facilitate present moment awareness, which would provide participants with an immediate, embodied or felt experience of the present moment. My analysis the interview data suggests that the design of speedy and efficient practices would help novice meditators, who were busy academics with little time, quickly experience and therefore come to realise the benefits of MMR practice.

My analysis further suggested that a key contextualising principle in designing time-efficient, evidence-based MMR practices was to facilitate speedy yet deeply embodied experiences of present-moment-awareness. The importance of getting academics *quickly engaged* and *explicitly feeling (embodying) the benefits* of present moment awareness was evident in the data. The experts' comments often *extended* the suggestion to arouse participants' curiosity to doing this at speed. Interviewees claimed that to encourage better engagement, the MRBi needed to be both time-efficient and also have a swift felt impact, in other words, an embodied sense of mindfulness and resilience enhancement. For example, Felicity urged:

> Get them doing it really quickly, straight away … show them it's quick, it works and can be done anywhere and that it doesn't have to be complicated.

The excerpt above exemplifies the experts' view that the MRBi should comprise contextualised practices, so that participants could speedily and deeply experience present-moment-awareness to realise the benefits of MMR practice in a time-efficient manner. Christian added:

> Show them upfront what this stuff can do … show them it works and can help.

This sentiment was supported by Tallulah:

> Get them to connect to their breath, right away, get them into the present
> moment and out of their busy minds.

Together, these excerpts support the idea about my contextualising the MRBi so that participants could quickly experience the felt benefits of present-moment-awareness. While they did not specifically mention the term present-moment-awareness, the resilience experts had similar comments about quick engagement through time-efficient methods that generate embodied benefits of resilience-enhancement techniques. For example, Kiara said:

> Get academics immediately thinking about boundary creation, and also
> how to audit and decrease their workloads to improve their thinking about
> resilience enhancement.

Other similar examples, such as the resilience-enhancing benefits of quick, positive-thinking exercises, and reflecting on supportive networks were suggested in the interviews. Together, my findings represent evidence that incorporating speedy and quickly-felt resilience experiences was a strategy for contextualising the MRBi design.

4.2.4.3   Section summary

Depth at speed, in this section, denotes what could be generated through intertwining research evidence-based practices with speedy MMR practices that offer deeply felt (embodied) present moment awareness. Depth at speed is a crucial finding that guided the contextualisation strategies I used in my study.

4.3 Discussion

The previous section identified the four themes that emerged from data analysis to inform the MRBi design and contextualisation. The discussion that follows links these themes to the literature. It is organised into four sections as follows: time poverty (Section 4.3.1); academic work – space, boundaries and restoration (Section 4.3.2); rigour – traditional wisdom and evidence-based practice (Section 4.3.3); and depth at speed (Section 4.3.4).

4.3.1 Addressing time poverty

This section discusses the interwoven elements that create a barrier to academics being able to access traditional MMR practices. These elements are time poverty, the need for MMR, brief MMR practices, and MMR practices contextualised for academics. Each will be discussed in turn.

4.3.1.1 Time-based barriers to practising MMR

Time poverty emerged as a key theme from my analysis of the expert interview data and thus had critical importance for how I would contextualise the MRBi. Within the relatively small yet growing literature on potential barriers to mindfulness practice, time-related issues (Hunt et al., 2020; Lomas et al., 2015) and excessive busyness (Laurie & Blandford, 2016) are important. Of time-related barriers to MMR, time poverty specifically in academics is less well researched. The findings from Phase one of my study suggest that barriers that limit academics engaging in MMR practices include the lack of available time to attend lengthy (8–12 weeks) of standard MMR interventions, and time poverty combined with extreme busyness, which impinges on their engaging in regular MMR practice. Well-regarded mindfulness interventions frequently span between 16 to 30 hours of teaching and self-practice (Thomas, 2017), while regular MMR practice requires between 45 and 60 minutes of daily practice (de Vibe et al., 2018; Lloyd et al., 2018). Their duration represents a

key barrier to time-poor academics' engagement in MMR practices. Understanding this barrier had significant implications for the MRBi design in my study, which I addressed through the development of brief, flexible and work-situated practices that are critical to contextualisation.

4.3.1.2   The need for MMR enhancement, despite being busy

Research shows that the contemporary university workplace is subject to constant disruptive change (Becker et al., 2020; Johnson et al., 2019; Kinman & Johnson, 2019; Marais et al., 2020). Whilst mindfulness and resilience enhancement is neither a cure, nor a quick fix (Lemon & McDonough, 2018a) for the resultant busyness of academics, their regular practice can improve wellbeing (Leggett, 2022; London, 2009). The expert interviewees went beyond this to claim that mindfulness and resilience enhancement practices are essential for academics because of the stressors and time poverty associated with academia. This finding is supported in the literature, which suggests that two gold-standard mindfulness interventions – MBSR and Mindfulness Cognitive Behaviour Therapy (MBCT) – significantly reduced symptoms of depression, distress and anxiety and significantly improving wellbeing in the workplace (Querstret et al., 2020).

In the context of universities governed by neoliberalism, which is associated with increasing levels of academic stress and workloads (Askins & Blazek, 2017), MMR practices can enhance academics' capacity to cope with challenging work conditions (Mellner et al., 2022). This points to a key finding from Phase one that aligns with the literature, that their benefits underpin the need for academics to undertake regular MMR practices (Hegney et al., 2021; Long et al., 2023). The message that engagement in the MRBi can potentially enable academics to generate space and boundaries around academic work is important to pass on to potential participants. Equally important is the message that the generation of space and boundaries enable restorative MMR practices, which in turn, contribute to the generation of space and boundaries. This is particularly so for academics who might otherwise dismiss traditional mindfulness-resilience interventions as effective self-care strategies that support and increase personal resilience and wellbeing (Clarkson et al., 2019).

4.3.1.3 Achievable MMR practices embedded in and around academic work

My findings indicate the importance and necessity of MMR practice that academics can do *quickly* and *whilst at work*. A review of the literature on short mindfulness practices (Mantzios & Giannou, 2019) suggested that practices as brief as five minutes have been shown to have a positive effect on individuals' physiological and psychological outcomes, when compared with a control group. This supports the inclusion of brief, beneficial and achievable MMR practices that are embedded into and around academics' busy lives in the design of my MRBi. Similarly, Schumer et al. (2018) found that shorter mindfulness practices based on their lengthier counterparts improved negative affectivity, decreased stress levels, lowered anxiety, improved mood and regulated emotions. This finding was supported by Berghoff et al. (2017), who found that the stress levels of a meditator group were significantly lower than a control group of non-meditators. The link between shorter, yet similarly effective MMR practices and reduce stress and improved wellbeing informed my contextualisation of the MRBi for time-poor academics.

In terms of enhancing and maintaining personal levels of resilience, brief, self-paced and online training can be effective (Stoliker et al., 2022). The efficacy of shorter MMR practices represents compelling evidence to integrate into the messaging and share with participants in the MRBi and, more importantly, to incorporate into the intervention design. This finding raised new questions, such as: How to design a short, effective MRBi for academics with very little time? How can short practices be designed for *online* delivery for people who *have little time*? Will a short, effective, online MRBi demonstrate participant engagement and efficacy? These questions were fundamental to my contextualising the MRBi.

4.3.1.4 Contextualising MMR practices for academics

There is extensive research investigating formal and informal MMR practice, yet very little of this focuses on embedding short, effective and achievable practices in the academic workplace. One exception is a study that developed a *brief mindfulness intervention* for university academics (Schwind et al., 2022). Participants in the study

were encouraged to complete 10-minute mindfulness exercises and short, informal mindfulness practices while on campus, such as walking and eating. The study supports my finding, based on the expert interviews, that it was *possible to interweave* short evidence-based MMR practices into academics' busy working day. What is key to this finding is that brief practices are feasible and significant in that they take little time and are also doable (Chozen Bays, 2018; Williams & Penman, 2011). The finding suggests that short practices can be implemented effectively.

4.3.1.5   Section summary

The discussion in this section linked the key finding from my analysis of Phase 1 interview data to the literature, that is, the need for MMR practices that accommodate the barrier of time poverty is evident. Although sparse, the literature shows that it is possible to design brief MMR practices within academic workplaces that are both doable and effective, while my findings suggest how this can be achieved, through skilful adaptation of short, feasible and acceptable MMR practices that can be embedded into and around academic work.

4.3.2 Setting boundaries to open space for restoration

This section aligns the second key finding from Phase 1 to the literature; that is, the interrelationship between the MRBi, space and boundaries around academic work, and restorative MMR practices. I begin by discussing space and boundaries in academic work (Section 4.3.2.1); make the link between space and boundaries and restorative MMR practices (Section 4.3.2.2); and conclude with a brief summary (Section 4.3.2.3).

4.3.2.1   Space and boundaries

The Phase 1 finding that creating space and boundaries in and around academic work is an important factor for contextualising the MRBi in my study aligns with evidence in the literature. Research suggests that mindfulness practices create better mental *space*, that is, better regulation of emotional states and clearer thinking (Rooney et al.,

2021) and calmer, more reflective mental states (McDonough & Lemon, 2018). The link between mental clarity and the creation of space through MMR practice leads to the capacity for the practitioner to set boundaries, as my findings suggest, that in turn, can benefit overworked academics. Here, creating space and setting boundaries also refers to the pausing of stressful work time, for restorative practices that improve wellbeing. This conceptualisation differs to those in the meditation and mindfulness literature. For example, the most common use of space and boundaries refers to eliminating the boundaries between an individual's sense of self and the external world (Nguyen et al., 2020). The resulting altered sense of perception is a common experience during mindfulness and other forms of meditation (Berkovich-Ohana et al., 2013; Nguyen et al., 2020). In contrast, my study found that the experts' use of the term boundaries referred to as placing buffers between work and self, which they saw as essential for managing and surviving the challenges of academic work. The idea of boundaries as buffers that enable space to be created within academic work for restorative practices is crucial to MMR and needs to be central to the messaging and contextualisation of the MRBi in my study.

4.3.2.2 Linking restorative MMR practices to space and boundaries

Phase 1 data analysis generated the finding that academics would benefit from restoration by creating space and setting boundaries for brief MMR practice within their working day. The MRBi developed in my study can effectively foster academics' capacity to restore and maintain wellbeing. This finding is supported by studies that point to inadequate rest-time for busy academics (Puāwai Collective, 2019) as a result of time-poverty and demanding workloads that often involve intensive screen time (Whittet, 2021), which can compromise their wellbeing. My study aligns with the literature in arguing that the urgent need to create space and boundaries for the purpose of restoration can be factored into academic work (Althammer et al., 2021; Hunter, 2016; Mellner et al., 2022). This can be achieved through restorative MMR practice linked to the more explicit creation of space and boundaries.

My finding is a far more feasible, practical and acceptable approach to addressing academic working conditions and improve wellbeing than studies that call for radical

systemic change to universities (Brewster et al., 2022; Carnegie et al., 2022; Kinman & Johnson, 2019; Urbina-Garcia, 2020). Instead, the finding is more akin to research that shifts focus away from disruptive organisational restructuring to increased academic wellbeing (Kinman & Johnson, 2019) and reduced stress (Urbina-Garcia, 2020), achieved through self-care and care for others, and increased slowness (Puāwai Collective, 2019). The emphasis in my finding on restoration through the creation of space and setting of boundaries is a useful contribution to this ongoing discussion.

The interdependence between the practice of mindfulness and restoration (Scott, 2018) is attributed to the former being able to improve emotional regulation and reduce emotional reactivity, "which are essential ingredients in restoration" (O'Shaughnessy, 2018, p. 144). The development of MMR practices to enable restoration to take place, therefore, is vital for academic wellbeing. The importance of restoration is indicated in the development of a dedicated Restoration Skills Training (ReST) program to teach mindfulness practices and techniques (Lymeus et al., 2020). In the resilience literature, furthermore, restoration is beginning to be seen as part of the process of resilience enhancement (Rosenbalm et al., 2020) with restoration practices enabling enhanced resilience. The experts in Phase 1 strongly advocated for their colleagues to discover and practise MMR, so that space and boundaries can be created, which leads to greater restoration. This is a vital contribution to my contextualisation of the MRBi.

4.3.2.3 Section summary

This section has emphasised the experts' views about the importance of creating space and setting boundaries because of the link to restoration, which can be enacted through MMR practices, and vice versa. Restoration is essential for professionals working in demanding environments such as academia. This finding is more feasible, practical and acceptable than radical organisational change in addressing the need for improved wellbeing among academics. The significance of this finding is that it enabled a deeper and more nuanced understanding of the interrelationship between space, boundaries and restoration, which the MRBi can achieve.

4.3.3 Rigour: incorporating traditional principles and research evidence

This section aligns the key finding of the need for rigour in the MRBi design, that is achieved by incorporating both traditional Buddhist wisdom into MMR practices, and contextualising the intervention to reflect the evidence base in the literature. The section begins by locating the argument for grounding the MRBi practices in the literature on its Buddhist heritage and lineage (Section 4.3.3.1), then discusses the need to avoid McMindfulness (Section 4.3.3.2), followed by the finding that evidence-based practices are to be incorporated in the MRBi messaging and content (Section 4.3.3.3), concluding with the section summary (Section 4.3.3.4).

4.3.3.1   Traditional wisdom

A key finding from the data analysis of this phase, was that rigour was being referred to mean respecting the traditional historic lineage and traditional wisdom that mindfulness stems from. The analysis reveals that this was an important thread of commentary primarily from the mindfulness experts. The literature identifies both factors of traditional wisdom and acknowledging the traditional contemplative lineage that mindfulness belongs to (R. S. Crane et al., 2017; Loucks et al., 2022) as important elements to display rigour in MBIs. There are however long standing discussions within the field of contemporary mindfulness about the nature of mindfulness interventions (most notably the MBSR) and their acknowledgment of their Buddhist roots and origins (Hassed, 2021; Husgafvel, 2018). Some of these discussions challenge the "degree of continuity between Buddhist teachings and contemporary mindfulness practices" (Husgafvel, 2018, p.275). In relation to this aforementioned degree of continuity in relation to my study, this was commented on by several experts who advised that it was perhaps best to explain Buddhist concepts and traditional wisdom to busy academics in secular language. This speaks to the arguments expressed in some areas of the literature which state, that within rigorous MBIs are deeply embedded concepts and notions drawn from wisdom taken from ancient meditative traditions (Engel, 2017; Hassed, 2021; Landau, 2017; Saunders, 2016). This knowledge

of embedding traditional wisdom while using secular language is fundamental to demonstrating rigour in my contextualisation process for busy academics.

4.3.3.2   Avoiding McMindfulness

The term "McMindfulness" was mentioned in the expert interviews, which refers to interventions that lack an evidence-based foundation, have corporatised or oversimplified underpinnings or questionable effectiveness (Anālayo, 2020; Hassed, 2021). McMindfulness offerings have been criticised for employing less rigorous methodologies (van Dam et al., 2018), although less experienced practitioners may use the term flippantly or without justification. The quality, duration and effectiveness of mindfulness programs can vary enormously, and it can be difficult for the unqualified eye to distinguish between them (Goldberg et al., 2017). This is particularly the case where there are a multitude of mindfulness offerings available in the market, comprising apps, websites, courses and interventions, some of which could be accused of McMindfulness (Leggett, 2022). To address this criticism and avoid such accusations, the experts encouraged focused attention on establishing rigour and credibility in the MRBi. Rigour is key to the success of established and well-received mindfulness-based interventions (Crane et al., 2017; Loucks et al., 2022).

4.3.3.3   Evidence-based practices

In the second instance, my findings support the notion that rigour in MMR programs can be demonstrated through evidence-based approaches that integrate practice and theory derived from scientific research studies and contemplative traditions. Here, evidence can be understood as arising from scientifically valid and reliable research outcomes, as well as sound research outcomes from the social sciences. The experts agreed that the MRBi content and practices should explicitly integrate a scientific evidence base in the contextualisation process to establish rigour and credibility. Integration is achieved by interweaving MMR practices with research located in a range of disciplines, such as education, psychology and medicine (Baer et al., 2019). The evidence base is therefore a core feature in both the development and contextualisation of the MRBi program in my study, and its core messaging. The

purpose is to address the criticism that some well-intended mindfulness programs, while claiming to be adapted from Buddhist traditions for mainstream environments (Baer et al., 2019), often lack sufficient evidence to support their approach to teaching and practice (Loucks et al., 2022). Conversely, studies demonstrate that interventions that incorporate evidence-based practices are seen as being of higher quality (Behan, 2020) than those that do not.

Resilience-enhancing interventions have faced similar challenges in relation to rigour, as interventions can vary widely in content, duration and methodological design (Joyce et al., 2018). To address this criticism, the adoption of evidence-based approach is viewed as good practice (Lanz, 2020). The key takeaway from my findings in this domain is that the MRBi needs to explicitly demonstrate rigour by basing the program design, contextualisation and messaging on scientifically reliable evidence.

4.3.3.4   Section summary

The section outlined the importance of rigour in the MRBi could be achieved, according to the experts, in two ways: by acknowledging its roots in Buddhist traditions and basing its contextualisation and messaging on scientific research evidence. This finding points to ways to ameliorate potential scepticism about mindfulness interventions from MRBi participants, who may be novice meditators, and is synonymous to avoiding accusations of McMindfulness. Incorporating scientific research evidence into the development, contextualisation and core messaging of the MRBi was recommended by the experts as the best way to counter potential scepticism from MRBi participants as to its effectiveness. This finding informed both the program design and the pilot testing of the intervention.

4.3.4 Conceptualising depth at speed

This section discusses the importance of depth at speed in the MRBi design and contextualisation in dialogue with the literature. Depth at speed is a new concept that arises from my data analysis, which therefore, has not been mentioned in the

literature. The concept extends existing ideas of mindfulness grounding techniques.

Grounding techniques are well utilised in mindfulness and contemplative practices

as a way of anchoring oneself in the present moment (Jarvis et al., 2020).

From the perspective of my study, depth at speed in the MRBi is defined as having

deep embodied experiences of mindfulness and resilience, in a short period of time.

The finding emerged from data analysis as I identified the link between contextualising

evidence-based practices and embedded research evidence in a time-efficient way

that engenders in the practitioner a deeply felt (embodied) present moment

awareness. The concept of depth at speed primarily applies to mindfulness, yet

also has connotations for resilience to a lesser degree.

In this section, I first explain tensions in adopting a depth at speed approach to the

MMR practices in the intervention, which may seem at odds with traditional notions

of such practices (Section 4.3.4.1). I then identify the issues related to participants

who may be novice meditators (Section 4.3.4.2), after which I discuss potential barriers

to engendering present moment awareness through speedy, embodied practices

(Section 4.3.4.3). Section 4.3.4.4 summarises the section.

4.3.4.1 Tensions in depth at speed

Depth at speed could be considered at odds with traditional views of mindfulness

practice as non-striving (Crane et al., 2017; Goddard & Kenny, 2016; Griffith et al.,

2019; Husgafvel, 2018; Kabat-Zinn, 1996). The term non-striving is commonly used in

quality mindfulness interventions, such as the MBSR (Goddard & Kenny, 2016; Kabat-

Zinn, 1996). Non-striving refers to the attitude adopted when practicing mindfulness,

which is one of observation and acceptance, albeit yet not agreement, of the present

moment. The term implies that no matter what is experienced – even unpleasantness

– during practice, it is observed and simply acknowledged (Goddard & Kenny, 2016;

Kabat-Zinn, 2001). Adopting this attitude has no aspiration at the outset of practice

for any desired effect, goal, emotion or outcome. In this way, non-striving and simple

present moment observation are achieved (Kabat-Zinn, 1996). Research studies affirm

that the notion of non-striving is core principle of mindfulness (Biggers et al., 2020;

Crane et al., 2017; Kabat-Zinn, 1996).

At first glance, depth at speed might appear at odds with the concept of non-striving. This is because its explicit aim is to achieve quick, time-efficient states of present moment awareness. Having this aim does not perhaps align with the spirit of mindfulness, as it could mean being too goal-oriented or too outcome-focused, which suggests a move towards distorting the meaning behind mindfulness practices. My framing of the concept of depth at speed, however, has a number of caveats. First, the concept is not to be shared with participants because of the possibility of its being seen as contradicting teaching messages within the MRBi, which includes non-striving and beginner's mind (Crane et al., 2017; Loucks et al., 2022). The nuanced messaging within the MRBi emphasises the need for non-striving and the abandonment of any particular goal, emotion or feeling directly arising from one's practice. In this way, the integrity of traditional mindfulness practice remains intact. Second, the point can be made that mindfulness practice cannot be entirely non-striving, because undertaking mindfulness practice infers striving to practice mindfulness. Herein lies a contradiction in terms, which has been identified (Goddard & Kenny, 2016). Third, I consider depth at speed to be an operational move by the facilitator or research team and a pedagogical feature of the MRBi. The concept is a operationalised by the facilitator so that MRBi participants learn to engage in mindfulness practices speedily and deeply. While never articulated, depth at speed is embedded in the MRBi, together with traditional evidence-based grounding practices (Behan, 2020; Jarvis et al., 2020). The speed at which depth of present moment awareness is achieved in the MRBi is a key finding of my study.

4.3.4.2   Novice meditators

The concept of depth at speed represents a way to address the struggle novice meditators often experience in the early weeks of MRR practice, as previously discussed (Section 2.4.2.1). Evidence points to high levels of attrition in novice meditators (Russ et al., 2017) because of their difficulties in adjusting to and lack of time for maintaining regular practices, frustration in engaging in them, and negative emotional experiences and thoughts that contribute to not finding benefit in them (Aizik-Reebs et al., 2021; Banerjee et al., 2018; Laurie & Blandford, 2016; Osin & Turilina, 2022). Traditionalists often see these difficulties as part of the journey that

brings attention to the monkey mind (Eliuk & Chorney, 2017). The monkey mind refers to the tendency for the mind to wander, ruminate and worry when unattended (Brandmeyer & Delorme, 2021). Busy academics are likely not to welcome further frustration, stress and angst that novice engagement in MMR practices may engender. Unpleasant meditation experiences have been shown to exacerbate intervention attrition and create negative perceptions of meditative practices (Osin & Turilina, 2022; Russ et al., 2017). Depth at speed has the potential to reduce frustration in novice meditators by offering fast and deep present moment awareness for those inexperienced in mindfulness and meditative practices.

4.3.4.3   Present moment awareness

The feasibility of the concept of depth at speed in grounding practices that generate present moment awareness is reflected in the success of existing short, daily mindfulness practices (Basso et al., 2019; Berghoff et al., 2017; Strohmaier et al., 2021). The growing area of interest in short MMR practices points to their effectiveness in helping practitioners to achieve behavioural outcomes through extended practice (Berghoff et al., 2017; Strohmaier et al., 2021). This represents an evidence base for adopting practices that are introduced early on (speed), short in duration (time-saving), and connect more readily to the present moment (deep embodied experiences of mindfulness) are therefore warranted.

Depth at speed, furthermore, expands the existing reservoir of grounding techniques commonly employed in contemplative traditions. Grounding techniques (Behan, 2020; Jarvis et al., 2020) enable practitioners to relatively easily connect to the present moment by, for example, focusing on one's breath or connecting to one's body or the ground/furniture. Depth at speed utilises established evidence-based grounding techniques (Jarvis et al., 2020), thereby maintaining the integrity and intention of the MRBi. Where depth at speed differs from grounding techniques is its potential to combine other strategies, which I will outline in Section 4.4.

4.3.4.4   Section summary

The discussion in this section points to the promise of the concept of depth at speed for contextualising the MRBi for busy academics who may also be novice meditators. Depth at speed contributes to the reservoir of existing techniques that enable practitioners to achieve speedy and deep mindfulness experiences.

4.4   Implications of Phase 1 findings

There are three key implications of Phase 1 findings for the development of the MRBi in Phase 2 Working Group (WG). They are:

1. Amendments to the MRBi curriculum (v1 to v2);

2. Revised goals for the Phase 2 discussions; and

3. Updated MRBi practices.

Each of these implications are discussed in turn in the following sections.

4.4.1 From MRBi version one to MRBi version two

As a result of the Phase 1 findings, I undertook a substantial redesign of the MRBi (v1) (Appendix M), which resulted in an enhanced curriculum (v2) (Appendix N). MRBi (v2) revised the weekly introductory mindfulness themes, which guided the content and teaching approach in the restructured MRBi program. The themes were enriched by the inclusion of traditional Buddhist principles, albeit articulated in secular language, and research evidence from my study. The MMR practices were revised to make them more accessible to novice meditators, and anchored in evidence-based grounding techniques, such as depth at speed, which were designed to accelerate experiences of present moment awareness. Table 4.8 shows the two key changes I made to the MRBi

(v2). The changes relate to expressing rigour in the messaging, and the development of MRBi practices and prototype artefacts required for Phase 2 of the study.

Table 4.8   Key changes to the MRBi (v1 to v2)

No.	Focus	Change
1	Rigour	Inserted weekly outline of evidence-based research
		Revised Buddhist principles/traditional wisdom
2	Practices	Depth at speed operationalised
		Practice timing and duration
		Prototyped artefacts

4.4.1.1   Research evidence-based messaging

The first major change was to the MRBi messaging. Rigour was emphasised by inserting outlines into each of the eight weekly meetings that were based on research evidence arising from my study. The purpose of the change was to arouse potential participants' intellectual curiosity and interest, underpin the MMR practices, meet academic participants' expectations of scholarly rigour. These changes represent a significant enhancement of MRBi (v1), which did not include research evidence in its weekly program. The MRBi (v2) curriculum featured both formal taught practices and informal across the eight weeks of the intervention, embedded traditional Buddhist principles in the weekly content, and added both dedicated resilience practices in the form of resilience reflections, and messaging about the weekly practices.

4.4.1.2   Revised Buddhist/traditional principles

The study finding relating to the theme of rigour significantly influenced my adaptation of the MRBi (v2) in two specific ways, follows:

1. I incorporated traditional Buddhist principles, articulated in secular language to avoid confusion among novice meditators; and

2. I updated traditional Buddhist teaching concepts, interwove these concepts into the teaching messaging across the eight-week program, and reinforced them in the form of MMR audio practices and scripts. Examples include beginner's mind, ease of suffering, embodiment of practice (in week 3), developing gratitude (in week 7), and mindful awareness in daily life to interrupt automatic pilot (in week 8).

4.4.1.3   Operationalising depth at speed

The concept of depth at speed concept was operationalised in the MRBi (v2). Depth at speed drew together four of the research findings: arousing curiosity, nuanced messaging, quick and time-efficient MMR practices, and the importance of restoration (Figure 4.3). These findings enriched the operationalisation of depth at speed by enabling quick, deep experiences of present moment awareness.

Figure 4.3   Depth at speed

1. Arouse academic curiosity	2. Messaging foci on ease of practice	3. Inclusion of quick evidence-based grounding practices	4. Evoke implicit sense of relaxation
− included nuanced evidence-based research (info) to pique academics' interest	− Messaging includes: flexibility of practice (e.g., invites) − + includes beginner's mind + non-striving attitude messaging	− Utilise time-efficient grounding practices to evoke quick, embodied present moment awareness	− Include calming background music to accompany MMR practice − Include soothing voice accompanying MMR practice

} = 5. Depth at speed

i.e., evoke quick/ speedy present moment awareness

4.4.1.4   Practice timing and duration

Findings from Phase 1 of the study, associated with time-poverty and depth at speed informed changes to the timing and duration of MMR practices in MRBi (v2). The practices were both deliberately shortened and also inspired by empirically-based *grounding exercises* to evoke quick and deep experiences of present moment awareness. For example, duration ranged from one- to two-minute introductory practices to no longer than 10-minutes, which represents a significant change to MRBi

(v1), which did not detail practice duration. While shorter, practices were of long enough duration to provide participants with a taste of MMR practices and a felt and embodied experience, and demonstrate effectiveness based on the research evidence (Chapter 2). The new concept of depth at speed concept was operationalised in new grounding practices to facilitate present moment awareness quickly and potentially a more deeply *felt* embodiment of practice.

Ease of practice was a new development I embedded into the MRBi (v2) practices. The concept was tied to depth at speed, in that it aimed to facilitate practitioners in quickly and deeply experiencing present moment awareness. Ease of practice was operationalised through the development of more succinct instructions for teaching and practice, which featured traditional Buddhist concepts in secular language so novice meditators could understand and follow. An example is provided below:

> I invite you to close your eyes if you feel comfortable to do so. Take some deep breaths, nice and slow. I invite you now to slowly listen to the sounds in the room and around you. If your mind wanders, that's OK. If your mind wanders a thousand times, that's OK too. Just return it back 1000 times and each time, return your attention back to the sounds in the present moment. Also know that there's no right or wrong way to do this mindfulness resilience practice.

The instructions aimed to facilitate ease of practice by incorporating flexibility and reducing anxiety about right or wrong ways of practising. The word *invite* was introduced to specifically create ease among participants by signalling that they were not *required* to do anything. The idea was to provide flexible options for practitioners, which is in line with best practice of T.I.M. MRBi, as previously discussed in Chapter 2.

4.4.1.5   Prototyped artefacts

One of the implications arising from Phase 1 findings was the idea of creating prototyped artefacts that might assist in contextualising the MRBi for the WG in Phase 2 of my study. Three sets of prototyped artefacts were created as follows:

1. A MRBi handbook that provided background to and supported the benefits of mindfulness and resilience practise through reference to my findings and other research. The purpose of the handbook was to reinforce the perception of rigour;

2. A mindfulness resilience reflection journal to enable participants to note elements of practice. The reflection journal mirrored gold-standard evidence-based mindfulness interventions, such as the MBSR. The purpose of the reflection journal was to complement MMR practice and enhance perceptions of rigour in the design and methodological approach to the MRBi; and

3. Eight short mindfulness resilience mediation audio recordings in the form of MP3s. The MP3s specifically reflected the updated weekly practice theme in the MRBi (v2) and included depth at speed in the form of new practice instructions.

The artefacts were prototypes in the sense that their acceptability and effectiveness had not yet been tested with participants. The intention was, however, that this would occur to some extent in Phase 2 WG, to gauge their viability for the Phase 3 pilot testing.

4.4.2 Preparation for Phase 2

To prepare for Phase 2 of the study, it was important that WG participants clearly understood what the MRBi (v2) entailed so that their further insights could help me contextualise the MRBi content and address Research Q 1. Aspects of the revised intervention remained provisional in terms of their acceptability, feasibility and effectiveness, such as the prototyped artefacts and the nuanced messaging. To combat this, I decided that the WG would actively test the prototyped artefacts in practical and experiential ways. This decision led to three new goals for Phase 2, that emerged after Phase 1 was completed and while the MRBi (v2) revisions were being undertaken. The

goals will be discussed in the following sections: lived experience (Section 4.4.2.1); experiential (Section 4.4.2.2); and testing artefacts together (Section 4.4.2.3).

4.4.2.1   Lived experience

The first goal was to capitalise on the WG participants' lived experience as busy academics to assist in the MRBi refinement process. To do this, I built discussion topics into the weekly sessions that aimed to elicit participant's experiences. Topics included: top ten daily struggles (week 1); potential barriers to practising MMR (week 2); and time factors that limit use of the prototyped handbook and reflective journal (week 5). These discussions would also influence the implicit and explicit messaging in the MRBi. It was unclear at this stage whether the traditional concepts inserted into the MRBi (v2) would resonate with an academic audience, and if the concepts of *ease of suffering, beginner's mind*, and *present moment awareness* would be adopted. The discussions served to address these issues and glean design ideas that were informed by the group's lived experiences.

4.4.2.2   Experiential

The second goal was to conduct experiential sessions engaging in MMR practices during the weekly WG meetings. This was to be achieved by the WG practising MMR together, using my prototyped mindfulness audio artefacts that incorporated depth at speed, followed by a discussion to collaboratively review and refine the prototypes. The rationale for the experiential sessions was so that participants experienced what mindfulness and resilience enhancement felt like, its benefits, ease of practice and adaptability for the workplace. It was hoped that equipped WG members would get an embodied understanding of both the experience of doing the practices and how to improve them. In turn, their refinements and feedback would influence my contextualisation process.

4.4.2.3   Test artefacts together

The third of Phase 2 was WG was to collectively test draft MRBi prototyped artefacts. Testing involved the group critiquing and refining the weekly MP3 audio recordings

and draft MRBi handbook and reflection journal. Drafting and testing the draft artefacts represented a time-efficient way of understanding participants' responses and actual use. In particular, the messaging, practice instructions, language used, and the actual MMR enhancement practices in the artefacts needed to be tested before the pilot phase of the study to evaluate their potential for their interactivity and experiential value. The collaborative process of the WG complemented the experiential nature of Phase 2, which aligns with the second goal.

4.5   Chapter summary and conclusion

The findings from my analysis of interview data from Phase 1 of my research study represented the experts' views on mindfulness, resilience and MMR practices and how to contextualise the MRBi for busy academics. Four themes emerged from the analysis: time poverty, space and boundaries, rigour, and depth at speed. The findings align with the literature and address Research Q 1: how to contextualise a mindfulness and resilience intervention for busy academics? The outcomes enabled me to identify ways for me to contextualise the MRBi curriculum and practices for this cohort, which was subsequently amended to incorporate changes to duration, pace, messaging, language and prototyped artefacts. The involvement of experts in Phase 1, therefore, significantly contributed to a more contextually appropriate iteration of the MRBi. The chapter that follows discusses Phase 2 of the research, which involved the formation of a WG to further develop and inform my contextualisation of the MRBi.

Chapter 5. Phase 2: Working group discussions

5.1   Introduction

The findings emerging from Phase 2 expert interviews were presented in the previous chapter. The eleven experts shared their views on how I could contextualise the MRBi to counter issues concerned with time-poverty, workloads and other work-related challenges faced by academics. As a result, four key themes were identified (Table 5.1), that assisted my contextualisation process.

Table 5.1   Key themes emerging from Phase 1 expert interview data analysis

No.	Themes linking findings to the literature
1	Time poverty
2	Academic work: space, boundaries and restoration
3	Rigour: traditional wisdom and evidence-based practice
4	Depth at speed

These themes informed the revision of the MRBi (v1) curriculum and the design of prototyped MMR artefacts for Phase 2 of my study with the Working Group (WG).

Chapter 5 is the second of three chapters documenting the context and reporting the research findings for each research phase. The chapter represents Phase 2 of the AR design, for which a small WG of six academics from a range of UTS faculties was formed to investigate ways to refining the MRBi for academics, to help me address Research Q 1. The collaborative research process involved one-hour weekly online group discussions over four weeks. The academics in the WG were loosely representative of the MRBi end users, so the weekly discussions incorporated trials of the draft prototyped artefacts developed, as a result of the Phase 1 findings.

Three key themes emerged from the analysis of the group discussion data, which had implications for the Phase 3 research design and processes.

The chapter is structured similarly to Chapter 4. This introduction is Section 5.1; Section 5.2 reports the themes emerging from analysis of the WG discussion data; Section 5.3 discusses the findings in dialogue with the literature; Section 5.4 outlines the implications of these findings for Phase 3 of the study; and the chapter concludes with Section 5.5. In this introduction to the chapter, I first outline the amendments I made to the MRBi (v1) in response to Phase 1 findings (Section 5.1.1) and then recap the research process and methods used in Phase 2 (Section 5.1.2).

5.1.1 The streamlined MRBi

As detailed in Chapter 4, the MRBi underwent a significant redesign, as a result of findings and implications of the expert interviews in Phase. The redesign led to an updated curriculum MRBi (v2). To recap, the revised curriculum consisted of updated weekly mindfulness themes that directed the teaching and content. The themes included supporting research evidence and traditional wisdom, albeit the latter worded in secular language (Appendix N). The MMR practices were also updated, inspired by evidence-based grounding practices that were designed to be short in duration. Each exercise incorporated the revised concept of depth at speed to facilitate a speedier experience of present moment awareness in MRBi participants, which is explained in Section 5.1.1.2 (Figure 5.3).

In preparing the MRBi (v2) for the six WG participants, special attention was given to prototyping MMR practices. I had contextualised these practices prior to Phase 2 by using succinct, secularised language that was free of jargon. The WG would most likely include novice meditators, so I designed the practices and instructions to be straightforward, enable ease of practice, and reduce potential confusion or frustration. The practice instructions were designed to be reassuring, particularly because novice meditators often worry unnecessarily about whether they are practising correctly Strohmaier et al. (2021). For example, practice instructions reiterated the point that

there is no right or wrong way to practice mindfulness, and that all experiences can be observed and welcomed. I included further instructions about handling potential mind wandering and the importance of adopting an attitude without judgement towards one's practice.

5.1.1.1 Prototyped artefacts for the WG

The aim of the WG discussions was to elicit comments from participants about their embodied, felt experiences during the MRBi to assist me in refining the practices and their subsequent contextualisation. To foster quality comments, I developed prototypes of the practices and handbook content to share with the WG, to be discussed and evaluated in each of the planned four weekly meetings. The prototyped materials, referred to as artefacts, assisted participants to immerse themselves in the MRBi ethos and practices. Two sets of prototyped artefacts were created (Table 5.2), the purpose of which was to enable the WG to experience, critique and collectively refine them.

Table 5.2   MRBi prototyped artefacts

Format	Content
MP3 audio practices	– Eight pre-recorded MP3 formal mindfulness meditations (facilitator-guided) for each week of the eight-week MRBi – One pre-recorded MP3 informal audio practice (self-led home-based practice) *ABC practice*
Handbook and reflection journal	– One prototyped MRBi handbook and resilience journal in A5 hard-copy colour format (Figure 5.1)

The artefacts guided two forms of MMR practice. The first is facilitator-guided and the second is self-led (Figure 5.1). The pre-recorded prototyped MP3 audio practices consisted of formal and informal practices, in line with the design of contemporary mindfulness interventions (Poulin et al., 2008). Figure 5.1 depicts the two kinds of practice, adapted from Kakoschke et al. (2021).

Figure 5.1   Two key mindfulness practices

Formal practice	**Informal practice**
Meditation-based practice	Undertaken in daily activities
(often facilitator-led)	*(self-led)*

Adapted from Kakoschke et al. (2021).

The prototyped MRBi handbook and reflection journal were combined into a hardcopy colour printed PDF A5 booklet incorporating 16 printed pages, and 11 images. There were sections with tips and advice for MMR practice, a 2-page summary of the scientific evidence surrounding mindfulness and resilience enhancement and its benefits, as well as three blank pages for personal reflection by participants. Figure 5.2 shows three sample pages.

Figure 5.2   MRBi handbook and reflective journal sample pages

During the weekly meetings, WG participants discussed the content, messaging and their experiences of using the MP3 audio artefacts across the eight-week curriculum,

and the design, usefulness and relevance of the prototyped handbook and reflective journal, which incorporated the redefined concept of depth at speed.

5.1.1.2 Depth at speed revisited

The refined depth at speed concept (Figure 5.3) incorporated evidence-based deep breathing practices at the beginning of the MMR practices in the MP3 audio meditations. My rationale for incorporating breathing practices into depth at speed is supported by a systematic review (Zaccaro et al., 2018), which suggests that such exercises activate the parasympathetic nervous system. Its activation helps to calm the nervous system (Hatfield et al., 2023; Obradović et al., 2021; Westmacott-Brown, 2020), which increases the likelihood of inducing restful states (Hatfield et al., 2023).

Figure 5.3   Revised conceptualisation of depth at speed

1. Use deep breathing practices	2. Arouse academic curiosity	3. Messaging foci on ease of practice	4. Inclusion of quick evidence-based grounding practices	5. Evoke implicit sense of relaxation
– Start with evidence-based deep breathing practices to calm the sympathetic nervous system	– Include nuanced evidence-based research (info) to pique academics' interest	– Messaging includes: flexibility of practice (e.g., invites) – + includes beginner's mind + non-striving attitude messaging	– Utilise time-efficient grounding practices to evoke quick, embodied present moment awareness	– Include calming background music to accompany MMR practice – Include soothing voice accompanying MMR practice

} = 6. Depth at speed

i.e., evoke quick/ speedy present moment awareness

5.1.1.3 Section summary

This section described the prototyped artefacts and the concept of depth of speed that were revised following Phase 1, in preparation for Phase 2 of my study. Each element incorporated formal and informal MMR practices, to make them more suitable for discussion during the WG meetings. The next section describes the research methods used in Phase 2 of my study, which was designed to elicit comments from WG participants to help me refine and contextualise the MRBi ahead of the Phase 3 PG.

5.1.2 Phase 2 research methods

As previously described in Chapter 3, the WG phase began with a recruitment drive in several UTS faculties, that sought participants to form a WG that would assist me to refine the MRBi for busy academics. Six academics who had expressed interest in joining the WG subsequently met face-to face-on campus for 60 minutes each week for four weeks. The weekly meetings were designed to be highly experiential, in that a significant amount of time was dedicated to the MP3 audio practices, supported by the combined handbook and reflective journal. After the WG experienced these artefacts, we discussed how they could be redesigned to better suit busy academics. No additional MMR practise by group members was required outside of these meetings.

5.1.2.1   WG participants

The six UTS academics that formed the WG worked in four UTS faculties and two UTS Centres of Research Excellence, which represented a range of disciplinary knowledge and experience (Table 5.1).

Table 5.3   WG participant demographics

Pseudonym	Job title	Employment status	Faculty	Novice
Simone [F]	Lecturer	[FT] ongoing	Health	Yes
Dominique [F]	Lecturer	[FT] ongoing	Office of VC	No
Maali [F]	Research assistant and lecturer	[FT] fixed term contract	Centre for Interconnected Intelligence	Yes
Ryan [M]	Lecturer	Casual	Built Environment/ Architecture	No
Spencer [M]	Senior lecturer	[FT] ongoing	Science	Yes
Travis [M]	Associate lecturer	[FT] fixed term	Transdisciplinary Innovation	No

[F] = Female   [M] = Male   [FT] = Full time

5.1.2.2   WG contextualisation process

The WG began with a welcome and brief introduction by the attendees in the initial meeting, and confidentiality and anonymity reiterated. After this and in subsequent weeks, the meeting content would be outlined, after which participants previewed two weeks' content of the MRBi (v2), and based on these experiences, discussed possible refinements (see Table 5.4). The purpose of these discussions was to refine particular aspects of the MRBi. After the discussion, the group would practise a 5-minute group MM, incorporating deep breathing, which they then discussed and critiqued. A second 5-minute topic was introduced next, followed by a 10-minute prototyped MMR practice and discussion, which included suggested improvements from the group. The meetings concluded with questions.

Prototyped artefacts were designed to provide participants an experiential taste of the practices during the meetings, followed by a discussion of their initial reactions and ways to refine the artefacts. To guide this discussion, two questions were asked of the WG members: Did this prototyped artefact resonate and if not, how could it be redesigned and improved? What else (content, wording, practice,) could be included or designed into the prototyped artefact for better effect/more appeal? The objective for each meeting was to focus on *gut reactions* to the MRBi artefacts, content and curriculum, so they could be collated and analysed to determine their value and what was required to make them more resonant with academics. The themes that emerged from the analysis of the collated meeting data are described next.

Table 5.4   WG weekly meeting agenda

Wk	Prototyped MRBi content	Group discussion topics
1	– Experience, critique and refine Week 1 and Week 2 MMR MP3 audio recordings – Experience, critique and refine MRBi handbook and journal	1. What are the top 10 things academics struggle with throughout their day? 2. How best to design the MRBi handbook and reflective journal?
2	– Experience, critique and refine Week 3 and Week 4 MMR MP3 audio recordings	1. What are the barriers to practising MMR for busy academics? 2. How best to design and embed resilience practices into the MRBi?
3	– Experience, critique and refine Week 5 and Week 6 MMR MP3 audio recordings	1. How to incentivise using the mindfulness journal? 2. How to effectively promote the MRBi to busy academics?
4	– Experience, critique and refine Week 7 and Week 8 MMR MP3 audio recordings	1. How to bring MMR into our lives holistically? 2. Thoughts on using mindful eating and drinking exercises in the MRBi?

5.1.2.3   Section summary

In this section, I identified the demographic features of the six WG participants and discussed the MRBi curriculum content and the process encapsulated in the four one-hour weekly meetings. The following section introduces the themes that emerged from my analysis of the meeting data.

5.2 Themes

Three themes emerged from my analysis of the meeting data, which are presented in Table 5.5 and then discussed in turn.

Table 5.5   Key themes emerging from Phase 2 WG discussion data analysis

Section	Themes linking findings to the literature
5.2.1	Holistic and practical design
5.2.2	User experiences of depth at speed
5.2.3	Revising artefacts and content

5.2.1 Holistic and practical design

The first theme centred on the importance of designing the MRBi to be holistic and practical so that both work and non-work aspects of academics' lives could be integrated. There are two sub-themes (Table 5.6), each of which will be discussed in turn.

Table 5.6   Subthemes relating to holistic and practical design

Section	Subtheme
5.2.1.1	Holistic intervention that will work in work and non-work environments
5.2.1.2	Practical MRBi design that facilitated ease of practice and no extra work

5.2.1.1   Holistic intervention

The theme of holistic intervention emerged from analysis of discussion data as an approach to designing the MRBi. This view contrasted to that of the experts, previously discussed in Chapter 4, who recommended that the intervention be work-centric. The WG did, however, indicate that a holistic approach was more suited to academics who worked in multiple settings, beyond the university alone. In other words, they saw the intervention as being applicable across the whole of an academic's life. In other words, the MRBi practices, teaching and artefact messaging should acknowledge notions of home, family and leisure interests, in addition to being attuned to academic work. This is encapsulated in Spencer's comment:

> We are not solely academics. We don't operate in a vacuum. We have lives
> outside of work, homes and families to go back to, this program needs to work in
> that context too, and not solely all be about university and being an academic.

Simone made a similar comment:

> Don't have it all related to work, bring in families, friends and other
> contexts outside of work.

The WG members agreed that they were not "solely academics", and that they wished to practice MMR skills in a range of contexts, rather the workplace lone. Simone added:

> Yes, we want to forget all about that stuff and use this [MRBi] to switch
> off thinking about work.

Further comments suggested using the MRBi while doing house chores or other non-work tasks and activities, as Spencer commented:

> Opening up the contexts that this program is about, and have it leveraging
> off other things, would make it more beneficial.

The theme that emerged from analysis indicates designing the intervention to be holistic was a useful contextualisation strategy to adopt.

5.2.1.2   Practical design

WG members thought a practical intervention would suit busy academics, exemplified in three distinct ways (Table 5.7).

Table 5.7   Subthemes of practical design

Section	Subtheme
ST 2.1	No extra work
ST 2.2	Time-efficient practices
ST 2.3	Portable, on demand and ease of practice

This theme expands the insights gleaned from Phase 1, in which the experts suggested that brief, doable and practical MMR practices embedded into and around work, but that did not involve extra work, were contextualisation strategies to pursue because of academics' time poverty. In contrast, the WG focused on a more holistic intervention design that could be used in work and non-work settings. Their rationale was to make the MRBi more practical and time-efficient for busy academics to undertake.

ST 2.1   No extra work

Many WG members stated that the MRBi should not feel like extra work, as Maali said:

> We're so busy all the time, we just need this thing to be simple and practical
> to be able to fit it into really jam-packed days.

Other participants agreed, as Travis commented:

> Make it easy for us to do, just an easy experience, that doesn't require a
> lot of extra work.

Together, these comments articulate the WG members' view that the MRBi should be uncomplicated and easy to undertake and not involve a lot of extra work. These comments stemmed from the view that academics were already overloaded and that the MRBi should not be an extra burden, as Travis noted:

> It shouldn't feel like yet another thing we have to do, another thing on
> our plate, it should just be quick and easy to do.

The excerpts above illustrate the need for a practical intervention design that did not add to workloads. The finding indicated that this could be achieved by embedding self-led MMR practices into everyday daily tasks at work and at home, which the WG considered a good contextualisation strategy for me to pursue. This is similar to the experts' comments in Phase 1, who described time-poverty as a barrier to academics engaging in MMR practices. For example, short, informal practices that preceded or accompanied work tasks, such as while starting a computer, waiting for a Zoom meeting to commence, or prior to editing a paper. Other examples linked daily domestic activities to self-led MMR practices, such as mindfully making a cup of tea, walking to the bathroom or washing up crockery, as Travis said:

> It'd be great just to have these types of quick practices available just to
> squeeze in even when things are really busy.

Simone added:

> Just showing how these practices can just be tucked into everyday jobs and
> tasks makes them so much more doable.

Together, these excerpts affirm the suggestion that the MRBi involve no extra work and that mindful drinking, eating and walking practices could be achieved relatively easily, as Dominique wrote:

> Oh, I'd really like to incorporate mindful eating into my days.

Together, these are feasible and practical suggestions for how MMR practices could be incorporated into and across busy academics' lives, without involving extra work.

ST 2.2   Time-efficient practices

The theme of time-efficient formal practices emerged as an important and practical issue for contextualising the MRBi for busy academics. The WG members' reactions to the formal prototyped 10-minute MP3 practices, therefore, was overwhelmingly positive in all four weekly meetings. The duration of the practices were appropriate and offered time-efficient benefits, as Simone said:

> That just didn't take so long, and was so easy to do, I should really be doing this more.

Dominique added:

> Oh, that was just what I needed, and it went so quickly …. it was so relaxing.

The excerpts show that the formal MP3 artefacts were time-efficient, and therefore feasible for time-poor academics to incorporate into their day. Time-efficiency is on ongoing theme in my study, with both Phase 1 and Phase 2 emphasising the barriers to busy academics attending wellbeing interventions.

ST 2.3   Portable, on demand and ease of practice

A theme emerged about the need for the MRBi to accommodate ease of practice. The WG comments indicated that using portable software to both complement ease of practice and enable sharing of the MP3 artefacts each week was crucial. It remained somewhat unclear, however, which technological platform/app might host the online MRBi, although the WG saw a portable platform such as a smartphone app or commonly used software as most preferable, as Maali:

> Using an app or software that everyone has access to, or that is on their phones already would be perhaps the best idea.

The MP3 artefacts, therefore, needed to be able to be uploaded to and accessed on participants' phones so that MMR practices could be "taken anywhere and everywhere", as Travis suggested. Spencer added:

> We need to be able to take these practices with us, wherever we go throughout our day, whether working from home on our dining room table, or at the office on campus, or walking to the bus stop.

The need for portability and ease of practice was supported by Ryan asking:

> So, ideally, we could just put this type of MP3 recordings onto our phone and do some quick practice whenever we want, is that the general idea?

To facilitate both portability and ease of use, WG members suggested online platforms such as Facebook, LinkedIn, Google Hangouts and WhatsApp. The latter was deemed preferable by the WG because it was independently owned at that time, free of charge, highly portable, and it had been previously used and liked by all members.

While the formal 10-minute MP3 artefacts were positively received, engagement in MMR practice was challenging, and required my substantial contextualisation as a result. This was ABC, which is an informal practice that created uncertainty for and was not easily used by two WG participants. ABC stood for:

> **A=** bring your **Attention** to practising mindfulness**;**

> **B =** focus on your **Breathing** – deep breaths out; and

> **C = Connect** in whatever way to the present moment – sound, sight, smell.

The practice was titled ABC to be easy to remember and to facilitate ease of practise. The practice was introduced in the final WG weekly meeting, by which time participants had gained experience in brief mindfulness and resilience practices, however, as Dominique commented:

> Oh, I forgot what the ABC stood for, so I just did my own thing.

Simone agreed that the acronym was not easy to remember:

> I could remember the A and the B bit but wasn't sure what the C bit
>
> stood for. I couldn't remember that.

These comments contributed to a discussion about how to redesign the practice to make it easier to undertake. Simone said:

> I think it needs to be made simpler.

Dominique added:

> Yeah, I agree. Something less complicated to remember that we can use
>
> quickly throughout the day.

Together, the comments suggest that simplifying the prototyped informal ABC practice was vitally important.

5.2.1.3   Section summary

The key theme identified in this section was the need for a holistic and practical intervention design. A number of subthemes were also identified in relation to the intervention design, which would need to be able to: be utilised in work and non-work environments; facilitate ease of practice yet involve no extra work; and represent portable, time-efficient and on demand practices. These themes pointed to the need for users to experiences depth at speed practices, which are discussed in the next section.

5.2.2 User experiences of depth at speed

My analysis of WG members' comments about their experiences with the revised concept of depth at speed, which was embedded into the MP3 artefacts suggest that it helped them experience present moment awareness in an easy, speedy way.

To expand on the discussion in Chapter 4, the WG's experiences indicate that depth at speed produced a beneficial and efficacious outcome by prompting present moment awareness, and feelings of refreshment, recalibration and restoration.

5.2.2.1 Present moment awareness

Present moment awareness was explicitly felt by all WG members as they engaged in the updated depth at speed practices. This was particularly significant for three novice meditators in the group of six. Both novices and more experienced meditators, however, found that the depth at speed practices generated present moment awareness with relative ease. Participants frequently commented about heightened awareness of the present moment during practice, including noticing external sounds and smells. Ryan, a novice meditator, commented at the conclusion of the MP3 practice:

> I could hear the water boiler tap in the corner of the room switch on and off.

Simone, an experienced meditator, added:

> Oh, I'd never noticed or paid attention to the sound of air-conditioners in this room before.

Spencer, also an experienced meditator, commented about the week 3 MP3:

> I really liked that nature soundtrack during the practice, that really kept me focused

Similarly, Maali, another experienced meditator, said during week 3:

> During that practice I could really smell the fruit on the table, my senses really noticed that, and that heightened awareness was actually nice.

The excerpts exemplify the heightened felt-sense during present moment awareness participants experienced during practice that demonstrate embodiment, which is the

interaction between mind, body and the external environment (Khoury et al., 2017). This continued in the body scan sessions in week 2, about which Dominique, a novice meditator, said:

> I really noticed how tired I was during that practice. I just really noticed it.

Ryan, also a novice, added:

> I could feel where my body met the back of the chair, and my stomach moving as I breathed. Never noticed that before.

These examples from different weekly meetings demonstrate that both novice and experienced meditators in the WG actively noticed and held attention in the present moment during the revised depth at speed prototyped practices.

5.2.2.2   Feelings of restoration

Completion of the depth at speed MP3 practices led to feelings of restoration in the WG. Restoration was expressed as calmness, refreshment or recalibration. For example, members commented on feeling increased calmness, such as Simone (experienced) commented week 1:

> That had a calming effect on me.

Of week 1, Maali (experienced) added:

> That was very soothing and calmed my head down.

Ryan (novice) commented in week 2:

> That was nice and calming.

In week 3, Dominque (novice) said:

> These practices are like a calm balm for me.

Dominique's mention of the word "calm" reflects its use in one of the narrated depth at speed practices, about which she said:

> I really liked the use of the word calm in that practice, it really resonated with me and I noticed it just helped me let go.

The use of the term 'let go' here meant, as she later explained, that Dominique could deepen her practice, connect and align to the present moment, and find a greater sense of calm. She later commented:

> This practice has really helped me, as I find it really hard to switch off.

The effectiveness of the practices in helping to switch off was echoed by other WG members in the same week, who agreed there was a calming and restorative effect of having undertaken the revised depth at speed prototyped practices.

In addition to restoration, WG participants in general, and novice meditators in particular, mentioned feelings of refreshment and recalibration as a direct result of the depth at speed MMR practices. For example, Dominique (novice) said:

> That was really refreshing, I feel much better after that.

Travis (experienced) mentioned "that was really rejuvenating" after a week 3 practice. Simone noted how refreshed and better she felt after practising during week 2:

> I wish I'd known just how easy and beneficial mindfulness practices were, I would have done them long ago.

To this, she added:

> I feel like I've just had a power nap.

Simone's comment that she felt restored and refreshed after engaging in the brief practice together was reiterated in week 3:

> I just love coming here and trying out this stuff, it's the highlight of my day.

Her comment indicated that the benefits of engaging in depth at speed practices left Simone feeling better as a result. Maali noted that the practices that week "are weaving a nice set of experiences for me." This was affirmed by Dominique (novice) at the end of the meeting in week 4:

> Thanks so much for this, it's been just what I needed, and I've thoroughly enjoyed it.

My analysis of WG comments show an overall pattern of feeling better and being somewhat refreshed or restored as a result of depth at speed MMR practices.

5.2.2.4   Section summary

This section expanded on the themes gleaned from Phase 1 data analysis, to suggest that user experiences of practices that facilitate depth at speed generate a beneficial outcome by generating present moment awareness that led to feelings of restoration. The following section discusses the WG suggestions for improving the MRBi artefacts and content.

5.2.3 Making space

Elements of the MRBi required reduction and occasionally elimination, as a result of the Phase 2 meetings. This was particularly so for two artefacts: the combined handbook and resilience journal, and the MP3 narration. In this section, I discuss the findings for each of these prototyped artefacts in turn.

5.2.3.1 Eliminating handbook and reflection journal

WG participants initially remarked positively on the design and presentation of information in the prototyped MRBi handbook and reflection journal artefact but ultimately found it to be problematic. WG members concluded that the handbook was not practical or time-efficient and could therefore be reduced or eliminated entirely. Disadvantages included the potential for losing or misplacing the handbook or forgetting about it, as Simone said:

> I think a hard copy will be problematic, I know I'll forget where I put it and I'll lose it easily.

Others, like Dominique, agreed that the hard copy format might be an issue:

> I think just carrying it around is gonna be an issue at some point, we're just gonna lose it.

Yet other participants saw finding time to actually use the handbook might be challenging and impractical, as Spencer noted:

> I'm not sure I have the time to read and write in this to be honest.

Other WG members, such as Spencer, agreed:

> Is there another way to present this information instead of in a hardcopy format?

Travis added:

> Yep, it needs another solution, something portable and not easy to lose.

Together, the excerpts point to the potential for eliminating the hardcopy handbook and resilience journal in its current format. This finding can be linked to that in Phase 1, in relation to time poverty, where the experts commented about the barriers to

participating in traditional mindfulness interventions, which often have handbook and journaling components. Similarly, the WG findings highlight the MRBi impracticalities and lack of time involved in utilising a handbook and undertaking journaling.

5.2.3.2   Prototyped MP3 audio practices

I was able to glean valuable information from the WG as to how I could contextualise the prototyped MP3 audio practices. There were positive comments in relation to how the artefact facilitated depth at speed, as discussed in the previous section. Two points were noted by the WG, however, about how the MP3 audio practices could be more effectively contextualised for future users. The first was to reduce the extent of the information, and the second was to reduce the narration to make space for silence.

To illustrate the first point, the WG felt that the practices in weeks 1 and 2 in particular, included too much supporting evidence, which they saw as distracting, as Spencer said:

> I feel like I'm being sold this program a bit … there's just a bit too much supporting data for my liking.

Simone added:

> Yeah, it feels too much.

Ryan stated:

> Yes, I was trying to practice during the quiet bit, but then the evidence popped up again, so it distracted me a little bit.

Maali agreed, and noted:

> Yeah, I found it a bit distracting at times, as I was trying to listen to the research but also do the practice at the same time.

These comments indicate that not all academics need evidence to support their MMR in the MP3 artefacts, as Spencer remarked:

> We're academics, we know that this stuff [mindfulness] works, we don't need to have an abundance of evidence to tell us it does.

Simone and Dominique somewhat agreed in relation to weeks 1 and 2 content, and mentioned that the evidence base could be reduced. This finding is in stark contrast to Phase 1 finding, in which the experts stressed the importance of explicit evidence-based information to support the rigour and integrity of the MRBi. The seemingly contradictory feedback suggested however, that less was more, in that while I could support the practices with research evidence, I did not need to overdo it to contextualise the content.

To illustrate the second point about making space for silence, the WG commented that the artefacts in weeks 1 and 2 were over-narrated. This was particularly so for the week 1 MP3, in which participants were invited to mindfully focus on the sounds in the room. Seconds after the invitation, the narration offered an insightful quote from secondary sources. WG participants found this to be distracting, for example, Spencer (novice) asked:

> Could we have some more silent time in the recordings?

Dominique (novice) agreed that it would be nice to have more silence at times, a sentiment that was supported by novice and experienced meditators alike. For example, Simone (experienced) said:

> I found it a little bit distracting to be invited to practice, and then I'm doing it, but then I listen to the narration again during it. I just wanted some quiet space to practise in for a while.

Other participants agreed that the lack of silence in week 1 and week 2 practices meant that the practice was disrupted, and at times, did not resonate. Consequently,

these are strong indications that reduced narration in the early MP3 artefacts in particular, was important to consider in the contextualisation process.

5.2.3.3   Section summary

The themes discussed in this section point to eliminating the hardcopy handbook and resilience journal and reducing the narration to leave space for silence during the MP3 practices. Together, these findings suggest that the balance between the provision of evidence-based information in the handbook and narration and space in the MP3 audio practices for silence was not quite right. These themes will be discussed in dialogue with the literature in the following section.

5.3   Discussion

This section is structured similarly to Section 5.2, in that each of the themes emerging from Phase 2 WG data analysis will be discussed in sequence. To reiterate, the themes include the need for: a holistic and practical design; user experiences of depth at speed; and revision of the MRBi artefacts and content. Together, the discussions contribute to the novel contextualisation process of the MRBi for busy academics, as outlined in Chapter, that is operationalised in Phase 3.

5.3.1 Balancing rigour and practicality

The discussion in Chapter 4 focused on the role of academic time-poverty, which presents a barrier to academics being able to practise mindfulness. The key finding was that the barrier might be addressed through the provision of speedy, yet deep MMR practices that are embedded, in practical ways, in and around work. The finding in this chapter that the MRBi practices might be extended beyond the academic work setting to other settings will be discussed in dialogue with what is known about holistic interventions and the importance of brief and practical approaches to intervention

design. The discussion is organised into three sections: holistic interventions; time-efficiency; and practicality.

5.3.1.1 Holistic interventions

The WG findings indicate the need to situate the MRBi as a broad holistic practice beyond the workplace for it to resonate with time-poor academics. This is a novel finding in the sense that while the effectiveness of holistic mindfulness interventions that are embedded throughout one's daily life is well-known (Williams & Penman, 2011), very little is known about how such interventions might effectively address the needs of academics. The outcomes of my analysis of Phase 2 WG discussions strongly point to the importance of holistic MMR practices that can be utilised in both work and non-work settings. By default, all mindfulness practice is holistic in that an individual – encompassing both body and mind – is the context and setting of the mindfulness practice undertaken (Kabat-Zinn, 2004). While there has been a recent move to prioritise context in the design of mindfulness interventions in health, there remains a lack of attention paid to the social and cultural context, even in health (Craig et al., 2018). This lack highlights the timeliness of my study's finding of the need for holistic intervention designs for academics beyond the workplace.

The WG favoured a holistic design that could be utilised in and out of work settings, which is supported by the idea of "mindfulness practice as a holistic philosophy" (Gause & Coholic, 2010, p. 8). Holistic mindfulness practice provides practitioners with a more solid foundation for committing to a life-long and enduring practice (Gause & Coholic, 2010). My finding is in line with a study of university academics who undertook a MBSR that holistically incorporated both work and non-work settings, with one informing the other and vice-versa (Becker et al., 2020). The notion of one context holistically informing another within an intervention was indicated in the WG findings. For example, my analysis found that academics do not operate in a vacuum, and instead, have diverse and complex lives in and out of work environments, which the MRBi needed to reflect. In other words, the MRBi needed to be utilised in domains beyond the university to wherever academics might be situated.

The Phase 2 findings, furthermore, extend the idea of one context informing another through the realisation that a stressful academic work life will manifest in some way at home and in other contexts, and vice-versa. A recent study of a holistic mindfulness intervention conducted at a large American university (Schwind et al., 2022) aimed at increasing academic wellbeing and enhancing teaching and learning scholarship in two stages. The first involved mindfulness practices at home, which were then applied to in workplace setting through classroom teaching and learning activities. While my study does not apply such a two-stage approach, the findings are similar, in that the WG recommended that the application of MMR practices should be holistically applied to all life settings. This finding mirrors Gause and Coholic (2010), who posit that mindfulness needs to be thought of as a holistic practice that is interwoven and integrated throughout one's life.

5.3.1.2 Time-efficiency

The Phase 2 WG discussions suggested that for me to contextualise an intervention for academics, it needed to be time-efficient, feasible and brief. In other words, the intervention needed to involve less work and be less intensive than traditional interventions. The WG found the MP3 artefacts to be highly suitable in addressing time-poverty in busy academics, which was previously identified as a barrier to practice (Chapter 2). For example, a third of the studies involving lengthy mindfulness interventions for academics reviewed in Chapter 2 identified lack of time as contributing to high rates of attrition (Aggarwal et al., 2017; Sood et al., 2014). Their busy schedules meant that participants also struggled to attend long individual sessions, such as 90-minute workshops, because of time poverty (Hegney et al., 2021), or complete pre- and post-intervention surveys, some of which took between 20 and 30 minutes each (Long et al., 2023).

The finding that the WG saw briefer MMR practices, such as those involving depth at speed as beneficial. This finding aligns with other time-efficient mindfulness interventions offering shorter practices that can be managed by busy individuals (Howarth et al., 2019), although they vary widely, from a single session to multiple session programs of up to 14 days (Schumer et al., 2018). Such interventions can

include a range of time-saving practices, such as the MP3 practices in my study, that are between five and ten minutes each (Schumer et al., 2018). The literature supports the efficacy and benefits of briefer and less intense mindfulness interventions, noting that even those lasting just one session or sessions of five-minutes can have significant positive health effects for participants (Howarth et al., 2019). Brief mindfulness practices are equally effective in reducing negative emotions, such as distress, anxiety and mood states linked to depression (Schumer et al., 2018). While these findings are encouraging, few studies focus solely on academics. The Phase 2 WG findings contribute to this literature through the engagement of academics in a brief MRBi designed specifically to address time-efficiency.

5.3.1.3   Practicality

The WG draw attention to the importance of contextualising a practical intervention that involved minimal time and no extra work for its users. This finding aligns with a growing body of research (Mantzios & Giannou, 2019; Mazorco Salas & Cuenca Botero, 2020) that highlights the importance of focusing on practicality in intervention design. While seemingly obvious, practicality can be overlooked, taken for granted or misinterpreted. For example, the WG findings show that, similarly to gold-standard mindfulness interventions, what I considered to be a practical handbook and reflective journal was, in reality, considered by users as impractical and time consuming. Feasibility and acceptability for users are central to contextualisation. This is often despite their reputations, such as the gold-standard MBSR and MBCT (Bravo et al., 2019), which have been seen as impractical (Howarth et al., 2019), too expensive (Bautista et al., 2022), and too lengthy (Howarth et al., 2019; Sesel et al., 2021). These are practical barriers for individuals who might otherwise benefit from engagement in mindfulness interventions (Howarth et al., 2019). My findings address these barriers by offering brief, practical MMR practices that are also feasible and acceptable to academic users.

The MRBi in my study utilised digital technologies in the WG meetings. The literature acknowledges the increasing popularity of briefer and more practical interventions (Schumer et al., 2018) that are made accessible through digital technologies, such as

apps (Mrazek et al., 2019) and internet streamed audio and video software (Creswell, 2017). Accessible technologies that offer hybrid interventions, combining both online and face-to-face interactions for participants, have also been noted as practical methods of delivering resilience and stress management training to participants (Romcevich et al., 2018). What my findings offer to this body of knowledge is the effectiveness of delivering MMR practices through a practical MRBi that combines formal and informal options.

5.3.1.4   Section summary

This section located the WG findings with the literature on the need for holistic and practical mindfulness intervention designs that, despite their brevity and reduced duration, are effective in improving wellbeing and reducing negative emotions in practitioners. I next turn my attention to user experiences of depth at speed in my study.

5.3.2 Operationalising depth at speed

The sub-themes of present moment awareness and restoration, expressed by WG participants as increased calmness and connection with the environment are discussed in this section. These user experiences were generated through the MRBi practices that incorporate the reconceptualised depth at speed (Figure 5.3).

5.3.2.1   Present moment awareness

The WG findings demonstrate that incorporating the reconceptualised depth at speed into MMR practices generated present moment awareness in participants. The cultivation of present moment awareness from mindfulness practice enables practitioners to become more grounded and more deeply connected to the external world (Macaulay et al., 2022). Depth at speed is a novel concept emerging from my study that aimed to evoke feelings of being grounded and deep connection in participants. The issues of frustration and confusion faced by novice meditators, and the need for intervention rigour through evidence-based grounding practices were

discussed in Chapter 4. The insights in this chapter extend these discussions to show that MMR practices incorporating depth at speed can help novice meditators more easily experience present moment awareness. The reconceptualised concept blended deep breathing practices, nature soundtracks and evidence-based grounding practices. Many of these elements have been used in previous studies, yet depth at speed moves beyond traditional interventions by bringing these elements together to encourage a speedier and embodied experience of present moment awareness.

Present moment awareness was generated in the Phase 2 WG through short exercises, such as deep breathing. This finding aligns with studies reporting positive participant experiences from deep breathing practices. For centuries, breathing techniques have been a common feature in contemplative eastern practices, such as yoga, martial arts and Buddhist meditation (Obradović et al., 2021). Studies have successfully integrated breath work and deep breathing practices into mindfulness interventions (Colgan et al., 2016; Crane, 2008; Duane et al., 2021; Zhu et al., 2017). Breath work and deep breathing in mindfulness meditation practices have been shown to calm the fight or flight sympathetic nervous system (Oneda et al., 2010), and are a useful self-regulation strategy that frequently induces a sense of calm (Obradović et al., 2021). Medical studies, furthermore, have shown that deep breathing practices lower blood pressure and reduce muscle tension (Fonkoue et al., 2020), which can prove helpful to stressed or agitated individuals. Such outcomes are beneficial in health-related domains (Obradović et al., 2021), for example, emergency room nurses who reported reduced feelings of work stress, tiredness and improved mental states (Mo et al., 2021), and veterans with PTSD who reported a reduction in negative symptoms (Colgan et al., 2016). In the context of universities, a recent study of American students showed their engagement in breath practices facilitated reduction in stress and anxiety (Nolte et al., 2022). None of these studies, however, involved academics. My research synthesises and extends studies that investigate the benefits of breathing exercises by identifying the depth at speed concept that offers MMR practices for time-poor participants.

5.3.2.2   Calm and restoration

The WG reported increased feelings of calm and restoration, as a result of their engagement in the reconceptualised depth at speed practices, for novice and experienced meditators alike. This finding is akin to the link established between mindfulness practice and feelings of restoration (O'Shaughnessy, 2018; Scott, 2018). This is attributed to the greater emotional regulation and lower emotional reactivity, "which are essential ingredients in restoration" (O'Shaughnessy, 2018, p. 144) brought about by mindfulness practices. Similarly, the revised MRBi offers the potential for restoration to busy and stressed academics through the depth at speed MP3 practices. These practices were intentionally designed to include background soundtracks, such as gentle ocean or rainforest sounds, that promote a sense of restoration.

The use of natural sounds and outdoor environments in mindfulness interventions, such as the Restoration Skills Training (ReST) (Lymeus et al., 2020), represent an area of increasing interest for researchers because of the benefits to participants. For example, an RCT that used brief online mindfulness meditations coupled with simulated nature sounds found that participants experienced enhanced heightened levels of mindfulness when compared to the control group (Ray et al., 2021). Simulated natural settings, furthermore, have been found to be almost as effective in providing restoration by increasing participants' mental and physical health and wellbeing (Choe et al., 2021). Research evidence, therefore, supports the efficacy of MMR practices in my study that incorporated natural soundtracks into the reconceptualised depth at speed practices. This is illustrated in comments by WG members about how pleasant, restorative and calming the natural soundtracks were, and how they helped them maintain focus during practice. Depth at speed, therefore, can assist novice and experienced meditators by bypassing many of the frustrations, particularly in the early stages of their mindfulness practices. These findings both contribute to knowledge about the importance of calm and restoration for busy academics and have consequences for my contextualisation process.

5.3.2.3   Section summary

The benefits generated for the WG members who engaged in the depth at speed MMR practices in my study were outlined in this section, specifically being able to quickly and deeply experience present moment awareness, which helped restore calmness. These findings are accompanied by suggestions for ways to improve the MRBi content and artefacts, which are outlined in the following section.

5.3.3 User-centred design: Prototyping and artefacts

The revision of MRBi artefacts and content was informed by the Phase 2 WG findings and the literature on prototyping artefacts within mindfulness interventions. This section begins with prototyping, followed by a discussion of the concepts of space and spaciousness in such interventions, and concludes with an examination of simplicity in artefact design.

5.3.3.1   Prototyping

Prototyped artefacts in Phase 2 helped me to contextualise the MRBi and informed a more nuanced design to suit busy academics. Phase 1 findings discussed previously in Chapter 4, suggested increased use of evidence-based information to support the MRBi content and increase participants' perceptions of its rigour. In contrast, the WG findings pointed to reducing supporting information, particularly in the prototyped MP3 artefacts. Prototyping enabled me to find the balance between these contrasting findings.

Artefact prototyping has been successfully used in studies in order to assist with planning, honing, and contextualising a diverse range of mindfulness-related apps, practices, websites and programs. For example, a study prototyped an artefact in the form of a digital mindfulness-based breathing app in three developmental phases (Chinareva et al., 2020). User-design research methodology was used to gather users' experiences and feedback to hone the overall development and contextualisation of the app. Similarly, a prototyped online mindfulness program was pilot tested in a study

to contextualise it for the intended audience (Plaza García et al., 2017). Prototyping mindfulness artefacts and programs represents a practical way to engage end users in the contextualisation process. Digital and physical prototyped artefacts were used in the WG as a time-efficient method for eliciting timely insights from users on how I could contextualise them to suit busy academics.

The WG findings also highlight negative points about elements in the design of the artefacts. As previously discussed, participants found problems engaging with the handbook and resilience journal and aspects of the MP3 artefacts. Prototyping in this phase enabled these issues to surface, which afforded an opportunity for refinement prior to Phase 3. This finding is in accord with user-centred design studies that prototyped artefacts to garner feedback that guided their refinement (Chinareva et al., 2020; Zhu et al., 2017). Similarly, the findings that highlight the impracticalities of the MRBi handbook and resilience journal and MP3 artefacts helped me to shape the contextualisation discussions in Phase 3.

5.3.3.2   Making space

Reducing the narration in the MP3 artefacts to make space for silence and reflection is an important finding from Phase 2. Space is an important element in mindfulness, as it allows both time to reflect and consider appropriate ways of responding (Sinclair & Seydel, 2013; Spence, 2016), and mental space and spaciousness to grow (Hunter, 2016). Space is also conceptually linked, in my study, to boundary setting to enable restoration. First, Phase 2 findings provide evidence that the MRBi practices *create* space for quiet and calm. The space enables academics to restore and refresh by enacting agency over their actions and gaining new perspectives on their environment and how they are placed within it (Hunter, 2016). The making of space for "silence" afforded through reduced narration was an effective way to practice mindfulness, as was the suggestion to limit the empirical evidence because of its tendency to distract from the practice itself.

Second, participants reported a preference for space for silence so they could sit and connect to the sounds around them without having to listen to the narrated

evidence. Mindfulness practices have been found to change one's relationship with thoughts and increase control over cognition and emotions, thus creating clarity of mind through the creation of mental space (Rooney et al., 2021). Well-paced and well-designed mindfulness intervention and teaching generate a sense of space and spaciousness within them (Crane et al., 2021). The over-narration in the prototyped MP3 artefacts, however, disrupted mental space and reduced clarity of mind. Setting boundaries around the narration to create space for reflection helped me to contextualise the MP3 artefacts. Through the AR process, the MRBi contextualisation design is aligned to notions of pacing, time-management and space and spaciousness in MMR practices (Crane et al., 2021).

5.3.3.3 Simplicity

The final Phase 2 finding of the need to reduce or eliminate artefact content that enabled me to streamline the MRBi reflects a trend in mindfulness intervention and artefact design for busy people. Research suggests that because of the time, cost and effort involved, making time for mindfulness is challenging (Laurie & Blandford, 2016), while busyness is a barrier to regular mindfulness meditation (Sinclair & Seydel, 2013). This is increasingly true for academics, as the findings reported in Chapter 4 and this chapter have shown. The WG findings indicate that the handbook and journal artefact was not feasible and should therefore be eliminated, despite their use in leading interventions that have, nonetheless, been critiqued for their time-intensiveness (Rung et al., 2020). The finding of the need for simplicity, which can be articulated as a *less is more* approach, was perhaps unsurprising to have emerged from the Phase 2 WG. Participants wanted less narration, less evidence, and less activity to open space for more silence and spaciousness in which to practise present moment awareness.

Simplicity is known to be an important factor in designing artefacts to effectively contextualise mindfulness interventions for busy people, such as high performance coaches (Hägglund et al., 2022) and high profile sports stars (Vidic et al., 2017). Reducing complication through streamlined artefact design can help achieve fidelity, which refers to the alignment of intervention goals with traditional Buddhist principles and assists participation in MMR practices despite busy lives. None of the mindfulness

studies that involved academics discussed in Chapter 2 mentioned artefacts in order to contextualise and simplify their offerings to the participants. My findings in this chapter offer a new perspective and a way to approach streamlining the MRBi artefacts by designing a simpler, briefer and contextualised intervention to help busy academics engage in and maintain mindfulness in their everyday lives (Laurie & Blandford, 2016).

5.3.3.4   Section summary

The discussion in this section points to the need for a less is more approach to designing and contextualising the MRBi artefacts, which sets boundaries around narration and evidence to generate time and space for silence and sitting in present moment awareness. The implications of these findings informed the development of the MRBi in preparation for Phase 3 of the study.

5.4   Implications of Phase 2 findings

The implications for Phase 3 of my study are a direct consequence from the analysis of the WG findings. There are two crucial sets of implications for the MRBi as follows: curriculum duration and content; and MMR practices and artefacts. Each will be discussed in turn.

5.4.1 Duration and content

The findings discussed in this chapter enabled me to adjust the MRBi time to be holistic, time-efficient, practical and not seem like extra work for its participants. This meant that significant changes were made to its duration and content, which are summarised in Table 5.8. The changes involved reducing the original eight-week MRBi to a six-week online intervention via Zoom to make it more practical, feasible and acceptable for participants, which also made it less work. The MP3 artefacts were re-designed and re-recorded so as to not exceed ten minutes, making them more

doable as daily/regular practice. Buffer periods were introduced into the 60-minute weekly Zoom meetings, reducing MMR practice content to allow time for questions, break-out rooms, interactivity and reflection.

Table 5.8   Key changes to the MRBi (v2 to v3)

	Change
1	MRBi duration reduced from eight to six weeks
2	Practices shortened and artefacts re-recorded
3	Online meetings evenly spaced with buffers

5.4.2 Practices and artefacts

Four changes to the MRBi practices and artefacts were undertaken, as a result of the findings emerging from Phase 2 WG. These are: less is more; holistic design; portability; and contextualisation of the MP3 and handbook artefacts.

5.4.2.1   Less is more

A streamlined approach to the MRBi design was undertaken to contextualise the intervention on the basis of the findings in Phase 2. Specifically, this meant less empirical supporting data, less narration in the MP3 artefacts, and no hard-copy course materials.

5.4.2.2   Holistic design

The MP3 artefacts were modified to be more holistic so they could be applied in contexts outside the university. This was achieved by incorporating suggestions into the guided mindfulness meditations, such as, "these practices can apply to all areas of your life; wherever you are now, thank you for making time to do this practice; and take these practices with you for the rest of the day". The strategy of intentionally

161

referencing aspects of participants' lives outside work aimed to encourage the broader take-up of MMR practices.

5.4.2.3 Portability

Portability was designed into the MRBi by producing practice guides in the form of readily accessible apps and messaging services. The instant messaging app, WhatsApp, was selected as the channel in which the informal MMR practices in the form of the MP3 artefacts could be shared in the Phase 3 PG. WhatsApp also facilitated the sharing of present moment awareness and reflections through pictures and chats. The weekly formal meetings were conducted online through Zoom, which allowed for participants to join on their own devices, irrespective of their location.

5.4.2.4 Artefact contextualisation

The prototyped artefacts were redesigned to incorporate a number of changes, which are summarised in Table 5.9 and explained in more detail shortly. The MP3s were then re-recorded, while the hardcopy handbook and reflective journal was eliminated.

Table 5.9   Key changes to artefacts

Artefact	Change
Digital MP3	Reduced evidence and narration
	ABC renamed BSB
	Introduced invitations to relax
	Incorporated periods of silence and reflection
	Redesigned to be shared via WhatsApp
	Incorporated natural Australian background sounds
	Embedded discrete messaging
Handbook	Converted hardcopy to editable PDF version
	Abandoned reflection journal

First, all MP3s featured reduced evidence in the form of narration. Second, the informal ABC practice was renamed BSB to make it easier to remember through the Australian banking analogy. **Note for international readers:** In Australia, a BSB (Bank State Branch) is a six-digit number used to identify individual bank branches. The BSB is paired with an account number to process payments like direct deposits and electronic transfers. While standard in Australia, this term may be unfamiliar to those in other countries. My renamed B.S.B practice stood for, **B=breathe** deeply; **S=sound** – listen to sounds around you; and **B=body** – make mindful connection to your body and its surroundings through touch or other senses. Third, introductory invitations to "make yourself comfortable" were incorporated into the MP3 artefacts, followed by several rounds of deep breathing to calm the nervous system, and a segue into a calm, guided narration of the MMR practice. The purpose of this change was to imbue a sense of relaxation and calm and to facilitate restoration.

The fourth change to the MP3 artefact involved the incorporation of periods for silence or reflection to reduce distractions from the narrations and to generate space and spaciousness that enabled participants to practise at their own pace and on their own terms. Fifth, MP3 artefacts were designed to be shared via wi-fi to WhatsApp. Sixth, Australian-centric natural sounds, such as native magpie birdsong, ocean waves and rainforest sounds, replaced the original nature soundtracks to assist depth at speed. Seventh, relaxation and restoration messaging was discretely embedded in the MP3 artefacts, such as, "just rest in the present moment"; "be kind to yourself"; "there is no wrong or right way to practice"; "there is nothing to strive for here"; "use this time to unplug from your daily activities"; "bring a sense of beginner's mind to your practice"; and "there's no need to judge your practice, every experience is welcomed here."

The final changes involved the handbook and reflective journal. The hardcopy version was converted to a softcopy PDF because of the finding that the former was cumbersome and easily lost or forgotten. The PDF contained relevant definitions, further information about the MRBi, and links to the research evidence that underpinned the intervention. The PDF also enabled participants to enter their learning goals, survey results, brief reflections on course completion and save the file,

making the handbook practical and portable for the Phase 3 PG. Finally, the reflection journal component of the handbook was replaced by inviting participants to post their reflections on daily practice to the WhatsApp group, which facilitated the formation of an informal, online MMR practice community.

5.4.3   Preparation for Phase 3

It was crucial to the success of the study that the pilot group in Phase 3 benefited from an enhanced experience of the contextualised MRBi and artefacts, and that I was able to monitor their reactions to the updated curriculum and MMR practice. Three goals were identified to assist my contextualisation.

The first goal was ease of practice. The MRBi was adapted and contextualised to be more holistic, practical, and also constitute less work for its participants. Ease of MMR practice was achieved through shorter intervention duration, time-efficient practices, and portable, accessible practical exercises.

The second goal was to facilitate participants' experiences of the present moment. The MMR practices were contextualised to facilitate speedier experiences of present moment awareness. The MP3 artefacts were redesigned and re-recorded to enhance states of present moment awareness.

The third goal was to encourage regular daily MMR practice. To achieve this, a ten-minute formal MMR practice was incorporated into the MP3 artefacts, along with a two-minute, informal BSB that could be practised several times a day.

5.5   Chapter summary and conclusion

The chapter discussed the three themes that emerged from my analysis of Phase 2 WG discussions. The themes reflect WG members' views that the MRBi design needed to be holistic and practical, incorporate depth at speed, and further contextualise the

prototyped artefacts. The WG's insights, experience and knowledge assisted me to contextualise the MRBi for time-poor academics without significantly adding to their workloads. These discoveries provided me with a deeper and more nuanced understanding of how to contextualise a mindfulness and resilience intervention for busy academics, in response to Research Q 1. Together with the themes arising from Phase 1, I was able to radically revise the MRBi. Now operationalised, the MRBi (v3) was ready to be trialled in with a pilot group. The chapter that follows discusses Phase 3 of my research, which involved the formation of a pilot group to trial the MRBi and evaluate its feasibility, acceptability and effectiveness for busy academics.

Chapter 6. Phase 3: Pilot group testing

6.1   Introduction

Chapter 5 presented the findings that emerged from the Phase 2 WG discussions of how to contextualise the MRBi and its prototyped artefacts in line with the needs of busy academics. The three key themes that emerged from my analysis of the discussion data are reiterated in Table 6.1.

Table 6.1   Key themes emerging from Phase 2 WG

No.	Themes linking findings to the literature
1	Holistic and practical design
2	User experiences of depth at speed
3	Revising artefacts and content

The Phase 2 findings informed a second redesign of the MRBi curriculum and artefacts, that significantly reduced the content, evidence base and narration, eliminated the hardcopy handbook and reflective journal, and inserted space for silence and reflection in the MP3 artefacts.

This chapter recaps the conceptual framing and methodological approach to data collection and analysis, identifies themes, dialogues the Phase 3 findings with the literature and discusses the implications of the Phase 3 PG findings for the MRBi curriculum and artefacts. The chapter begins with a recap of terminology and key concepts that framed the MRBi contextualisation process (Section 6.1.1), followed by a recap of the streamlined MRBi (v3) that resulted from Phase 2 WG findings (Section 6.1.2). The research methods (Section 6.1.3) and pilot group processes (Section 6.1.4) are then described. Two key themes were identified from the qualitative and

quantitative analysis of Phase 3 data (Section 6.2), which are discussed in relation to the literature (Section 6.3). The chapter concludes with the implications of this phase for the MRBi (Section 6.4).

6.1.1 Recapping terminology, conceptual framework and the MRBi (v3)

In this section, I first briefly reiterate the key terminology (Section 6.1.1.1), conceptual framework (Section 6.1.1.2) and changes to the MRBi that emerged from Phase 2 of the study (Section 6.1.1.3).

6.1.1.1 Terminology

Mindfulness meditation can be undertaken through both formal and informal practices. Formal practice is defined as purposefully, mindfully meditating, usually by sitting with closed eyes (de Allicon, 2020). Formal meditation is often led by a facilitator or teacher to guide the practitioner through the practice. Informal practice is defined as embedding mindfulness into situations, such as travelling on a bus, watching the ocean, or mindful walking (de Allicon, 2020). Informal meditation involves self-led practice. Anchors are used in both formal and informal mindfulness meditations to guide practice. Participants often work with anchors, such as such as the breath, the body, or an external sound that assists in orienting the practitioner to the present moment (Meggs & Chen, 2021).

6.1.1.2 Contextualisation and tailoring

My dual role in this study is as intervention developer and researcher. Contextualisation is both a concept and a process that guides the intervention developer in designing and adapting the intervention content to improve its relevance for participants (Fraser & Galinsky, 2010). The three research phases reported in Chapters 4, 5 and this chapter, document the process, undertaken in my study, of my contextualising the MRBi for busy academics. This involved adding and then reducing the volume of traditional Buddhist principles and research evidence in response to findings from Phases 1 and 2. While contextualisation

provided the structure through which I was able to adapt the MRBi in preparation for Phase 3, which allowed PG participants to tailor their MMR practices.

The concept of tailoring falls under the umbrella of contextualisation. Tailoring is defined as the process through which an intervention is customised to meet the particular needs of an individual (Ryan & Lauver, 2002). The participants in Phase 3 of my study tailored the MMR practices in the MRBi for their own needs in three ways, by: 1) altering practice duration; 2) altering location, time and ways of practising MMR; and 3) finding new and unique ways to holistically practise mindfulness, and/or mixing anchors during practice, then sharing their insights in the online WhatsApp group. Tailoring enhanced participants' engagement in and adherence to MMR practice by meeting their individual needs.

6.1.1.3   Streamlining the MRBi

Following Phase 2, the MRBi underwent a significant streamlining process guided by a less is more approach that made it more holistic and practical for busy academics. The key changes involved reduction in intervention and practice duration, and the provision of supporting information. First, the intervention duration was reduced from eight to six weeks. This is because participants thought an eight-week intervention was too long, while four weeks would not be long enough to grasp the basic elements of MMR practice. Second, the MRBi (v3) reduced the duration and number of MMR practices in each weekly meeting. The purpose was to provide participants a simpler and more feasible set of MMR practices that would encourage engagement and adherence. Third, the provision of research evidence featured in the narrated MP3 artefacts was reduced to open space for silence and reflection.

The slimmed down MRBi (v3) also featured updated weekly topics (Table 6.2). For example, Introduction to becoming mindful in week 1, and Using five senses to be mindful in week 2. These topics provided a structure that both guided participants in iteratively building knowledge and mindfulness-resilience skills each week and deepened their understanding of core mindfulness concepts and practices. My process of contextualisation was informed by my experience as a mindfulness

facilitator and practitioner and participation in and researching well-known interventions. In doing so, I assigned a focus to the content each week, linked to the traditional mindfulness principles of kindness, gratitude, empathic joy, compassion and equanimity (McCown et al., 2010). The aim was to deepen participants' understanding of these principles while embedding space for reflection to enhance resilience. Together, the updated topics enabled focused progression while providing flexibility so practitioners could address challenges specific to them. Contextualisation thus meant MMR practices were iteratively scaffolded in a holistic, safe, meaningful way.

MRBi (v3) offered participants effective formal practices lasting no more than ten minutes, and informal practices of up to two minutes' duration per day. These practices were supported by straightforward language, simple and calm instruction, a succinct approach and a reassuring pace. An overview of the streamlined six-week MRBi (v3) (Appendix O) is provided in Table 6.2.

Table 6.2   Overview of the MRBi (v3) online curriculum for Phase 3

Week	Theme	Teaching focus/pertinent foundations of mindfulness	Embedded resilience reflection
0	Participants complete pre-intervention survey		
1	Introduction to becoming mindful	– Non-striving / nonjudgmental in present moment awareness	Evidence shows mindfulness helps build resilience
2	Using 5 senses to be mindful	Reducing automatic pilot	2 positive experiences in the last 24 hours
3	Mind and body connection	Embodying practice (body scan)	Reflect on supportive relationships
4	Mindful gratitude	Cultivating gratitude	3 things to be grateful for
5	Developing equanimity – being with the highs and lows	Developing equanimity and dealing with challenge in life	Reflect on a challenge you have overcome
6	Living and working mindfully	Blending all practices into an ongoing lifelong practice	Reflect on benefits of a regular mindfulness resilience practice
	Participants complete post-intervention survey + MRBi feedback survey		
Follow up	Participants complete 2-months post-intervention survey		

6.1.2 Phase 3 research methods

A mixed-method research approach was used in Phase 3, involving recordings of the weekly PG Zoom discussions, collation of the WhatsApp chat threads, and pre- and post-intervention surveys to measure the effectiveness and acceptability of the MRBi (v3).

During week 1 of the online pilot, two participants dropped out due to other commitments. The remaining 15 academics completed the six-week pilot. Two participants, Dominique and Ryan, who were formerly members of the WG, expressed interest in the MRBi and its potential benefits and subsequently joined the pilot. Table 6.2 summarises the participants of the PG.

6.1.2.1 Pilot group participants

PG participants initially comprised 17 UTS academics from different faculties (Table 6.3). Two participants withdrew in week 1 because of other commitments, which left 15 academics who completed the six-week pilot. This included Dominique and Ryan, who were members of the WG in Phase 2, who had expressed interest and subsequently participated in Phase 3.

All Phase 3 participants were novice meditators. Group members were predominantly women and mostly full-time lecturers. Each participant was provided sufficient information to guide them through the pilot, access the weekly content, and complete the online surveys.

Table 6.3   PG participant demographics

Participant	Job Title	Employment status	Regular MMR practitioner
Alayah [F]	Lecturer	FT	No
Cora [F]	Senior lecturer	PT	No
Dominique [F]	Lecturer	FT	No
Francisco [M]	Senior lecturer	FT	No
Jacinda [F]	Lecturer	PT	No
Janette [F]	Professor	FT	No
Kevin [M]	Lecturer	FT	No
Kendra [F]	Research director	FT	No
Meagan [F]	Lecturer	Casual	No
Melody [F]	Lecturer	FT	No
Mona [F]	Lecturer	PT	No
Natalia [F]	Lecturer	PT	No
Ryan [M]	Lecturer	Casual	No
Sasha [F]	Lecturer	PT	No
Vivien [F]	Senior lecturer	FT	No

[F] = Female   [M] = Male   FT = Full time   PT = Part-time

6.1.2.2   Pilot group process

As a result of the promotional campaign in UTS faculties prior to the commencement of Phase 3, academics registered their interest in participating via email. Each was emailed a participant information sheet (PIS), which outlined the study, the ethics approval, what was involved, and an informed consent form (Appendix D). Upon completing the consent form, participants were emailed a digital information pack and self-screening mental health protocol to assess their suitability for the intervention (Appendix E). Only academics who confirmed they met the criteria outlined in the self-screening protocol and were not experiencing acute mental health

172

challenges were invited to participate. This ensured the intervention was appropriate and safe for all participants. Eligible participants next emailed a second digital information pack. The pack comprised a guide to the MRBi, support service list, the mental health protocol approved by the UTS Ethics Committee, a technical guide to Zoom and WhatsApp, and a withdrawal form. Prior to the start of the PG, participants completed the Qualtrics online surveys: the Five Facet Mindfulness Questionnaire (FFMQ), and the Connor Davidson Resilience Scale-2 (CD-RISC2).

Engagement in the MRBi involved participants attending weekly 60-minute Zoom sessions that concentrated on practising MMR practices together during that time. Interactive activities were embedded into each session and allowed time for participants to chat with one another in break-out rooms, use the group chat function, or ask questions. Following this, participants engaged in a 2-minute BSB practice, the MP3 artefact for which was also shared on WhatsApp. Additionally, the dedicated weekly MP3 audio practices (max 10-minute durations) were then shared on WhatsApp in the form MP3 artefacts which the participants practised with every day. After the session and throughout the week, participants posted their reflections and comments about their daily MMR practices to WhatsApp. At the end of the pilot, participants completed a feedback survey that comprised open-ended questions about their experience and elicited suggestions for improvements. Immediately following the intervention, participants were emailed and invited to complete the Five-Facet Mindfulness Survey and the Connor-Davidson Resilience Scale 2 once more. A 2-month post-pilot email survey gathered participant's reflections on the MRBi, its lasting effects and impacts, if any, as well as any suggestions for further modifications.

6.1.2.3   MMR practices

Phase 3 PG participants were invited to undertake two daily MMR practices while engaged in the six-week online MRBi. The first was a seated 10-minute formal practice guided by one of the MP3 artefacts at least once a day. The second was the 2-minute informal BSB practice as often as possible throughout their day. To assist them in completing this request, participants were encouraged to tailor and embed the

173

practices into their daily activities. Flexibility was afforded participants by operationalising the concept of depth at speed in both formal and informal practices.

Tailoring in the formal 10-minute MP3 audio practices could take the form of changing the location, for example, while on the train, in an armchair, in a conference room or at a desk, and by changing the duration and/or frequency of the practice (lengthening or shortening their practice). Tailoring in the informal BSB practice could involve varying location and timing, as well as finding unique and new ways to holistically practise mindfulness, and/or mixing anchors during their practice and then share their experiences and insights online in the WhatsApp MRBi group.

6.2   Themes

Two themes emerged from my qualitative analysis (see Table 6.4) of the data generated in the weekly Zoom session and collated WhatsApp chats throughout the six weeks. The first theme drew from participants' reflections on their MMR practices and how they had tailored these practices in their lives. The second theme point to how participants understood and used MMR metaphors to better understand their practices.

Table 6.4   Themes emerging from the Phase 3 PG

Section	Theme
6.2.1	Tailoring MMR practices
6.2.2	Mindfulness metaphors for busy academics

These themes are discussed as follows.

6.2.1 Tailoring MMR practices

The MRBi Participants were encouraged to tailor the MMR practices throughout the
PG phase of the study, to help them embed the practices into their daily lives.
Two subthemes emerged: tailoring MMR practices in and around work; and tailoring
MMR practices holistically.

6.2.1.1 Tailoring MMR practices in and around work

My findings show that tailoring MMR practices into and around participants' academic
work was achieved in a number of ways. For example, inserting informal 2-minute BSB
practices during stressful work moments to generate calm and balance, and taking
mindful breaks between work activities, such as in between meetings. Participants'
comments frequently related the timing of these breaks in relation to workloads and
priorities, as Natalia noted in the chat:

> I have been challenged by how much I have to do today, and to get things
> done, but I just noticed and observed these thoughts in my MMR practice
> at my desk, and then I noted how I returned to a calm mind.

Here, Natalia describes how she tailored the location of her MMR practice to her
desk during a stressful moment, which enabled her to return to a "calm mind".
Similarly, Janette tailored the timing of MMR practice in response to work stress:

> I was getting stressed at work, and I used my BSB 2-minute breathing
> practice throughout my workday to stop myself feeling so overwhelmed.

The insertion of the short MMR enabled Jannette to reduce the feeling of being
"so overwhelmed". Francisco made a similar comment about embedding MMR
practice into his daily walks:

I've been walking more and doing BSB breathing sessions between work tasks. It's really good to know I'm not alone in the chaos of thoughts resulting from uni work.

Francisco's comment shows how he tailored MMR practice through location and situation. Similarly, Meagan said:

I have found I am getting better at taking my 2-minutes of mindfulness when working at home amongst chaos (kids, dog, drums, violin, neighbours) when I have traditionally felt distracted. The 2-minute breathing BSB seems to calm me through the day enough for me to tackle anything.

Megan's comment captures how she tailored both the location and the setting of her practice to work, home-life and time with family. Kendra commented:

I've been doing my MMR practices through my workday, which really helped me to take a break from the to-do list in my head.

The following week she noted,

I've been using breath awareness just generally throughout my day to calm me. Just doing my longer 10-minute practice at the start of my day and was super-lovely, it went very quickly, and I feel a bit nourished.

Kendra's comments about feeling refreshed after MMR practice were echoed by Mona, whose regular incorporation of the BSB practice during tea-breaks and while washing her cup throughout her workday helped her calm her thoughts. Together, the excerpts show how pilot participants tailored BSB practices during and around their busy workloads.

Not all participants, however, were successful in tailoring MMR practices in and around work, as Kevin's WhatsApp comment in week 4 suggests:

I found it really hard to embed my practices into work this week. I just struggled to focus, probably due to everything going on this week and lots of deadlines.

Like Kevin, Ryan also posted that despite similar struggles, he had achieved some success:

Although I was busy, and work was stressful, MMR practice helped me to make things clearer and I could see my priorities more clearly after my practice.

Kevin added the following week (week 5):

We often feel pressured to be doing something all the time, I realised, and pressured into feeling productive. The more I reflect on my mindfulness practice, the less convinced that being busy all the time, is an effective use of our time. I see mindfulness as being part of being productive and can help us accept what is going on in our lives.

Kevin's post indicates his insight into constantly feeling pressured to be productive, which helped him tailor his practise to achieve balance and calm to both offset the pressure and understand mindfulness as "being part of being productive". Natalia's comment that follows appears to refer to time spent before she starts work, it is clear that while experienced outside her workday, it relates to the stressful work setting:

I woke this morning with a knot in the stomach feeling, as my worries were bubbling around. I noticed these feelings with mindful curiosity and very quickly felt calm and had an accepting mindset. I'm feeling grateful for a toolkit to draw on in tricky moments.

In addition to tailoring their MMR practices in stressful work moments, participants also tailored them to help prepare for meetings, as Cora noted:

I've been practising before going into work meetings. Just a good opportunity to calm myself before I go in, just focus on sounds and my breath. Just grounds me before a Zoom.

In this example, Cora uses sound and breath to anchor her MMR practice, before she joins an online work meeting. Other participants liked and responded to her comment in the WhatsApp chat, for example, Kevin posted:

I've been using my [mindfulness] breath practice throughout the day, before meetings, and with everything else too.

Tailoring their practices in and around work also involved how they practised, as Melody commented:

I did my practice after 4 hours of back-to-back meetings. I just laid down and felt my body resting and just focused on the stillness.

Finding time during and in between stressful work activities represent ways that participants tailored informal MMR practices. The purpose varied, however, ranging from helping them mentally prepare for, or to wind down after, an activity. One of the most common ways to tailor practices in and around work was for participants to do them during tea and rest breaks. Melody commented on her *novel anchor* during one such break:

I just love making tea and focusing on the sound the bubbles make.

Similarly, Dominque contributed her novel approach tailoring being mindful:

I've been taking regular mindful breaks, just drinking tea as a break from the day, focusing my attention on the warmth of the cup.

As did Cora:

> I've been practising mindful breaks and just placing attention on how
> many sounds are made when I'm drinking my coffee.

Kendra posted about listening mindfully to the sounds of the kettle boiling as a way to anchor her MMR practice (Figure 6.1).

Figure 6.1   Kendra's WhatsApp post

Figure 6.1 shows Kendra's unique way of tailoring her MMR practice during tea break and sharing it with the group online. In contrast, Jacinda used a different location and activity:

> I'm enjoying trying to embed MMR into different activities like walking or
> putting on the kettle for tea.

While the anchors varied, together the excerpts show the commonalities in how participants tailored their MMR practice, *often in new and unique ways*, in and around work to restore calm.

6.2.1.1   Tailoring MMR practices holistically

Participants extended their tailoring of MMR practices in and around work holistically to other parts of their lives. Holistic tailoring of MMR practice into work and home lives was achieved in three distinct ways: 1) practising during domestic tasks; 2) practising during free time and while out in nature; and 3) applying to sleep.

Participants' comments during Zoom sessions and in WhatsApp illustrate how they embedded MMR practices into domestic tasks at home. For example, some encouraged family members to join their MMR practice, like Mona, who introduced mindful eating during family dinners. Meagan wrote that she practised mindful breathing with her young daughter before putting her to bed, and Alayah described doing the formal 10-minute practise with her husband:

> … who is really enjoying the practices with me.

Some participants engaged in MMR while grocery shopping or in busy shopping centres, as Francisco wrote:

> I practised during a busy grocery shop, I let go of all the distractions and car park chaos. I'll continue practising like this in busy and distracting environments.

Several participants liked and responded to Francisco's comment, saying that they wanted to try practising in supermarkets in the coming weeks. Janette mentioned she practised whilst mowing the lawn, describing her focus on the associated sounds and smells to anchor her in the present moment.

Participants holistically tailored the MMR practices in often unique ways to help manage discomfort, as Natalia posted:

> I found the equanimity practice [in week 5] helpful yesterday to deal with super itchy sandfly bites over my legs. I managed to notice and accept the sensation and pull my attention to breath and sounds which took the edge off the discomfort.

The excerpt above highlights Natalia's increased tolerance that resulted from her practice. Similarly, Melody tailored the BSB practice before a difficult phone conversation, noting:

> The practice did help me achieve calmness throughout the call.

Cora also tailored her practice to help deal with a difficult situation, commenting on how she specifically used the equanimity practice in week 5 to help reduce her reaction to noisy construction work next to her home.

Participants often tailored their MMR practice during free time outdoors and in natural environments. For example, Kendra regularly posted about using MMR skills whilst swimming at weekends, during ocean bush walks, and while snorkelling. Similarly, Vivien commented on spending time by the ocean to practise, which "activated all my senses." Natural outdoor sounds helped anchor participants in MMR. For example, Janette noticed her focus on birdsong and listening to rain dripping off her roof to help her connect to the present moment. Dominique noticed cicada sounds and barking dog during her park walks, while both Ryan and Alayah had used the sound of rustling trees to pay attention to the present moment. Francisco often posted that he practised MMR in his free-time while bush-walking, and during bike rides with friends, by focusing on the sounds around him.

Holistically tailoring their MMR practices to improve sleep and address sleep disturbances was common throughout the study. For example, Sasha posted having trouble with sleep, particularly with the onset of a new semester looming, and tailored the MMR practices by anchoring on her breath to help improve her sleep. Similarly, Kevin posted:

> I have sleep issues, but I've noticed that the MMR practices are helping me sleep better.

These are good examples of holistic tailoring of MMR practices beyond the work setting. A further example of tailoring involved mixing up several techniques, as Kendra posted:

> I tried a body scan to help me fall asleep, but it actually made my body more restless. I did a bit of breathing and sound focus instead; and that's the last thing I remember.

The excerpt above shows how Kendra tailored the MMR practices by mixing three techniques to help her sleep. Poor sleep quality extended to family members, such as children, who sometimes joined participants in practising MMR. For example, Meagan posted:

> I love doing deep mindful breaths with my daughter each night at bedtime, and I find this a lovely way to wind down from a busy day.

Similarly to Meagan, Natalia posted that she both tailored and shared her MMR practices with her young daughter to help them both sleep.

6.2.1.3   Section summary

This section illustrated how participants holistically tailored the MRBi practices to both work and home situations, with their family members, and while out in nature. This finding corresponds with the findings in Chapter 5.

6.2.2 Mindfulness metaphors in qualitative data

The second theme that emerged from analysis of the qualitative data collected in Phase 3 PG refers to the metaphors participants used to assist their understanding and application of the concepts of mindfulness. Metaphors and concepts that I introduced in the weekly Zoom sessions resonated with participants, who readily adopted and frequently used them in their online exchanges. Their frequent use

indicates that metaphors were not only accessible but also useful for participants. Three metaphors were used most often across the MRBi: 1) squirrels and monkeys referred to noticing intrusive thoughts during MMR practice; 2) snow globes were connected to understanding how the mind works during mindfulness; and 3) anchors enabled present moment awareness. Each metaphor and the underlying concept will be discussed in turn.

6.2.2.1 Squirrels and monkeys

The concept of noticing intrusive thoughts during MMR practice was introduced to the PG as a pivotal mindfulness practice during the Zoom session in week 1 through the traditional Buddhist metaphor of the monkey mind. This metaphor instantly resonated with participants, prompting me to share a similar metaphor that had arisen prior to Phase 3, of noticing, but not feeding, the squirrels. This metaphor referred to the idea of squirrels running around in one's head, which like the monkey mind, could be observed and noticed but not engaged with, in mindfulness. The squirrel metaphor soon overtook monkeys in popularity during the intervention.

The metaphor refers to two experiences: when participants noticed tension from intrusive thoughts (squirrels); and when participants moved from noticing thoughts (squirrels) to noticing feelings of calm. The latter experience was most often commented upon, as Ryan posted:

My squirrels have quietened down after that practice.

Francisco similarly commented:

What I noticed after the practice was that I was quite focused and relaxed during this and used the focus on my breath to keep the squirrels away.

Vivien also mentioned squirrels in relation to observing and letting go of thoughts:

I noticed my observing the squirrels, and then just accepting them and then moving on to focus again.

Similarly, Dominque posted in week 3:

> I've just had a massive squirrel attack through my walk through the park.
> But I just noticed it and then returned to my breath.

The noticing of thoughts and returning to present moment awareness is the essence of mindfulness practice, as Kendra commented:

> I've been doing mindful walking through the bush path during my free-time
> and listening to my breath and the native birds. This has been turning
> down the squirrels.

Here, participants' comments about "observing the squirrels", having "a massive squirrel attack", and "turning down" the squirrels are clear indications of this intervention's MMR practices in action.

As is often the case, not all participants enjoyed calmness during MMR practice. There was frequent mention of squirrels and monkeys in reference to the tension between intruding and wrestling with thoughts. For example, Janette used both metaphors in a post:

> During that practice, I had a major duel between the squirrels and monkeys.

Dominique commented on the intrusion of persistent thoughts during her practice, but she maintained focus on the present moment through mindful breathing:

> The squirrels were persistent, but the second time I tried was better, the
> mindful breathing was a good way to stay focused.

Like Dominique, Natalia noted the tension between intrusive thoughts and present moment awareness in her weekly home-based practice:

> I've been finding moments of calm, then I go back to squirrel land.

Natalia's novel "squirrel land" can be linked to Cora's "distracting" monkeys:

> I got itchy during my practice, wondered if this was the monkeys distracting me.

Sasha concurred, commenting:

> I'm finding it increasingly difficult to keep the squirrels away. In my MMR practice I noticed my thoughts were trying to escape.

As did Francisco, who noted in his reflection on practice in week 6:

> I've been using my 2-minute BSB practice a few times this morning, as I've been feeling occasionally paralysed by self-imposed high expectations and many squirrels. This practice is helping me to tame this.

The idea of "taming" squirrels and "keeping [them] away" points to tensions that novice meditators experience during MMR practice, yet together, the excerpts above show that participants practised mindfulness by observing their thoughts, noting what was occurring, and moving back to present moment awareness.

6.2.2.2 Snow globes

The concept of understanding how the mind works during mindfulness was also introduced in the Zoom session in week 1. A snow globe was used as a metaphor to represent the filling of the mind with constant thoughts, like the snow globe when shaken. During mindfulness, the mind often quietens, just as the snow in the globe settles when still. As the snow globe is again shaken, thoughts again intrude. The cycle of being shaken and returning to stillness repeats throughout practice. To distract from the activity of the snow globe, i.e., the mind, present moment anchors, like the breath, or sound can be used to bring oneself back to the present moment. The snow globe metaphor was readily adopted by PG participants, as the following data excerpts show. For example, Kevin commented:

I found this practice much harder than the first one we did. I had lots
of snow globe moments.

"Snow globe moments" refers to Kevin becoming aware of thoughts that disrupted his focus on the present moment. Cora also commented:

Never knew my mind was such a walking snow globe – really noticed that here!

Her extension of the metaphor to "a walking snow globe" attests to the degree of disruption Cora experienced. By week 3, the metaphor had extended to posting images to the WhatsApp chat, of snow globes participants had bought (Figure 6.2) and/or were using to support their MMR practice.

Figure 6.2   WhatsApp snow globe posts
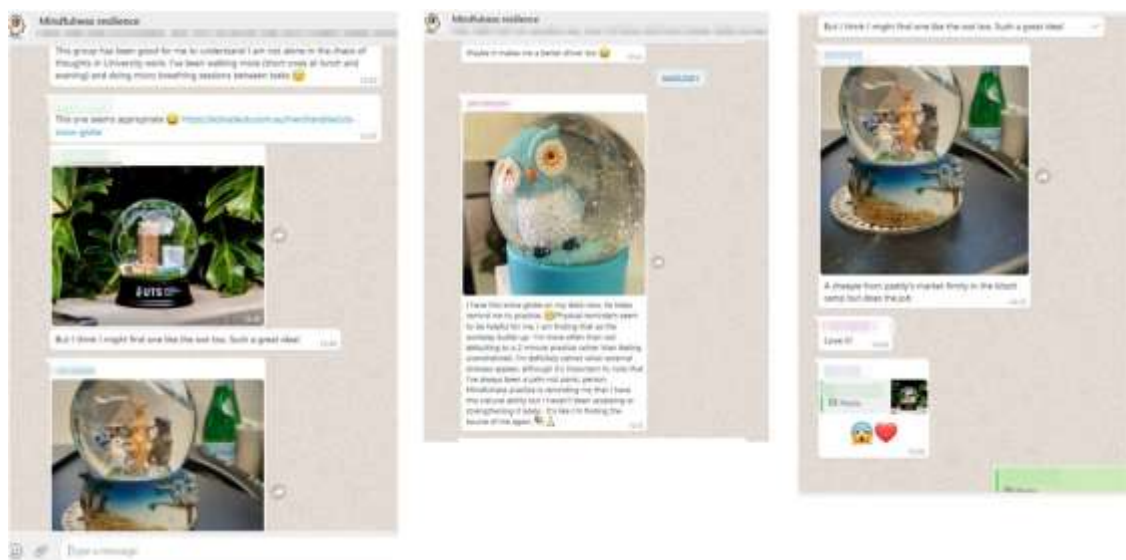
Janette's post was accompanied by her comment:

I have this snow globe on my desk now, it helps to remind me to practise.

Other participants responded positively to such posts, with Vivien commenting on the usefulness of having a visual reminder to help her practice. For example, Dominque responded the following day with the post:

Here's my new snow globe, which is helping me to just observe my thoughts.

In response to Dominique's post, Francisco commented:

These [snow globes] are such a good idea – great to hear all this.

Natalia posted a picture of a university branded snow globe, later commenting:

I have snow globe envy developing.

The excerpt above was Natalia's response to images of snow globes posted to WhatsApp. The findings indicate that the snow globe metaphor resonated with the group.

6.2.2.3   Anchors

The third traditional concept relates to the enabling and realisation of present moment awareness, which was similarly introduced in week 1. This concept is represented by the metaphor of an anchor or anchors, which refers to anchoring oneself in the present moment by paying attention to the breath, body or some other object or sensation (Anderson & Farb, 2018). The anchor metaphor was very popular with MRBi participants and was widely commented upon throughout the six-week pilot, most often during the Zoom sessions, where they were taught various ways to anchor themselves. The techniques included anchoring to the breath through such things as: sounds of breathing; bodily movements of breathing, such as belly and shoulders; temperature of the air coming into their nostrils; body scans; and external sounds. Anchors are often used in grounding practices, and are also a key element of the depth at speed concept (discussed previously in Chapters 4 and 5). A pattern emerged from Phase 3 data analysis in relation to participants' preferred anchors, those they changed during practice, and anchors they tailored and mixed.

Changing anchors during practice shows evidence of participants' *tailoring* the MMR technique to suit their requirements or circumstances, as Sasha noted:

I worked with different anchors throughout this practice, which was interesting.

Janette commented that she too liked to employ different anchors at different times, and tailor the use of anchors throughout a single practice, noting:

I changed my anchor during the practice and moved from sounds to visual anchors as it suited me better.

She added later in the session:

I used the anchor of my breath to help me keep focused, I also noticed my breath and then used the anchor of noticing my body against the chair.

Francisco commented on his tailoring of anchors to suit his mindful walking practice and personal strengths, saying:

During mindful walking, it is easier for me to focus and keep to my anchors. I've also noticed these [anchors] change throughout my practice.

Once more, Francisco indicates tailoring of MMR practice through mindful walking, choosing an anchor and then changing it during the practice.

Other participants indicated their preference for a single anchor during practice. For example, Natalia noted in two different Zoom chats that it was easiest to connect by focusing on external sounds. In contrast, Dominque commented:

Breathing was a good anchor for me in this practice.

Similarly, Vivien liked to anchor on her breath:

I'm enjoying embedding my breath anchor into different activities, like walking and making fresh tea.

Together, the anchor metaphor resonated with the group of busy academics as a way to realise present moment awareness.

6.2.2.4   Section summary

To conclude this section, the qualitative findings indicate that the use of the already known metaphor of *anchor*, resonated with this group of busy academics, who used this metaphor to help their focus on present moment awareness. Squirrels and monkeys helped participants first notice, and then "calm" intrusive thoughts, snow globes helped them understand the working of their minds during practice, and use of various anchors enabled present moment awareness. Overall, this knowledge of the use of anchoring metaphors by the academic participants is important knowledge for me in discovering ways of contextualising the MRBi. The following section outlines the results of the statistical analysis conducted on the quantitative survey data collected.

6.2.3 Analysis of survey data

The results of statistical analysis of the two pre- and post-intervention survey data (Sections 6.2.3.1 and 6.2.3.2) are presented first, followed by thematic analysis of the qualitative data generated through open-ended questions in the two post-intervention feedback surveys (Sections 6.2.3.3 and 6.2.3.4).

Participant responses in the Five Facet Mindfulness Questionnaire (FFMQ) and the Connor Davidson Resilience Scale – Shortened Version 2 (CD-RISC2) were analysed to investigate the difference, if any, between pre- and post-intervention scores.
The statistical software R was used to conduct the analysis. A paired sample analysis of the data was initially carried out, which then led to a *t* test to identify and compare pre- and post-intervention means.

6.2.3.1   FFMQ results

Participants' mindfulness levels were measured using the FFMQ prior to commencing the pilot and at on its completion at the end of week 6. The FFMQ is a 39-item

questionnaire, which measures the level of participants' trait-like tendencies to be mindful in daily life. Five facets of mindfulness, observing, describing, acting with awareness and without judgment of inner experience and nonreactivity to inner experience (Baer et al., 2012) are measured using a Likert scale of 1–5, where 1 is never or very rarely true, and 5 is very often or always true (Appendix F). Seventeen participants completed the pre-intervention survey, but because two withdrew from the pilot prior to completion, quantitative analysis was conducted on the 15 participants (88%) who completed both surveys. The results from the FFMQ analysis demonstrate that internal consistency was rated adequate to good, with alpha coefficients ranging between .88 and .89 at baseline (pre-intervention), and between .88 and .89 post-intervention.

A statistical analysis for paired samples was used to compare the pre- and post-intervention FFMQ results. Descriptive statistics provided an overview of the difference between levels (Table 6.5).

Table 6.5   Descriptive statistics

	Facet name	Group	N	Mean	SD	Min	Q1	Median	Q3	Max
1	Observe	Pre	15	26.93	3.73	22	24.0	27	29.5	36
1.1		Pos	15	32.40	3.89	24	30.5	32	35.5	38
2	Describe	Pre	15	24.07	2.12	21	22.5	24	25.5	28
2.1		Pos	15	26.27	1.16	24	26.0	26	27.0	28
3	Act.with.awareness*	Pre	15	22.40	4.01	13	20.0	23	25.5	28
3.1		Pos	15	20.33	4.01	11	18.5	21	23.5	25
4	Non-judge*	Pre	15	21.20	5.49	11	18.0	20	23.0	32
4.1		Pos	15	16.93	5.51	9	14.0	17	19.0	32
5	Nonreact	Pre	15	20.00	2.42	16	18.5	20	21.0	26
5.1		Pos	15	23.07	3.43	18	20.5	22	25.0	30

* Reversed-scored items within this facet

As shown in Table 6.5, higher scores in the facets "observe", "describe", and "non-reactivity" and lower scores in the facets "act with awareness actions" and "non-judging" were recorded post-intervention. All facets were reverse scored, so the lower scores show overall positive outcomes after completing the MRBi. Paired sample *t* tests were then conducted to see if the changes were statistically significant.

Table 6.6   Paired sample *t* tests

.y.	Observe	Describe	Act.with.awareness	Non-judge	Nonreact
statistic	-6.153572	-4.490731	2.360788	4.068694	-4.297537
df	14	14	14	14	14
p	0.000025	0.000508	0.033300	0.001150	0.000737
p.signif	****	***	*	**	***

As shown in Table 6.6, the results of the paired sample *t* tests show that the changes in all five facets were significant (p – value < .05). Effect sizes were then calculated.

Table 6.7   Effect sizes

.y.	Observe	Describe	Act.with.awareness	Non-judge	Nonreact
effsize	-1.588846	-1.159502	0.609553	1.050532	-1.109619
magnitude	large	large	moderate	large	large

Table 6.7 shows large effect sizes for all but one facet, Act.with.awareness, which scored moderate effect, indicating the practical significance of the changes resulting from the MRBi.

6.2.3.2   CD-RISC2 results

Participants' resilience levels were measured using the CD-RISC2 prior to and post-intervention. The CD-RISC2 is a two-question survey using a Likert scale of

0–4, where 0 is not true at all, and 4 is true nearly all the time (Appendix G).
The two CD-RISC2 questions were added to the online Qualtrics survey to facilitate
ease of response, so the results follow Q. 39 in the FFMQ, as Q. 40 and Q. 41.
A paired-samples statistical analysis was conducted to compare the pre- and
post-intervention CD-RISC2 scores. Descriptive statistics were used to summarise
the differences between these pre- and post-intervention levels. The results of the
statistical analysis show approximately symmetrical distribution between pre- and
post-intervention resilience scores (Figure 6.3).

Figure 6.3   Histogram comparing pre- and post-intervention responses
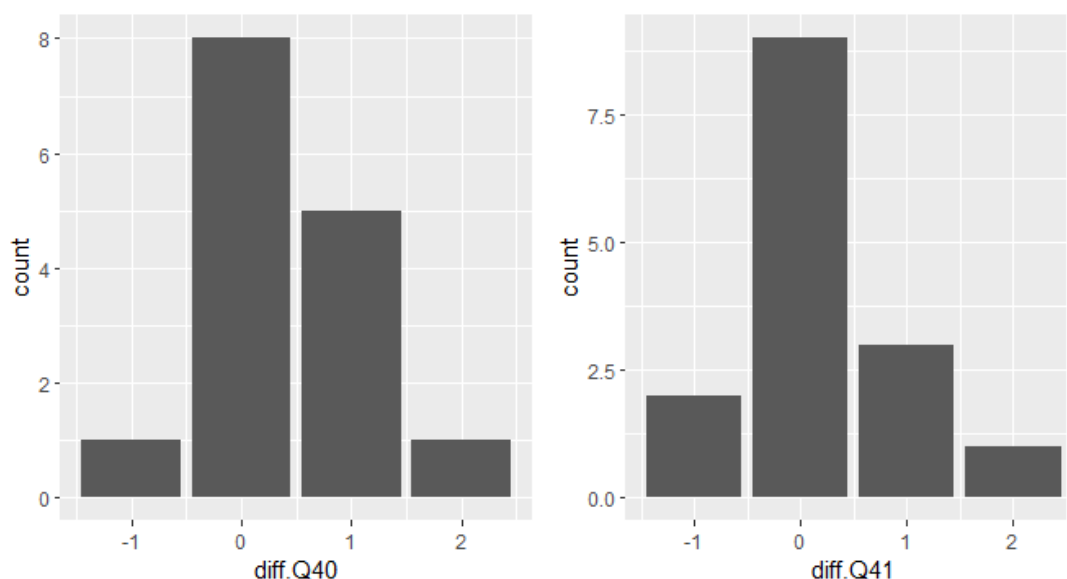
The descriptive statistics of the CD-RISC2 data (Table 6.8) show an increase in the post-
intervention mean resilience score.

Table 6.8   Descriptive statistics

	Group	N	Mean	SD	Min	Q1	Median	Q3	Max
Q. 1/40	Pre	15	4.00	0.76	3	3.5	4	4.5	5
	Post	15	4.40	0.63	3	4.0	4	5.0	5
Q. 2/41	Pre	15	4.07	0.59	3	4.0	4	4.0	5
	Post	15	4.27	0.46	4	4.0	4	4.5	5

The Wilcoxon Signed-Rank Test for paired sample was then used to determine if the increase in resilience was significant, although unlike the paired t-test, the Wilcoxon Signed-Rank Test does not assume the data follow a normal distribution. The boxplot results (Figure 6.4) show a similar increase in Q. 1/40 from 4.00 to 4.40 and in Q. 2/41 from 4.07 to 4.27.

Figure 6.4   Boxplots for Q.40 (Q1 CD-RISC2) and Q.41 (Q.2 CD-RISC2)
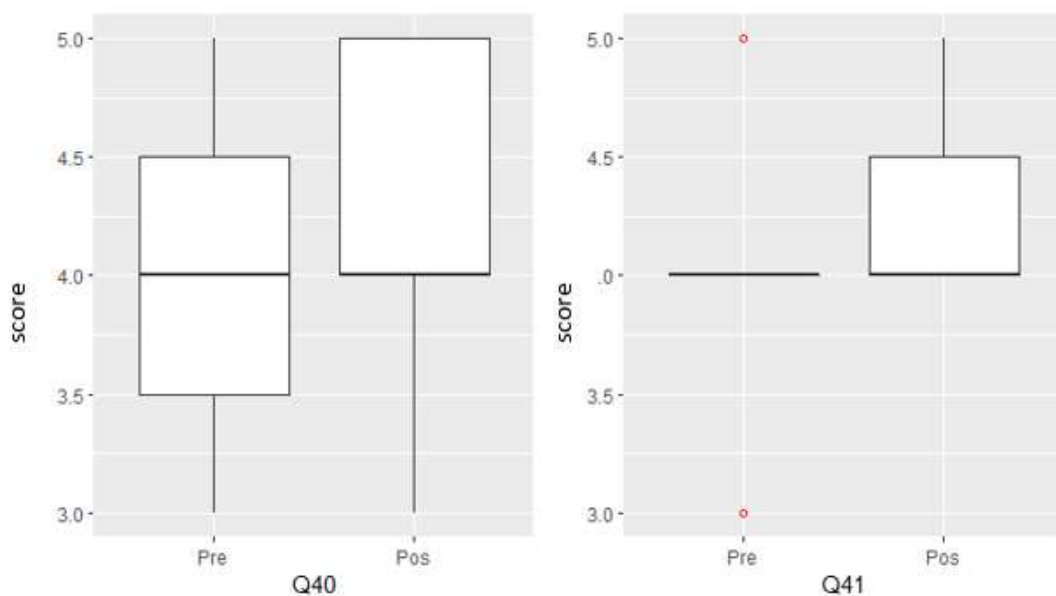
Wilcoxon Signed-Rank Tests were applied, the difference between the two groups, however, was not statistically significant ($p-value = .0708$ and $p-value = .3740$,

respectively). The slight increases resulting from statistical analysis, however, show that the intervention had a positive effect on participants' levels of personal resilience.

6.2.3.3   End of MRBi feedback

At the end of the 6-week MRBi, the Qualtrics link to an anonymous feedback survey comprising five open-ended questions (Table 6.8) was emailed to the 15 participants. The survey had a 100% response rate. The analysis of the survey data in this section as well as 6.2.3.4. were both analysed by identifying the most common and frequently occurring responses rather than applying a strict thematic analysis. Patterns and recurring themes were observed across participants' answers, and the most prevalent responses were highlighted to capture key insights. This approach ensured that the analysis reflected the dominant perspectives within the data while maintaining a clear and structured summary of participants' views.

Table 6.9   End of MRBi feedback survey

No	Survey Question
1	What did you enjoy in this program?
2	If you were to recommend this program to other academics, what would you tell them?
3	What effect (if any) has learning mindfulness and resilience had on a) you personally and b) your work practices?
4	How would you suggest we improve/modify this program for other academics?
5	Any other comments?

The results of the qualitative analysis of survey responses are presented in sequence.

1.   What was enjoyed?

The results show that the majority of participants enjoyed the regular weekly Zoom meetings to collectively learn and share experiences of the MMR practices. Several participants noted their enjoyment of the sense of community that developed

over the six weeks, and that in general, people supported one another throughout the intervention. There were further comments about enjoying the underpinning theory and research evidence that accompanied the MMR practices, and some participants praised the facilitation style that took place.

2. If you were to recommend the MRBi to other academics, what would you tell them?

There were many comments about participants being able to manage stress better, and several noted a sense of increased wellbeing. Four participants noted the investment in the intervention was worthwhile, particularly as the MMR practices did not take much time. One of these individuals commented, "An amazing program with a range of benefits but doesn't take a lot of time". Another noted, "It is low effort and a safe space, and has potential for high returns in overall wellbeing."

3. What effect (if any) has learning mindfulness and resilience a) had on you personally and b) on your work practices?

Multiple comments about increased feelings of calm as a result of MMR practising were noted, which helped participants manage stress and feelings of being overwhelmed. Many participants cited the breathing exercises as particularly helpful, with some saying that they used them regularly. Comments also mentioned better concentration and increased focus.

In terms of impact on work practices, comments suggested a pattern of feeling less reactive or provoked by work issues. One respondent said:

> I feel I am more attuned to my work environment, and that I can say no to more work, more easily than before.

Similarly, another respondent stated:

> I feel calmer when I'm overwhelmed, which provides clarity and better prioritisation. I've noticed I'm more compassionate, thoughtful and rational.

Multiple respondents described having increased clarity and more control over their thoughts and minds as a result of their practise. For example:

> The practice helped me control my thinking more and manage my work practices more effectively.

One comment specific mentioned the ease of embedding practices in their life:

> This taught me how easy to integrate mindfulness into everyday life, this was a revelation, as making enough time and space was a significant barrier for me.

Together, the comments suggest that the MMR practices were holistic, acceptable and feasible to fit in and around their academic work and domestic lives. Their experience in the MRBi prompted one respondent to say:

> I've realised I'm too busy to look after myself well, so I really need to reassess my hectic schedule.

This comment shows the insight and clarity that arose from having engaged in the MRBi, that enabled them to reflect on the busyness of their "hectic schedule."

4. How would you suggest we improve/modify this program for other academics?

Seven respondents said they were happy with the MRBi (v3) and that no major changes were needed. Other individual's suggestions for improvement included more focus on sleep issues:

> A lot of people in the group had sleep issues, could we have some dedicated sleep audio practices [in the next version] intended to help with sleep?

The use of WhatsApp was polarising. Four unique respondents said that they really liked the WhatsApp chat, because of the supportive community that developed, while a further individual wanted the WhatsApp chat to continue indefinitely to support and share MMR practices. Conversely, three unique respondents did not like

WhatsApp, two of which found it annoying, and the frequent posts "too distracting". The third respondent wanted to post in the chat, but felt like they did not want to intrude on others' privacy and "add to the noise that was already being generated."

5. Any other comments?

Thirteen respondents (93%) made positive comments about the MRBi, of which almost half expressed their appreciation for the intervention and the benefits they received. Other comments show that the intervention was a valuable opportunity, as follows (note that their specific health condition has been de-identified with "x"):

> Thank you for teaching me mindfulness. It could not have come at a better time. I got sick with X due to overworking, and the course started when I just recovered. I was by then aware of my work/life balance not being healthy, and mindfulness has made me aware of what and how I need to change, as well as provided me with tools.

The comment above shows that the respondent appears to have gained deep insight into the consequences of their work behaviours as a result of participation in the MRBi. Two respondents expressed a wish for the intervention to continue in the longer term, because of the support and connection with others. Another stated:

> Thanks so much, this has been a life changing moment, and I want to continue my mindfulness practice!

One respondent talked about the impact of the MRBi on their life:

> I loved the course. It was great to connect up with other staff and to hear about their experiences. To know you weren't alone and to hear how others manage. It was really great to be part of it, and very professionally and safely run. Thanks.

Overall, the comments show a predominance of positive feedback, although one negative comment related to the wording of questions in the FFMQ survey, which they felt were confusing and difficult to interpret.

6.2.3.4 Two-month follow-up results

Two months after completing the MRBi, participants were emailed a link to a follow-up a survey with six open-ended questions (Table 6.10) that aimed to assess the effects, if any, of participating in the intervention. The questions covered topics like the impact of practising MMR, its current effects, if any, and suggestions for modifying the course. All 15 participants completed the survey.

Table 6.10   Two-month follow-up survey questions

No.	Question
1	Could you please outline below, about a time in the past two weeks that the mindfulness/resilience practices have helped you with your work as an academic?
2	Could you please describe below, what were some of the challenges you faced in undertaking the MRBi program?
3	In what ways are you still practicing mindfulness and resilience and how are they assisting you?
4	In what ways [if any] have you noticed a change in the way you face difficulty as a result of partaking in the mindfulness resilience program?
5	Can you outline what impact practicing mindfulness and resilience techniques have had on your: a) Work life as an academic? b) Life in general? c) Your overall wellbeing? If none, please state N/A to each relevant part of the question.
6	If there were things you'd like to change about the 6-week program, what would you suggest?

The results of the analysis of participant responses are reported in sequence, as follows.

1. **How the MRBi helped participants in the longer-term**

Analysis identified a pattern in the comments that suggested the MMR respondents learned in the MRBi helped them manage work-related stress better. Several respondents mentioned their use of the breathing practices throughout their work and home lives to stop intrusive thoughts, help reset their minds or assist with sleep difficulties. Several respondents said the MRBi helped them gain skills to improve clarity, with one saying that as a result, he felt more productive.

2. **Challenges faced during the MRBi**

The comments show that finding the time to practise MMR was a major issue. Many comments pointed to the difficulties in forming a habit during the day to

practise and to prioritise practise over competing tasks and duties. The themes of time-poverty and the associated lack of adequate time to practice therefore align with those in the expert phase of the study (Chapter 4).

3. **Ongoing MMR practises**

Of the 14 respondents, 12 commented that they had initiated a fairly regular MMR practise that continued two months after completing the MRBi. Some were continuing to use the 10-minute formal MP3s to guide their practise. Others preferred the 2-minute BSB and breathing practice throughout the day, to break up work activities or to reset their minds during busy periods. The two respondents who reported that they did not regularly practice cited time-poverty and work commitments as the reason.

4. **Resilience**

All respondents felt the MRBi had a positive impact. Several felt more in control and more emotionally aware. Respondents used words like "improved clarity" and "increased sense of calmness" in their responses. Many commented on being able to take a step back from their emotions, which helped them be less reactive to stressful stimuli at work. One respondent said that they had more equanimity and gratitude and that this had greatly improved their family relationships.

5. Impact on academic work

Over half of respondents reported being able to better manage work-related stress after completing the MRBi. Comments frequently cited an increased ability to manage significant, "insane", workloads. Terms such as "better clarity", "less stress" and "better prioritisation skills" were used to describe the impact of MMR practices on their work. One respondent cited "clearer focus" and "better sleep", which improved work performance, and another mentioned "attention" and "better concentration". Overall, the pattern showed positive benefits related to academic work.

6. Suggested changes

Respondents' enjoyment of the MRBi emerged as a strong pattern. For example, many respondents thought it was a great initiative, and one thought it was "well-considered", "applicable" and "effective". In terms of changes, respondents suggested the MMR sessions should continue in the long-term. Overall, the feedback suggests that the MRBi was contextualised to effectively meet the needs of busy academics.

6.2.3.5   Section summary

The results of statistical analysis comparing pre- and post-intervention survey data show positive outcomes for participants that represent statistically significant changes in mindfulness. Slight increases in personal resilience, although not statistically significant, were also recorded. The feedback survey results show predominantly positive feedback about the MRBi, although the use of WhatsApp was somewhat divisive. The results of the 2-month follow-up survey show that, most participants learned skills that helped them manage work-related stress better; maintained a fairly regular MMR practice guided by either formal or informal MP3 artefacts to break up work activities or to reset their minds; and reported improved clarity and increased calmness that helped them manage "insane" workloads. For some participants however, time-poverty and the associated lack of adequate time inhibited regular MMR practice. Suggested modifications focused on extending the MRBi and/or WhatsApp community in the longer-term.

6.3   Discussion

Three themes that emerged from Phase 3 PG data analysis are discussed in dialogue with the literature in this chapter. The themes are as follows: tailoring approaches used by MRBi participants (Section 6.3.1); improved efficacy (Section 6.3.2); and metaphors (Section 6.3.3). Together, the discussion supports the finding that, as operationalised in the Phase 3 PG, the MRBi (v3) was shown to be effectively contextualised for busy academics.

6.3.1   Tailoring approaches

The personalisation or tailoring of mindfulness activities to align with participants' particular interests and strengths warrants further research, according to Hatfield et al. (2023). Tailoring has been defined as the process of customising information based on each individual's characteristics (Bull et al., 1999; Ryan & Lauver, 2002). The process of tailoring is usually undertaken by the intervention developer during the design phase. However, in my study, tailoring is carried out by the pilot participants of the MRBi (see Figure 1.1). While tailoring MMR practices is advocated because of the increased number of health and wellbeing mindfulness-based interventions (Arpaia et al., 2022; Bodenlos et al., 2015; Spears et al., 2017) incorporating this approach, little is known about how academics tailor MMR practices into their busy working and home lives.

Research has suggested that more consistently positive effects are achieved when mindfulness programs teach participants how to tailor MM practices with respect to their individual health needs and behaviours (Horan & Taylor, 2018). In my study, MRBi pilot participants were introduced to and encouraged to explore ways to tailor and holistically embed MMR practices throughout their daily lives, not just while at work. My findings show that participants successfully incorporated short MMR practises into periods of stressful work, between meetings, during tea-breaks, while engaged in domestic tasks and outdoor activities in natural environments, and at night with their families, because of sleep issues. These findings bring a new perspective to

understanding how time-poor professionals, specifically academics, tailor MMR practices into their busy lives, while acknowledging the inaptness of a one-size-fits-all approach (Osin & Turilina, 2022). As a result of holistically tailoring MMR practises into their lives, Phase 3 MRBi participants experienced both increased levels of mindfulness and enhanced personal resilience.

6.3.2 Improved efficacy

Tailoring in the MRBi involved the pilot participants engaging in self-directed adaptations of MMR practices, which, as Phase 3 findings show, improved its efficacy. Efficacy is improved as a result of the beneficial effect on participants that taking their preferences into account within interventions has (Bodenlos et al., 2015; Carlson et al., 2014; Pollard et al., 2017). This point is supported by studies that show that, as the individual as the uncontrolled variable, the process of personalising practices that considers how individuals actually work, live and practice influences their overall effectiveness (Krägeloh, 2016). Studies also show that encouraging practitioners to personalise the environment in which the practice is performed as well as the practice itself, can improve both attention during and adherence to their practice (Arpaia et al., 2022).

Participants in my study enjoyed tailoring and holistically embedding their daily practices into their busy lives by adapting strategies and mixing concepts, guided by sound principles and decision-making that enhanced effectiveness (Kreuter & Skinner, 2000). This point is supported by the suggestion that the social context of an intervention and its delivery can enhance its impact (Weisbaum, 2022). In my study, individuals chose, adapted and embedded the MMR practices introduced during Zoom meetings, fitting them into spaces that were in turn, created by their MMR practice. This helped balance time poverty constraints and the need for restoration. The flexibility of the intentional contextualisation process that enabled and encouraged participants to tailor their practices also piqued their curiosity, captured their attention, spoke to their scholarly expectations, and addressed their individual

mindfulness and resilience needs in holistic ways (Arpaia et al., 2022). Tailoring, therefore, is crucial to enhance participant engagement and intervention efficacy (Poland et al., 2009; Spears et al., 2017). Participants' maintenance of longer-term MMR practices, furthermore and as my findings show, leads to the likelihood that they will continue to practice using techniques that are tailored to their individual preferences and specific needs (Hyland, 2014).

The outcomes of my study support the argument for contextualising intervention designs so that they are feasible, acceptable and practical for particular audiences. Its iterative research design enabled my contextualisation of the MRBi to occur across the study and tailoring to be feasible in Phase 3. Its online delivery addressed accessibility by enabling academics to engage wherever they were, while the MP3 artefacts enabled tailoring of practices so they could be performed anywhere, at any time, for any number of times, as needed. The delivery of and research into online interventions that can be tailored will likely continue, as a rich area of interest that has the potential to offer any number of effective, convenient, flexible, accessible and practical variations (Weisbaum, 2022). To achieve this, both the intervention structure and the mindfulness trainer must be adaptive to participants' often nuanced social, contextual and organisational needs (Roche et al., 2020). Understanding these nuanced needs requires the consideration of often volatile and complex environments (Roche et al., 2020), such as that of academia.

6.3.3 Metaphors

This section first discusses the origins of metaphors and their application in mindfulness and Buddhism (Section 6.3.3.1). This is followed by a dialogue between my Phase 3 PG findings and the literature that shows how the metaphors of squirrels and monkeys (Section 6.3.3.2), snow globes (Section 6.3.3.3), and anchors (Section 6.3.3.4) resonated with participants.

6.3.3.1 Metaphors in mindfulness and Buddhism

The Buddhist tradition of mindfulness uses metaphors to reveal the practice of MM to its practitioners (Brandsma, 2017). Metaphors are a fundamental and well-established tool for mindfulness teachers, in that they communicate concepts that may otherwise require a thousand words of explanation (Brandsma, 2017). Teaching and practice were facilitated in the MRBi by embedding traditional wisdom in the form of metaphors. Metaphors were used to convey the underlying concepts in mindfulness practice, in relatively simple terms, to a novice audience in Phase 3 of the study.

Various metaphors can be utilised to bring mindfulness into one's everyday existence (Anderson et al., 2019) and to describe the natural flow of experience when practising mindfulness (Brandsma, 2017). For example, metaphors such as "a mind like a river", "working the mindfulness muscles", "the whirlwind of constant thoughts", are frequently used. It is important, however, to limit the use of metaphors to ensure they are clear, meaningful, and memorable and do not distract (Brandsma, 2017). The clearer the metaphor, the more effective it will be for practitioners. The MRBi used three metaphors: squirrels and monkeys, snow globes, and anchors.

6.3.3.2 Monkey mind

The challenges to MM are often referred to as the so-called monkey mind (Wisner, 2013), a metaphor that originated in traditional Buddhist teachings and wisdom (Kopel et al., 2019). The monkey mind jumps from one thought to another, like a monkey swinging from one branch to another (Struhl, 2022). Metaphors are a well-established and basic tool for a mindfulness teacher, in that they communicate something that otherwise employs a thousand words (Brandsma, 2017). The monkey mind metaphor was introduced to Phase 3 MRBi participants in the week 1 Zoom meeting. The metaphor was widely adopted to the point that it was extended to "feeding the squirrels", shortened to squirrels. My findings show that the noticing of monkeys was common, in reference to the monkey mind metaphor, yet the noticing of squirrels became more common as the MRBi progressed. The power of these metaphors is in their meaning, however, rather than the form itself. The meaning here is that while intrusive thoughts are persistent, they can be tamed with constant practice and attention through mindfulness. The

animal metaphor resonated deeply with academics, particularly as a well-known contemplative neuroscientist study has suggested that the average American adult will have a wandering mind for almost half of their waking life; in other words, not paying attention to what they are doing (Powietrzynska et al., 2015). It is possible, however, to bring calmness to the monkey mind through mindfulness practice (Eliuk & Chorney, 2017), while mindfulness can also greatly decrease the monkey mind (Struhl, 2022), and in the case of the MRBi, help to tame the squirrels.

6.3.3.3 Snow globes

Snow globes are a traditional metaphor and visual representation in mindfulness practice that depict the whirlwind of constant thought during mindfulness (Marlowe, 2017) and the mindfulness meditation process (Harris, 2017), which, when shaken, like the snow in the globe, interferes with clear thinking (Urquhart, 2021). Both as a metaphor and an artefact, the snow globe was introduced in the MRBi during week 1 and resonated deeply with the group of stressed academics. The metaphor assisted participants in noticing, like the snow in the globe when it is shaken, how thoughts come up during mindfulness meditation, and, like the snow settles while still, the practitioner continually returns to focus on the present moment. The metaphor shows that with time and focused attention, wandering thoughts calm and settle; as the globe becomes clear, so does the mind (Anderson et al., 2019). My findings show a clear pattern in participants' references to the snow globe, to the point where several bought and posted pictures of their own snow globe to the WhatsApp chat.

6.3.3.4 Anchors

Anchors facilitate present moment awareness by increasing attention and focus when the mind has wandered so one can orient oneself back in the present moment (Meggs & Chen, 2021). Anchors as metaphors are commonly used within contemplative practices to stabilise and maintain attention (Anderson & Farb, 2018; Treleaven, 2018), which have been shown to improve both engagement and adherence to practise (Arpaia et al., 2022). Just as an anchor prevents a boat from slipping away, a meditation anchor draws the participant's mind back from ruminating

or getting lost in thought (de Allicon, 2020; Treleaven, 2018). My findings in this chapter extend understandings about how anchors can be tailored in MMR practice. For example, MRBi Phase 3 participants learned to anchor their attention by focusing on the breath in a variety of ways, listening to external sounds, body scanning, using the five senses, and flexibly combining anchors to facilitate present moment awareness. By offering MRBi participants flexibility in working with anchors and inviting them to tailor their own, they were able to more easily sit in mindfulness.

Scholars have recommended meditation teachers share various anchors with their students to enable them to practice before selecting one for themselves (Anderson & Farb, 2018). My study went beyond teaching anchors to inviting participants to tailor their own involving mixing them together as well as discovering new anchors for themselves. Personalising anchors that suit practitioners helps to improve adherence and engagement with mindfulness practice (Anderson & Farb, 2018; Arpaia et al., 2022). My strategy of inviting practitioners to choose their own anchor is in line with best practice in T.I.M. (Treleaven, 2018), which engenders a sense of safety. The findings from my pilot study show the anchors introduced to the academics worked well, offering choice and opportunities to tailor anchors for themselves.

6.4   Implications of Phase 3 findings

Phase 3 findings point to two sets of implications for the future development of the MRBi. These are: understanding which contextualisation strategies were effective in the MRBi (v3) and should remain; and what contextualisation is still needed? Each set of implications is addressed in turn.

6.4.1 Successful contextualisations

Participant feedback in Phase 3 of the study indicated that the MRBi (v3) was contextualised well in terms of design, pedagogy, pacing, duration and delivery.

Specifically, the feedback suggested that the: short duration of the MMR practices made them feasible for daily practice; formal and informal MMR practices could be embedded in and around work and were effective; blending of research evidence and traditional wisdom was well received; depth at speed was successfully practiced and showed efficacy; online delivery mode was well-received and offered support and a sense of community; and that participants successfully tailored MMR practices and holistically incorporated them in and around their work and everyday lives, without much additional work.

6.4.2 What is needed?

Although beyond the scope of my study, the findings resulting from the post-intervention survey and the 2-month follow-up feedback survey suggests improvements to consider in the next iteration of the MRBi contextualisation. Participants suggested: introducing dedicated MMR practices to address sleep disruption and assist with sleep; reviewing the use of the WhatsApp chat function to address concerns about privacy and distractions; and scaling the MRBi to evaluate the potential for larger groups and other professionals.

6.5 Chapter summary and conclusion

The chapter identified and discussed the findings from the analysis of Phase 3 PG feedback and evaluation data. Two themes emerged: tailoring the MMR practices and mindfulness metaphors for busy academics. The themes address Research Q 1, which focused on how an online MRBi could be contextualised to suit academics and their work; and Research Q 2, which sought to identify the effects, if any, of the intervention on participants' mindfulness and resilience. In the first instance, Phase 3 findings identified the ways in which the MRBi was successfully contextualised for busy academics. Specifically, the contextualisation I undertook enabled participants to select and tailor mindfulness activities, concepts and, particularly, metaphors that

aligned with their interests and strengths. This approach allowed the MMR practices to be applied in and around work, and more holistically, in the home setting, without creating more additional work for busy academics. As a result of tailoring, the MMR practices were effective in restoring calm to participants' lives both in and beyond the work setting, and that the practices were sufficiently feasible and acceptable to be maintained for two months after the intervention ended. The next and final chapter responds to the Research Questions that framed the study, articulate the significance of the research and its contribution to knowledge, and identifies study limitations and the implications for future research.

Chapter 7. Conclusions

7.1 Introduction

The findings in my study have demonstrated the positive impacts of mindfulness-based-resilience-enhancement interventions (MRBis) on one group of busy academics. The thesis contributes to the literature on mindfulness meditation and resilience practices (MMR) by offering valuable insights into contextualising such interventions for an academic population. This study was sparked by my interest and experience in meditation and contemplative practice over many years, coupled with an extensive career in adult education in higher education institutions across the U.K., Asia, Central America and Australia. During my most recent role as a casual academic at University of Technology, Sydney (UTS), I noticed the significant political and organisational changes in Australian universities resulting from neoliberal policies. These changes included large-scale job cuts, increased casualisation of the academic workforce, funding restrictions, new learning technologies and platforms, increased administrative and curriculum development tasks required of academics, irrespective of their employment status. My experience was demanding and stressful, involving long hours and an intensive workload that required perseverance and resilience for me to achieve. This experience led me to research meditation and contemplative practices for university academics.

There is a paucity of studies investigating the impact of mindfulness-based-resilience-enhancement interventions on academics, as outlined in Chapter 2. Coupled with my own experiences, this deficit inspired me to design and test a customised Mindfulness Resilience-Based Intervention (MRBi) that was contextualised for university academics. The aim was to investigate the effects, if any, that such an intervention may have on its participants. To recap from Chapter 1, the term contextualise means to adapt something to increase relevance to context. The importance of adaptation and context for particular audiences has been emphasised in the scholarly literature on

intervention contextualisation (Craig et al., 2008; Fraser & Galinsky, 2010). This emphasis informed my development, contextualisation and pilot testing of a novel MRBi. Deep understandings of how to contextualise a MRBi for busy academics has emerged from my three-phased approach to designing and evaluating its effectiveness, acceptability and feasibility in collaboration with three cohorts of academics. The use of a novel tandem methodological approach that combines Action Research (AR) and a Behaviour Change Framework (BCF) for the iterative development of MRBis informed the mixed AR reflective cycle methodology, as outlined in Chapter 3. This innovative approach helped in the planning, prototyping and pilot-testing of the MRBi contextualised for academics. The aim was to work with a number of academics with a range of experience and knowledge of MMR practices to elicit expertise and generate insights into how the intervention could be contextualised for time-poor, but otherwise mentally-well academics. The methodological approach enabled me to gather, critique and refine evidence-based strategies with all research participants, which I then integrated into the MRBi.

This chapter presents an overview of my research study and brings the findings together. This introduction recaps the arguments made in each of the preceding chapters (Section 7.1), followed by a discussion of the study findings in response to the Research Questions (Section 7.2). Next, I discuss the significance of my study and its contribution to knowledge (Section 7.3), after which I identify the study limitations (Section 7.4). A professional reflection (Section 7.5) precedes the final conclusions of the thesis (Section 7.6).

7.1.1 Recap of arguments

The challenges facing academics who work in universities were outlined in Chapter 1. The research evidence presented shows that academics experience increased stress, excessive pressure and demanding workloads within universities in Australia and internationally. Whilst mindfulness interventions have been successfully trialled with non-university educators, evidence suggests that time-poverty was a potential barrier

for academics, particularly those new to mindfulness practices, to engaging in intensive mindfulness interventions such as the Mindfulness-Based Stress Reduction (MBSR). My study, therefore, aimed to address time-poverty by developing a custom-designed MRBi that engaged the input of academics and researchers across three iterative research phases. The purpose was for me to identify ways for me to contextualise the MRBi to ameliorate the barriers to academics undertaking MMR practices.

The literature review in Chapter 2 highlighted the contemporary conditions in which academics work that generate pressure, stress and anxiety and negatively impact wellbeing. While radical systemic change is needed to disrupt these conditions, yet unlikely to occur anytime soon, the literature review demonstrated that academic work pressures can be softened, to some extent, through MMR practices. Chapter 2 also identified the small number of studies involving academics' participation in MMR interventions to date, and discussed the issues encountered in the studies, specifically retention and attrition, time-related challenges to participation and the lack of contextualisation to accommodate them. I then reviewed the literature on contextualising interventions for specialised populations and trauma-informed mindfulness practices, which pointed to the need for embedding flexibility and safety into MMR practices to reduce attrition, particularly in novice meditators.

The conceptual framework and methodological approach used in the study were presented in Chapter 3. The conceptualisation of mindfulness and resilience as closely interrelated underpinned my development of the MRBi that sought to enhance both mindfulness and resilience. I then outlined trait- and state-mindfulness as requiring mind-body practice that involves attention to the present moment, without judgment and with equanimity. Next, I described the contested and complex notion of resilience, and ways to enhance resilience through mindfulness practices (Rogers, 2013; Tonkin et al., 2018). I highlighted the ways that the MRBi sought to develop and improve resilience through mindfulness practices combined with resilience reflections. Together, these practices enhance personal resilience by enabling participants to observe their thoughts, calm reactivity and positively reflect on their experiences in a process that can lead to the consideration of new perspectives, enhanced positive

affect and ways of being, that strengthen resolve and mental outlook. I drew attention to the fact that enhanced resilience facilitates improved adaption to unsettling change, and the capacity to withstand and move forward after adversity. Methodologically, my study employed a cyclical AR approach in tandem with a BCF over three research phases with different groups of academics: expert group; working group (WG), and pilot group (PG). Each phase involved an AR reflective cycle of observing, reflecting, acting, evaluating and modifying (McNiff & Whitehead, 2011) the MRBi to generate data and address my Research Questions.

The findings from Phase 1 expert group interviews were presented in Chapter 4. The experts comprised academics and researchers from diverse backgrounds and with expertise in mindfulness, resilience enhancement and professional wellbeing. The experts included two psychologists, a mindfulness scholar with a general practitioner background, two academic counsellors, and resilience and mindfulness researchers. Four key themes emerged from the analysis of semi-structured interview data: time poverty; space and boundaries in academic work; the importance of rigour; and the concept of depth at speed. The findings identified the need for me to incorporate evidence in the form of traditional Buddhist principles and scholarly research and align the intervention to academic work conditions to engage and retain participants. The outcome of Phase 1 was the revision of the MRBi from version 1 to 2.

Chapter 5 built on Phase 1 findings to contextualise the MRBi for the Phase 2 Working Group (WG). The WG of six UTS academics utilised a high-level iteration of the prototyped MRBi (v2) and a number of prototyped MMR artefacts to assist participants to more easily engage in both the MRBi and my study. Two key themes emerged from the analysis of WG discussion data, involving the need for: reducing the volume of scientific evidence in the MMR artefacts to create space for silence and reflection; and designing a holistic MRBi that moved MMR practice beyond the workplace to academics' entire lives without additional burden. These findings contradicted those in Phase 1, to the extent that they pointed to the need to incorporate a suitable volume of evidence into the MRBi for Phase 3 participants.

The thematic and statistical analysis of data collected in Phase 3 PG Zoom sessions, WhatsApp chat posts and pre- and post-intervention surveys were presented in Chapter 6. The chapter introduced tailoring as a concept and trauma-informed strategy within contextualisation. Tailoring afforded flexibility for the MRBi participants to safely select, combine and adapt MMR practices to suit their particular circumstances and preferences. Two themes emerged from the qualitative data analysis: tailoring MMR practices in and around academic work life and holistically into home life; and tailoring metaphors to support MMR practice. Statistical analysis of the quantitative survey data showed that the MRBi was feasible and acceptable to busy academics and resulted in increased levels of mindfulness and resilience. My analysis of the feedback surveys showed that participants continued their tailored MMR practice two months beyond the end of the MRBi, with some requesting it continue indefinitely. The results show that the MRBi had efficacy, resonated with the time-poor participants and was appropriately contextualised to suit the requirements of busy academics.

The next section brings together the findings emerging from the research phases to address the two Research Questions proposed in Chapter 1.

7.2   Responding to the Research Questions

Two Research Questions guided my study:

> Q 1.   In what ways can a custom-designed online MRBi be contextualised to suit academics and their work?

> Q 2.   What are the effects (if any) of the intervention on the academics' mindfulness and resilience?

The Research Questions were developed as a result of reviewing mindfulness-only (*non-resilience-focused*), and mindfulness-based-resilience-enhancement interventions and practices. I started by examining the Mindfulness-Based Stress

Reduction (MBSR) intervention (Kabat-Zinn, 1996), which is perhaps the most successful and researched mindfulness intervention of its type, and then identified nine previous studies with academics in MMR interventions in Chapter 2. The paucity of studies and the lack of contextualisation in MMR interventions for academics support the rationale for my study.

7.2.1 Addressing Research Question 1

The key finding of my study that addresses Research Q. 1 is that there are two important ways to contextualise MMR interventions for busy academics. These are: to develop a niche design to address the barrier of time-poverty; and to offer tailoring that enables participants to flexibly, safely and holistically adapt MMR practices in and around work and into their home lives without much additional work.

7.2.1.1 Niche design

Developing a niche intervention with design features that specifically address the key challenges faced by academics was crucial for me to successfully contextualise the MRBi in response to Research Q. 1. The design needed to address the issues academics frequently encountered as barriers to maintaining and engaging in regular MMR practice, namely: time poverty, lack of availability for lengthy interventions, and challenges experienced by novice meditators. My aim was to develop a holistic, niche design that was acceptable and feasible for busy academics, whilst maintaining rigour by incorporating traditional principles and research evidence about the efficacy of mindfulness. To address these issues, I crafted a niche intervention specifically for busy academics. Here, niche refers to the designed-in features of the intervention, such as content, structure, progression, and facilitator messaging, that addressed the barriers participants faced and enabled them to tailor their MMR practices. The key niche features are as follows: a holistic design that could be adapted in, around and beyond work; a more practical intervention curriculum that was delivered online and shorter in duration; and briefer practices that incorporated depth at speed to assist novice meditators experience present moment awareness.

By holistic design, I mean that the MRBi facilitated the insertion of custom-designed MMR practices into all aspects of an academic's life. Its designed-in features encouraged participants to holistically tailor their practices in and around work, and beyond work throughout their daily lives. For example, participants inserted MMR practices into work and domestic tasks, in their leisure time and while outdoors in natural settings., thus causing no significant additional burden of work as a consequence. The holistic approach resonated with participants in both the WG and PG phases of the study and beyond the MRBi itself as participants extended MMR practices to home and by engaging family members.

The MRBi and its MMR practices were made practical and feasible by shortening their duration to address the time barriers faced by academics. The intervention was reduced from eight to six weeks in duration, and none of the MMR practices extended beyond ten minutes. My concept of depth at speed underpinned the practices, which highlighted the relationship between pace and depth of mindfulness. Depth at speed was achieved by quickly piquing participants' curiosity so they could more readily experience deep, present moment awareness. The concept of depth at speed deepens understandings of contextualising mindfulness practices that maintain the rigour of traditional practices underpinned by research evidence, while facilitating ease of practice for both experienced and novice meditators. Depth at speed emerged from my literature review in Chapter 2, which showed that space and boundaries created buffers between academics and their overwhelming workloads, and that these buffers, in turn, enabled increased restoration. The principle of *less is more* guided my insertion of buffers that set boundaries around the degree to which the MMR artefacts were narrated and reduced the volume of traditional Buddhist principles and research evidence. The artefacts were further contextualised in response to participants' feedback, by incorporating deep breathing and natural Australian sounds that imbued the customised MMR practices with calmness. In addition, converting the hardcopy handbook and reflection journal into a more convenient PDF version that could be completed online was another contextualisation undertaken. Together, these modifications successfully made space for silence and reflection.

7.2.1.2 Tailoring

Contextualisation of the MRBi in Phase 3 engaged participants in tailoring the MMR practices to suit their busy lives. Tailoring was achieved in three ways, by 1) altering the practice durations, 2) altering the location, timing and ways in which the practice was performed, and 3) finding new and unique ways of being mindful and/or mixing anchors during practice and sharing these insights with their MRBi peers . First, participants took advantage of breaks in their working day for shortened MMR practices, such as making tea or prior to and in between meetings, and before going to sleep. Second, participants holistically tailored MMR practices to be doable in and around work, while engaged in domestic tasks at home, and during outdoor leisure activities like walking. Third, participants selected, modified, discovered new ways to do the intervention's custom-designed MMR practices. They did this through mixing the trauma-informed, traditional and research-based practices of the MRBi, along with anchors and metaphors of their choosing, and then shared their insights with the WhatsApp group, as well as family members.

Overall, much of the success of the contextualisation could be attributed to encouraging participants to discover new ways of being mindful in their daily lives. This was guided by the concepts, knowledge, and practical artefacts introduced in the MRBi, which enabled them to tailor their practices to align with their interests and strengths without adding significant burden.

7.2.2 Addressing Research Question 2

To address Research Q. 2, I evaluated the effects of the MRBi on participants' mindfulness and resilience. The key finding that emerged from the analysis of three datasets, including quantitative survey and qualitative feedback data, show that overall, participation in the intervention had a positive effect on pilot group (PG) members.

The comparison of participants' pre- and post- intervention trait-mindfulness levels showed there was a statistically significant increase in levels of mindfulness. To support this finding, I drew on Chowdhury's (2019) description of the five facets of mindfulness (Baer et al., 2006) that underpin the FFMQ survey questions (Appendix F). Facet 1 is mindfully observe feelings and perceptions of the present moment; facet 2 is describe present moment experiences; facet 3 is act with awareness; facet 4 is non-judgment; and facet 5 is non-reactivity.

7.2.2.1   Mindfulness effects

The results of the statistical analysis in Table 6.5 demonstrate MRBi participants' increased capacity for all five of the facets of mindfulness, to varying degrees. Higher scores in the facets "observe", "describe", and "non-reactivity" and lower scores in the facets "act with awareness actions" and "non-judgment" were recorded post-intervention. All facets were reverse-scored, so the lower scores show overall positive outcomes after completing the MRBi. Specifically, the majority of participants increased their ability to observe; enhanced their capacity for describing present moment experiences; significantly increased their levels of self-awareness and letting go of autopilot; and deepened their self-acceptance, levels of empathy and nonjudgmental experiences. A significant number of participants increased their capacity for non-reactivity, which means increased detachment from negative thought and feelings and increased non-reactivity to negativity. Increased non-reactivity, in particular, improves mental balance and enhanced emotional resilience (McManus et al., 2012). The findings emphatically support the benefits of their participation in the MRBi on these academics' increased levels of mindfulness and sense of wellbeing.

7.2.2.2   Resilience effects

The results of statistically analysing the CD-RISC2 survey data (Table 6.8) show an increase in participants' post-intervention mean personal resilience score, although the increase is not statistically significant. Analysis of the feedback emerging from the immediate post-intervention and 2-month follow-up surveys show large-scale positive effects and beneficial impacts on resilience as a result of participation in the MRBi.

What is significant here is that the effects on participants were felt in the longer-term, which signals improvements in trait-resilience, with most academics continuing their MMR practice in some form or another. Participants reported that they were handling stress better and feeling calmer during times of being overwhelmed, which resulted in better concentration and focus.

In relation to the effect on work practices, participants reported increased levels of mental clarity and stated that they felt less reactive and less provoked by academic work, which was attributed to feelings of greater calmness and improved capacity to prioritise time and workloads. These findings highlight the benefits of participation in this custom-designed MRBi design, which sustained long-term positive traits in participants, such as enhanced mindfulness and resilience, which, in turn, have had a positive influence on their academic work.

7.3   Contribution to knowledge

The findings from my study represent two key contributions to knowledge: the successful development of a niche, holistic and custom-designed MRBi contextualised for a specific professional cohort; and a unique, effective design and development process. These contributions are discussed in turn.

7.3.1 Mindfulness-based-resilience-enhancement interventions

The original contribution of my study is the creation of a custom-designed MRBi for busy academics. The intervention design approach was informed by establishing the stressful working conditions for university academics and their impact on wellbeing, reviewing existing knowledge about similar interventions, and identifying barriers to participation in such interventions experienced by academics. The MRBi in my study was designed to counter two such barriers: challenges facing novice meditators, and the issue of time-poverty. Each of these barriers will be discussed in turn, followed by a description of the outcomes of my contextualising the MRBi in order to make the practice of MMR acceptable, feasible and effective for academics.

7.3.2.1   Novice meditators

The unique approach to contextualising the MRBi has contributed to understandings about how to design an MMR intervention that mitigates, to some extent, the challenges experienced by novice meditators. Whilst there are many benefits to be gained from MM, there are also many barriers to undertaking a regular practice (Hunt et al., 2020). Novice meditators in particular, may experience mindfulness practice as overly challenging or boring (Osin & Turilina, 2022), difficult to accomplish (Spears et al., 2017), or require too much effort because of the emotional and cognitive burden that sometimes occurs (Creswell, 2017; Russ et al., 2017). Novice meditators also tend to experience higher rates of anxiety and adverse effects from participating in mindfulness interventions (Aizik-Reebs et al., 2021), particularly younger people,

individuals with more negative thinking, and those with more ruminative thinking patterns (Banerjee et al., 2018). These experiences often mean novice meditators drop out of interventions in the early stages (Osin & Turilina, 2022; Russ et al., 2017).

Of the nine studies investigating academics' participation in MMR interventions with academics identified in Table 2.1, none specifically addressed the issues faced by novice meditator issues, such as the need to commit to lengthy interventions, which contributed to high rates of attrition, such as 33% (Sood et al., 2014), 29% (Aggarwal et al., 2017) and 25% (Moffatt-Bruce et al., 2019). These attrition rates also reflect other mindfulness only (non-resilience based) interventions involving academic novice meditators, where attrition rates were as high as 40% to 50% (Ziaian et al., 2015), which was attributed to the intervention duration and uninteresting content. Further examples of where attrition was a major factor was an 8-week study with novice meditating academics (Becker et al., 2020) which saw significant drop out rates which affected the amount of data collected post-intervention and was cited as a limiting factor in the research.

Given that the 15 participants in Phase 3 PG were novice meditators, almost all (88%) completed the MRBi, and most continued to practice two months after the intervention finished, my custom-designed intervention demonstrates efficacy in helping novice meditators maintain MMR practice in their daily lives. This was achieved by contextualising the MRBi through online delivery, short duration, balancing supporting evidence and making space for silence and reflection, and enabling participants to tailor MMR practices to holistically suit their busy lives without significant extra burden.

A crucial strategy to mitigate the barriers to participation by novice meditators and improve ease of practice is the concept of depth at speed, which is a novel idea that aimed to quickly introduce meditators to feeling a deep sense of the present moment. Depth at speed was interwoven into shortened MMR practices, such as deep breathing (Hegney et al., 2021; Koncz et al., 2016), to soothe the nervous system. To pique participants' curiosity, the idea was supported with messaging referring to research evidence and traditional Buddhist grounding practices, such as non-striving and

beginner's mind, albeit expressed in secular language. The concept of depth at speed mitigates some of the barriers to regular MMR practice experienced by novice meditators by quickly deepening practice and reducing frustration.

7.3.2.2   Time-poverty

Time-poverty and the lack of available time for practice represent the major barrier for busy academics undertaking regular MMR practices, and the key challenge for the design and contextualisation of the MRBi in my study. Issues associated with time coupled with lengthy interventions were identified as problematic in a third of the studies reviewed in Table 2.1. For example, time-poverty was reported to have: disrupted the intervention evaluation process because of the high rate of attrition among academic participants (Long et al., 2023; Sood et al., 2014); contributed to reduced attendance and enthusiasm for early morning practice sessions (Aggarwal et al., 2017); and was cited as a barrier to participation (Hegney et al., 2021). Although none of these studies involved MMR practices that were specifically developed for academic participants, their longer-term effects have also not been studied. In contrast, the findings in my study contribute to understandings of how to contextualise MMR practices to mitigate the time-related barriers to academic participation.

Building on this discussion of time-related challenges faced by academics in attending mindfulness interventions, it is important to note that such barriers are not necessarily unique to academia. Generalised workplace-based mindfulness interventions across various professional industries, similarly encounter significant time-related obstacles to participation in lengthy and non-contextualised interventions. This is often attributed to the difficulty of finding available time within busy work schedules (Lomas et al., 2015). This highlights the pervasive nature of time constraints as a barrier to effective participation in lengthy, one size fits all, mindfulness interventions, regardless of the professional context. There is difficulty in finding time and space to undertake a regular mindfulness practice in one's everyday life (Banerjee et al., 2018; Hunt et al., 2020; Laurie & Blandford, 2016). To address this barrier, research suggests that shortening the duration of interventions and their practices, facilitate improved

adoption and adherence rates over the longer-term (Mantzios & Giannou, 2019). For example, short mindfulness practices of less than ten minutes duration were more likely to be undertaken and maintained than lengthier practices, particularly by novice meditators (Norris et al., 2018). To cultivate professional and individual resilience in busy professionals, studies point to the need to develop feasible time-efficient interventions and practices that address time-related barriers (Correia, 2020) and that are contextualised to meet the specific needs of the participants involved.

The successful contextualisation over three research phases in my study involved shortening the MRBi from eight to six weeks duration, limited to six hours of online interaction, prototyping and revising artefacts to support a minimum of 12-minutes of daily practice that can be holistically applied in and around academics' work and extended to the home setting, all without adding a significant amount of extra work. While shorter duration mindfulness interventions that improve sleep quality, increase mindfulness levels and help emotional regulation are not new (Wongtongkam et al., 2017), not all involve resilience enhancement like mine did. Shortened interventions may improve facets of mindfulness, for example, an intervention with academics comprising three 90-minute workshops improved mindfulness, although there were no statistically significant improvements in wellbeing or self-compassion observed (Schwind et al., 2022). The contextualisation process from which the streamlined MRBi and brief MMR practices incorporating depth at speed emerged, is itself a practical contribution to MMR interventions in that it represents a feasible, acceptable and effective intervention that improves mindfulness and personal resilience levels in time-poor participants in the immediate and longer-term.

7.3.2.3   Holistic and practical

A holistic and practical intervention, such as the MRBi in my study, facilitates adherence to mindfulness by enabling academics to tailor their MMR practices to fit in and around work, and beyond work to one's entire life (Williams & Penman, 2011). The MRBi, therefore, in practical ways, addresses critiques of the MBSR and other gold-standard interventions that they are too lengthy (Howarth et al., 2019; Sesel et al., 2021), and impractical (Howarth et al., 2019). My MRBi was intentionally designed

so that MMR practices could be holistically tailored and designed to suit busy academics, which contributed to 88% of participants maintaining their MMR practice beyond the completion of the intervention. The contextualisation process from which the MRBi emerged moves the intervention beyond other studies which have fitted mindfulness (Wongtongkam et al., 2017) and deep breathing practices into everyday activities (Hegney et al., 2021; Raddon, 2023; Sood et al., 2014), or offered practices of varying durations (Sass et al., 2013), or simply transferred practices developed at home to work (Schwind et al., 2022).

The contribution the MRBi makes is the opportunity for meditators to tailor their MMR practices, select, adapt, mix and discover metaphors and anchors (as explained in Chapter 6) to be practical for everyday use, and holistically incorporate their adapted practices into all aspects of their lives, without much extra work. The adaptation of MMR practices to fit into everyday living in the form of mindful drinking, mindful speaking, mindful washing of dishes and mindful observation in the MRBi represents what scholars would term *a holistic practice* (Kabat-Zinn, 2018; Tart, 1990), which makes life more mindful (Hanh, 1991; Siegel, 2010), and can inform one's entire life (Black, 2015). Tailoring practices to holistically integrate into one's home and work life is the key to developing a well-balanced (Gunatillake, 2018) and sustainable set of MMR practices that can be maintained longer-term.

7.3.2   Design process and guiding principles

My research has contributed to the MMR intervention design process in two ways: the use of BCF and AR to develop, customise and trial an MMR intervention; and a set of guiding design principles with which to contextualise an intervention. These are discussed in turn.

7.3.3.1   Novel intervention design process

The MRBi design process discussed in previous chapters demonstrates how the BCF and AR methodology were used in tandem in developing, contextualising and testing

the effectiveness of a custom-designed intervention with busy academics. The novel design process involved three AR cycles of development, which engaged experts, a WG and a PG. The AR cyclical approach bolstered the effectiveness of the MRBi design process by engaging a diverse range of academics, respectively in interviews, a working groups and a pilot group that experienced and refined the MMR practices.

A four-step behaviour change framework (BCF) that was informed by research evidence, guided the intervention design process to ensure rigour and credibility. The steps involve: identifying potential barriers; selecting intervention components; using theory to drive intervention development; and engaging end-users (Colquhoun et al., 2017). In my study, the four steps guided: a review of the MM and MMR intervention literature; the development of shorter duration curriculum and briefer practices; the incorporation of evidence in the form of traditional Buddhist principles and research findings; and the design of three AR reflective cycles through which I could plan, prototype, and trial the contextualised intervention. There are similarities between my study and that of a mindfulness-based intervention for teachers (Kennedy et al., 2022), which used a behaviour change wheel approach to design to enhance rigour and credibility. Whilst using a BCF approach was similar to my study, the researchers did not take an AR three phased iterative approach to its design, nor did they involve other academics to understand the context of the intervention.

While behaviour change models have not been widely incorporated into mindfulness-based intervention research thus far Kennedy et al., (2022), studies have shown that the self-regulated behaviour change that comes from mindfulness practice leads to better emotion regulation, increased focus and attention, and improved self-monitoring and self-efficacy (Schuman-Olivier et al., 2020). Such behaviour changes were seen in the MRBi pilot participants, who reported increased mindfulness and resilience levels from MMR practices introduced in the study (Chapter 6). My study contributes to existing knowledge about the design process by illustrating how BCF underpinned the intervention development processes, while the AR reflective cycles drove data collection, which in turn, informed the intervention design process from start to finish.

An important part of the MRBi design process contributing to its success was prototyping. Prototyping of the MRBi enabled the academics in the two final research phases to engage, critique and refine the intervention design and its content. In Phase 1, the experts had access to, but did not directly engage with the MRBi (v1) curriculum during the interviews (as detailed in Chapter 4). Their recommendations on its possible design and content, however, informed the first prototyped MRBi (v2) curriculum, with which the WG engaged over four weeks of discussion. These discussions generated creative insights and practical suggestions for improving the intervention, and although their views somewhat contradicted those of the experts, they contributed to the MRBi (v3) curriculum and improvement of prototyped artefacts.

The three phases of research, each involved AR reflective development cycles consisting of observing, reflecting, acting, evaluating and modifying (McNiff & Whitehead, 2011), which guided my data collection and analysis processes. From my data collection and analysis, the two-factor contextualisation process of niche design and tailoring emerged. The AR methodological approach provided the foundation for rigorous and credible data collection (Dick et al., 2009) across these three research phases. While AR has been used previously in a study with Australian academics that developed 5-minute mindfulness practices (Ziaian et al., 2015). This study was a 13-week intervention that did not incorporate resilience enhancement, nor did it involve development, refinement and contextualisation phases in its design.

The combined BCF and AR approach used in my study has not previously been undertaken, which represents a unique contribution to knowledge. Studies with academics have typically used existing MMR programs (Table 2.1), for example, the Mindfulness Self-care and Resiliency MSCR intervention (Hegney et al., 2021), and the SMART program (Sood et al., 2011; Sood et al., 2014). These studies have not included development or contextualisation phases providing academic participants opportunities to contribute to the intervention refinement. Whilst other studies have used prototyping in the development of online mindfulness-only programs (Chinareva et al., 2020; Plaza García et al., 2017; Zhu et al., 2017), to the best of my knowledge, mine is the first to have used niche intervention prototyping with and for academics. The final element in my design process was Phase 3, which via a pilot-trial of the MRBi

generated suggestions for additional refinements to contextualise the intervention further. Its effectiveness was, therefore, enhanced as a result of testing the full prototyped intervention that emerged as a result of input from busy academics. The combined four-step BCF and AR cyclical design process represents a practical foundation informed by research evidence for the future development of interventions for specific practitioner cohorts.

7.3.3.2 Design principles

My study makes a significant contribution to the intervention design process as a result of the tandem approach of using a BCF and AR to developing, contextualising and testing the MRBi. The contribution is in the form of a set of seven design principles (Table 7.1) to guide *mindfulness and resilience-based* intervention development for relatively understudied populations in this field, such as academics.

Table 7.1   Design principles to guide MMR intervention development

No.	Principle
1	Shorter, practical intervention duration – ideally 6 weeks
2	Shorter MMR practices – up to 10-minutes – that can be incorporated in and around work holistically
3	Embed depth at speed to assist novice meditators to quickly experience present moment awareness and its benefits
4	Embed resilience enhancement within mindfulness practices
5	The intervention to implicitly evoke a sense of restoration through space and boundaries
6	Utilise evidence-based research and evidence-based grounding practices to underpin the MMR practices
7	Encourage tailoring to holistically guide and maintain MMR practice beyond the intervention

My guiding design principles in Table 7.1 represent a unique contribution to what is known about developing effective MMR interventions for academics and other busy professionals. While researchers have outlined principles to guide the teaching and content of generalised mindfulness interventions to ensure rigour, ethics and credibility (Crane et al., 2017; Crane et al., 2020; Crane & Kuyken, 2019), there is a paucity of studies that focus on design guidelines to develop interventions to address the specific work-related challenges of university academics. The principles encapsulate the findings from my study that support the argument for: shorter interventions, ideally six weeks duration, briefer MMR practices of up to 10-minutes that embed depth of speed, make space for silence and reflection, are restorative, and are grounded in a balance of traditional Buddhist principles and research evidence, and encourage tailoring. Tailoring is one of the core guiding design principles that contributed to the effectiveness of the MRBi for this practitioner cohort.

As stated earlier in this thesis, research has shown that tailoring can improve attention and adherence to mindfulness practice (Arpaia et al., 2022). The contextualisation process in the MRBi involved the inclusion of tailoring, which requires moving beyond one-size-fits-all approaches (Osin & Turilina, 2022) and considering participant preferences in the design process (Carlson et al., 2014). Research emphasises the importance of interventions that allow individuals to reap the emotional and physical benefits of mindfulness by tailoring their own practices (Bodenlos et al., 2015). Tailoring is, therefore, becoming increasingly important in mindfulness-based interventions that focus on health and wellbeing (Anderson & Farb, 2018; Arpaia et al., 2022; Hatfield et al., 2023). This is particularly the case for interventions designed for novice meditators, as a way to increase retention and reduce boredom in the early stages of practice (Osin & Turilina, 2022). MRBi participants were encouraged to tailor their MMR practices by selecting, adapting, mixing and discovering new anchors as well as, choosing how, when and where to practice to by aligning to their particular interests and personal strengths and mitigate the challenges they faced, specifically, time-poverty and lack of adequate time for practice (Chapter 6).

As a core design principle, my study shows that tailoring the MRBi made it more practical, feasible and acceptable for academics, that enabled them to holistically

maintain across their lives and beyond the intervention itself. Despite the majority of novice meditators in my study, participants enjoyed tailoring the MMR practices, which is a finding that bodes well for other niche interventions designed to address the health and work needs of busy professionals (Arpaia et al., 2022; Hatfield et al., 2023). Tailoring allows space in which participants can align their mindfulness-based practices with individual strengths and personal interests, which makes for more effective practices overall (Heath et al., 2015; Pollard et al., 2017).

The development of the seven guiding principles to effective MMR intervention design emerging from my study represents a significant contribution to the intervention design process to guide more effective outcomes in professional populations, such as academics.

7.4 Limitations of the study

My study was shown to be effective in introducing and maintaining participant adherence to MMR practices and the integrity of the research design shaped the valid and original contributions to knowledge. I acknowledge, however, its limitations in terms of the intervention development and contextualisation process and the research design and procedures. In this section, I critically reflect on several limitations.

7.4.1 Intervention and practice duration

It is important to acknowledge from the outset that even the most well-designed intervention cannot fully resolve structural (antecedent) issues such as workload pressures, performance metrics, or institutional constraints. These factors are often deeply embedded within broader systemic frameworks that extend beyond the scope of any single intervention. However, interventions may offer academics tools and strategies to navigate these challenges more effectively—provided they actively engage with the process. The potential benefits of an intervention are, therefore, contingent upon participants' willingness to engage; without this, its impact remains limited. This underscores the importance of both individual agency and institutional support in fostering meaningful outcomes.

Contextualising the MRBi as a shorter intervention with briefer practices could be seen as potentially compromising the integrity of its practices and outcomes. The MRBi might be viewed as reductively corporatising traditional mindfulness practices and their underlying principles, despite the increase in interventions that seek to mitigate the barriers to MMR practices that lengthy interventions pose specifically, time-poverty and lack of available time for practice (Banerjee et al., 2018; Hunt et al., 2020; Laurie & Blandford, 2016; Smith, 2020). Shortening interventions, nonetheless, does not appear to affect their efficacy (Berghoff et al., 2017; Howarth et al., 2019; Mantzios & Egan, 2019; Nolte et al., 2022; Schumer et al., 2018) in contrast to accepted wisdom that longer is better (Creswell et al., 2014; Parcover et al., 2018;

Siegel, 2010). The MRBi is not intended to replace the gold-standard interventions, such as the MBSR, nor undo its hard-work or discredit its worthy reputation and its efficacy. Indeed, the MRBi owes its lineage and inspiration from longer gold-standard interventions (Bravo et al., 2019) such as the MBSR and MBCT and their well-deserved reputations for decades-long excellent scholarly contributions to the field. My study respects and acknowledges the contribution that the MBSR and the work of its creator Jon Kabat-Zinn and other notable mindfulness scholars and researchers have made.

Irrespective of length, the MRBi was designed to feasibly support academics in developing regular MMR practices. In this sense, the MRBi represents somewhat of a gateway intervention, which fosters busy academics' interest in contemplative practice. To explain this term, subtler approaches to introducing mindfulness can serve as gateways, by extending their appeal to broader populations (Ergas et al., 2018). In offering an accessible starting point for academics to engage with mindfulness practices in a manner that feels achievable and relevant to their individual contexts, the MRBi represents a gateway intervention. The aim is, over time, that participants' engagement with the MRBi may ignite a sustained interest in mindfulness, encouraging them to maintain and deepen their practice, while exploring complementary offerings. The MRBi, therefore, addresses the immediate wellbeing needs of busy academics and also builds a strong foundation for ongoing personal and professional growth in mindfulness and resilience enhancement.

7.4.2 Self-selection and self-reporting

The results of the MRBi pilot phase are limited in that participants in Phase 3 PG were self-selected and the outcomes were self-reported. This means that participants may have had an interest in MMR practices to improve wellbeing prior to joining the intervention, while self-reporting in the evaluation surveys may have skewed results. Steps were taken, however, to reduce the risk of bias from self-selection and reporting. In Phase 3, the MRBi participants provided anonymous feedback at three points: at mid-way, the end of the intervention, and two months following the

intervention. Survey results and feedback consistently supported the feasibility, efficacy and acceptability of the MRBi, yet participants also critiqued the intervention and practices. For example, despite evidencing positive experiences by the posting of photos, emojis and comments, some participants disliked the WhatsApp chat, because of privacy issues and the perception by two participants that the WhatsApp chat was distracting.

7.4.3 Pilot sample size

A second limitation is the small sample size of 15 participants in the Phase 3 PG. The survey results, therefore, are not representative of the broader population of academics, and some caution must be applied to interpreting the evaluation. The aim of the study, however, was to investigate the components required for an effective MMR intervention while informing its design and testing its efficacy rather than to generalise the findings to academics in other institutions, locations and contexts. My pilot study was not designed to be a RCT trial, it was designed to serve as an additional method to test and further refine the practices, and get some initial indication of their efficacy from survey measurements. At my pilot stage, an RCT was inappropriate as the intervention was not ready to be subject to a control group scenario, as the pilot needed to be tested first. Despite this, there sems to be consistency within the self-reported qualitative and quantitative data that suggests this data was given in good faith and were honest reflections. The small sample size was addressed, to some extent, by involving a larger sample size of 32 diverse academics from Australian and international universities in the overall research design.

7.4.4 Action Research

A further limitation may be seen in the AR structure of my study. AR often involves a single group of participants working together over multiple research cycles that contribute to the research outcome over the entire life span of the study. In contrast,

my study was intentionally designed to limit the engagement of different participant cohorts to three reflective research cycles. The purpose was to increase the feasibility of the MRBi by expanding engagement from one to three groups of academics would strengthen the integrity of the results. Not only did this approach of having different academics in each phase assist the feasibility of their participation in my research, where the demands of prolonged participation may have caused difficulties given how busy academics are, but this approach gathered a wide range of perspectives from a broad group of academics with backgrounds in psychology, counselling, general medicine, mindfulness enhancement, contemplative practice and resilience-building. Therefore, in conducting my action research with these three separate groups, I have managed to work with a much larger group of academics than if I had worked solely with one group across the project. There have been significant advantages in working with different groups of academics, all of whom have informed this study and my development and contextualisation of the MRBi.

7.5   Professional reflection

I began my study wanting to know how contemplative practices were being and could be utilised by university academics. This led me to investigate and research mindfulness and resilience practices. I soon discovered the small pool of research studies that investigate their combined use in interventions by academics. Through the research process over several years, my knowledge of a wide variety of mindfulness interventions and the specific barriers to engagement for academics has broadened. In reflecting on my time as a teacher and facilitator of mindfulness-resilience prior to and during this study, I came to understand and appreciate the crucial role contextualising contemplative practice plays in maintaining this practice over the longer-term. My research found ways to embed MMR practices in daily routines in and around paid work, home and leisure activities. The strategies developed throughout the research exemplify the ways that regular MMR practice can be holistically embedded into everyday life without necessarily creating extra work for busy, time-poor participants. These include forming regular mindfulness habits,

undertaking frequent, short BSB breathwork practices that incorporate the concept of depth at speed. I now use the MRBi results to advise MMR practitioners how to holistically embed their practices across their lives.

In reflecting upon my study, I have personally benefited from learning from the many people involved in my research, who have contributed their time, knowledge and expertise. I am particularly indebted to the PG participants. We had six weeks to practise and support one another in cultivating regular MMR practices. Sharing the ways in which we all tailored practices and metaphors to bring brief moments of MMR into our lives was a rich and rewarding learning experience. Memorable moments were shared, in particular, listening to the sounds of the kettle, incorporating mindfulness into sleep preparation, and contemplative bush walking and bike riding. Interweaving Japanese Buddhist Zen Master Shunryū Suzuki's foundational concept of beginner's mind (Siegel, 2010) throughout the pilot reminded me of the importance of being able to see things afresh despite prior knowledge. I was also richly rewarded by observing the group of novices grow their tailored practices. As a result of the study, I now have a deeper understanding of what constitutes regular MMR practice, which can be shared with others.

7.6 Implications of the study

There are three key implications in relation to mindfulness arising from my study of the MRBi: for intervention creators; for busy academics; and for future researchers. These will be discussed in turn.

7.6.1 Mindfulness intervention designers

The findings of my study can be used to guide researchers in developing similar MMR interventions for other cohorts of time-poor professionals. The iterative contextualisation process that was conducted across three research phases, contribute

a rich array of strategies, themes, techniques and metaphors that may be of use to other intervention creators. The process of contextualisation, and in particular, tailoring, has seen ideas variously incorporated, rolled over, embedded and abandoned in different research phases, which has enabled me to craft a custom-made intervention to meet the needs of a hard-to-reach population. The BCF structured the intervention design process, while the rigour of the AR reflective cycles iteratively strengthened the overall contextualisation process, which may be useful to other mindfulness intervention designers.

Reflecting on the learning and implications of combining Action Research (AR) with my use of a Behaviour Change Framework (BCF) has highlighted both the strengths and implications of integrating these two approaches. One of the key insights was how AR's iterative and inclusive nature allowed for a more responsive and dynamic process of continuous improvement, ensuring that my intervention remained dynamic and attuned to the needs of participants. The BCF contributed by providing a validated and structured process through which the intervention development could proceed methodically. This combination of approaches ensured that changes to the MRBi were not only originating from the target audience, but also grounded in established intervention development, thus strengthening the potential for the MRBi to have more sustained impact.

For other researchers, combining Action Research (AR) with the Behaviour Change Framework (BCF) I utilised, these two approaches offer a clear and practical way to design and implement intervention development and change. The BCF I utilised provides a straightforward, four-step structure that is straightforward to follow, and AR can fit neatly within it, allowing iterative cycles of continuous improvement and development to take place consecutively. This combination of approaches helps researchers stay grounded in intervention development and design, whilst still adapting to the real-world practical needs of the intervention's potential users. A key implication of using both approaches such as I have, is that it can make the research process more dynamic, accessible and agile. This dual process offers a balance of structure and flexibility that supports meaningful, dynamic and participant-involved change.

7.6.2 Busy academics

Despite their small participant number, the academics in my study used the MRBi as a gateway solution developing low-stakes, easy to maintain, feasible and holistic MMR practices. The study can be seen as a gateway because despite its short duration and the brevity of practices, the results show its efficacy in introducing MMR practices to novice academic meditators. The gateway notion is attractive in that the MRBi has been shown to establish a low time-related threshold for doable practices that can be maintained over time. For busy academics, short practices offer far better benefits than no practice, if they do not create extra work, as Chapter 4 showed. Benefits of completing the pilot MRBi included improved clarity of thinking and reduced stress, which enhanced work performance. These benefits have the potential to move beyond the personal realm to mitigate increasing workplace-related challenges in the contemporary university.

7.6.3 Future researchers

There are two key implications of my study for future researchers. First, because of its online delivery mode, the study can be extended to larger groups of academics, and potentially, to scientific trials such as an RCT, to corroborate the findings of my study. Second, researchers in other universities can pilot the contextualisation of the MRBi for their organisational conditions and specific academics' needs.

7.7 Final conclusions

This thesis has described my approaches to designing, developing, and contextualising an MMR intervention custom-designed for a small group of busy academics at an Australian university. The intervention addresses time-poverty, which often prevents engagement in longer programs, while still delivering clear *wellbeing benefits*.

The iterative process developed by combining BCF with AR reflective research cycles gleaned expertise, knowledge and insight from academics and contributed to the development of a feasible and effective custom-designed intervention that is also acceptable to busy academics. The MRBi shows potential as a gateway intervention through which to cultivate a regular MMR practice that eases work-based challenges for these and other busy professionals, who might otherwise not engage in lengthier and more time-intensive interventions.

In sum, the MRBi offers a holistic, shorter intervention through which brief MMR practices can be feasibly undertaken, tailored, and embedded within busy lives to generate greater calm, clarity, and present moment awareness to inform decision-making and relieve stress, that overall contributes to an improved sense of wellbeing. As academics face increasing and ongoing challenge and stress in their workplaces, this study has provided ways to feasibly undertake a regular mindfulness resilience practice that enhances wellbeing and workplace performance, without adding to that burden of work unnecessarily. The pilot participant data demonstrated that feelings of greater calm, clarity, decision making and stress relief, that impacted greater sense of general wellbeing, were gained from participating in this intervention, as a result.

I offer thanks to the many scholars who contributed their wisdom and experience to this project throughout its phases. Sincere gratitude is gratefully extended to everyone who contributed their time, advice and participation to the undertaking of this research. The two month follow up feedback I received from the pilot participants was complimentary about the intervention, with 14 participants (93%) recommending it to their peers. Whilst such positive feedback was unexpected, it reflected a pilot intervention that had been rigorously and iteratively developed, had expert guidance

from psychologists, counsellors, researchers, academics and fellow researchers in the field. Additionally, the methodology of AR and its many cycles of observing, reflecting, acting, evaluating and modifying (McNiff & Whitehead, 2011) across the MRBi's three phases, have resulted in contextualising an effective intervention solution. As such, this project has blended expertise, rigorous research, and evidence-based practices, all underpinned and influenced by traditional-wisdom, to offer an effective intervention solution for busy academics, and has shown the many ways to contextualise such an intervention for time-poor and busy academics.

Appendices

Appendix A.   Expert phase PIS

Appendix B.   Working group PIS

Appendix C.   Flyer promoting the pilot group phase

Appendix D.   Pilot group PIS

Appendix E.   Self-administered mental health assessment tool

Appendix F.   FFMQ Questionnaire (Likert scale)

Appendix G.   CD-RISC2 Questionnaire (Likert scale)

Appendix H.   UTS Human Research Ethics Committee approval

Appendix I.   UTS Health and Medical Research Ethics Committee

Appendix J.   Interview guide

Appendix K.   Handwritten notes taken during expert interview

Appendix L.   Completed working group feedback sheet example

Appendix M.   MRBi (v1) curriculum – drafted prior to Phase 1

Appendix N.   MRBi (v2) curriculum – Phase 2 WG

Appendix O.   MRBi (v3) online curriculum – Phase 3 PG

Appendix A. Expert phase P.I.S

₩UTS UNIVERSITY OF TECHNOLOGY SYDNEY

PARTICIPANT INFORMATION SHEET - EXPERT
An Action Research Based Mindfulness And Resilience Enhancing Intervention For Busy Academics
UTS HREC application number ETH19-3609

WHO IS DOING THE RESEARCH?
My name is Jonny WELLS (email: jonny.d.wells@student.uts.edu.au) and I am a student at UTS. My principal supervisor is Associate Professor Nick Hopwood (email = Nick.Hopwood@uts.edu.au) and my secondary supervisor is Dr. Kimberley Pressick-Kilborn (email = Kimberley.Pressick-Kilborn@uts.edu.au).

WHAT IS THIS RESEARCH ABOUT?
This study is about developing a mindfulness and resilience-enhancing intervention for busy academics. It will be informed by input from experts, then a collaborative process of co-design with academics.

WHY HAVE I BEEN ASKED?

You have been asked because you have recognised expertise in relation to areas relevant to the study.

IF I SAY YES, WHAT WILL IT INVOLVE?

If you decide to participate, I will invite you to:

a. Read a brief project overview pack (some text, and a short flyer) sent by email to you, giving an overview of the project and its aims (total time required = <10 minutes).
b. Participate in an approximately 50 minute semi-structured interview (at a day/time/location convenient for you) that will be audio recorded (by Phone/ Skype or Zoom) and then later transcribed. (Participants have the option to review the transcripts if they request them). Participants also have the option to say things off the record if they wish, in such circumstances the researcher will stop any audio recording and/or note taking until advised and the subsequent information will not form part of the data collection.
c. You will be invited to share your expertise advice/guidance/ suggestions etc. during the interview, regarding the effective development of the intervention from your area(s) of expertise.

WHAT ARE THE POTENTIAL BENEFITS OF BEING INVOLVED?

If you decide to participate, the benefits of being involved are:

1. The opportunity to influence and contribute to the production of a contextualised Mindfulness and Resilience Enhancing Intervention For Busy Academics.
2. Have an opportunity to share your knowledge and expertise on how to bring mindfulness/ resilience stress relief into the working practices of busy Academics.

ARE THERE ANY RISKS/INCONVENIENCE?

Yes, there are some risks/inconvenience. They are: -
1. You might experience some inconvenience relating to the scheduling of the interview and time taken to participate.

DO I HAVE TO SAY YES?

Participation in this study is voluntary. It is completely up to you whether or not you decide to take part.

239

WHAT WILL HAPPEN IF I SAY NO?

If you decide not to participate, it will not affect your relationship with the researchers or the University of Technology Sydney in any way.

WHAT IF I WANT TO LEAVE THE PROJECT MIDWAY?

By signing the consent form you consent to the research team collecting and using personal information about you for the research project. All this information will be treated confidentially and not published in any way. Your name, and any identifying details will not be published in the study and your details will remain confidential.

If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason, by informing the researcher or by writing to the following email address _____@student.uts.edu.au.

Additionally, if you decide to leave the research project, we will not collect additional personal information from you, although personal information already collected will be retained to ensure that the results of the research project can be measured properly and to comply with law. You should be aware that data collected up to the time you withdraw will form part of the research project results.

CONFIDENTIALITY

By signing the consent form you consent to the research team collecting and using personal information about you for the research project. All this information will be treated confidentially and not published in any way. Your name, and any identifying details will not be published in the study and your details will remain confidential.
Additionally, your information will only be used for the purpose of this research project and it will only be disclosed (if need be) with your permission, except as required by law.

For maximum data security, the information you provide will be securely stored on University cloud based servers as well as encrypted through Microsoft Bitlocker to securely store and de-identify the information you provide.

ACKNOWLEDGEMENTS

With your permission, the research team would like to thank you for your time and cooperation in this research by being thanked in the Acknowledgments section of the PhD thesis. Your full name would be used in order to do this. This is not compulsory, however, and if you wish not to have your name published, the researcher will emit this from any publication of the PhD thesis.

WHAT IF I HAVE CONCERNS OR A COMPLAINT?

If you have concerns about the research that you think I or my supervisors can help you with, please feel free to contact us on the contact details on the previous page.
You will be given a copy of this form to keep for your records.

NOTE:
This study has been approved in line with the University of Technology Sydney Human Research Ethics Committee [UTS HREC] guidelines. If you have any concerns or complaints about any aspect of the conduct of this research, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: Research.Ethics@uts.edu.au], and quote the UTS HREC reference number in the footer of this document below. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

UTS UNIVERSITY OF TECHNOLOGY SYDNEY

CONSENT FORM -EXPERT

I _____ [participant's name] agree to participate in the research project An Action Research Based Mindfulness And Resilience Enhancing Intervention For Busy Academics which has been given UTS Ethics Approval (UTS HREC application number ETH19-3609) which is being conducted by Jonny Wells, PhD Student, School of Education, Faculty of Arts and Social Science, Broadway, Sydney, 2007. email: jonny.d.wells@student.uts.edu.au / Jonny's mobile = ▓▓▓▓▓

By consenting, I agree that:

1. I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

2. I understand the purposes, procedures and risks of the research as described in the Participant Information Sheet.

3. I have had an opportunity to ask questions and I am satisfied with the answers I have received.

4. I freely agree to participate in this research project as described and understand that I am free to withdraw at any time without affecting my relationship with the researcher or the University of Technology Sydney.

5. I understand that I will be given a signed copy of this document to keep.

I agree to be: [Please tick for yes ✓ and cross ✗ for no]

☐ Interviewed

☐ Audio recorded during the interview

I agree that the research data gathered from this project may be published in a form that:
[Please tick for yes ✓ and cross ✗ for no]

☐ Does not identify me in any way

☐ May be used for future research purposes

☐ I am aware that I can contact Jonny Wells (The Researcher) if I have any concerns about the research.

_____   Date ___/___/_____
Participant First Name / Family Name // + Signature [participant]   Date (dd mm yyyy)

_____   Date ___/___/_____
Name and Signature [researcher or delegate]   Date

Please sign, scan and return (by email) to jonny

UTS Ethics Approval ref number = UTS HREC REF NO. ETH19-3609

Appendix B. Working group P.I.S

UTS UNIVERSITY OF TECHNOLOGY SYDNEY

PARTICIPANT INFORMATION SHEET - WORKING GROUP

An Action Research Based Mindfulness And Resilience Enhancing Intervention For Busy Academics
UTS HREC application number ETH19-3609

WHO IS DOING THE RESEARCH?

My name is Jonny WELLS (email: jonny.d.wells@student.uts.edu.au) and I am a student at UTS. My supervisor is Associate Professor Nick Hopwood (email = Nick.Hopwood@uts.edu.au).

WHAT IS THIS RESEARCH ABOUT?

This study is about developing a mindfulness and resilience-enhancing intervention for busy academics. It will be informed by input from experts, then a collaborative process of co-design with academics.

WHY HAVE I BEEN ASKED?

You have been invited to participate in this study because you are currently working as an academic at UTS.

IF I SAY YES, WHAT WILL IT INVOLVE?

If you decide to participate, I will invite you to:

1. Read a brief project overview pack (some text, and a short video) sent by email to you, giving an overview of the project, its aims and current status (total time required = <10 minutes).
2. Participate in a maximum of 4 weekly meetings, of 1 hour each. Location will be situated in a meeting room in a convenient part of the UTS Broadway campus. These meetings will involve other participants (approx. 10 individuals total) discussing with me different aspects of a mindfulness intervention and what we would need to do to make it fit an academic context.
3. Consent that each meeting can be audio recorded and later transcribed (Participants have the option to review the transcripts if they request them). N.B. Participants have the option to say things off the record if they wish, in such circumstances the researcher will stop any audio recording and/or note taking until advised and the subsequent information will not form part of the data collection.

Please note that your supervisor will be made aware [by you] of your participation in this research project as a result of the recruitment process

WHAT ARE THE POTENTIAL BENEFITS OF BEING INVOLVED?

If you decide to participate, the benefits of being involved are:

1. Sense of reward and community contribution from being part of a process that aims to help the academic community
2. Insights into strategies and ideas that might be useful to you as a busy academic.
3. New relationships and connections with academics across UTS who you would not otherwise have met.

ARE THERE ANY RISKS/INCONVENIENCE?

Yes, there are some risks/inconvenience. They are: -

1. Inconvenience in the time taken to participate, although you remain free to withdraw at any time should the burden become too much.

Participant information and consent form – version 2 working group   Page 1 of 4

242

UTS — UNIVERSITY OF TECHNOLOGY SYDNEY

2. Discomfort relating to some of the topics discussed, which may cover difficult or stressful aspects of academic work*.
3. Harm if confidential matters discussed in the meetings are shared by others. However, all participants will be reminded of the importance of confidentiality in each meeting, and steps will be taken to minimise this risk as much as possible.

*To help reduce the impact of any distress or stress occurring within the participants of the working group, an information sheet outlining a wide range of confidential face to face, as well as online support services/resources will be given to all participants of this working party and will be made available at every meeting.

DO I HAVE TO SAY YES?

Participation in this study is completely voluntary. It is completely up to you whether or not you decide to take part.

WHAT WILL HAPPEN IF I SAY NO?

If you decide not to participate, it will not affect your relationship with the researcher or your status as an employee of the University of Technology Sydney in any way.

WHAT IF I WANT TO LEAVE THE PROJECT MIDWAY?

By signing the consent form you consent to the research team collecting and using personal information about you for the research project. All this information will be treated confidentially and not published in any way. Your name, and any identifying details will not be published in the study and your details will remain confidential. In any transcribed material, or subsequent mention of your contributions, a pseudonym will be used (if absolutely necessary) instead of your real name.

If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason, by informing the researcher or by writing to the following email address _____@student.uts.edu.au.

Additionally, if you decide to leave the research project, we will not collect additional personal information from you, although personal information already collected will be retained to ensure that the results of the research project can be measured properly and to comply with law. You should be aware that data collected up to the time you withdraw will form part of the research project results.

CONFIDENTIALITY

By signing the consent form you consent to the research team collecting and using personal information about you for the research project. All this information will be treated confidentially and not published in any way. Your name, and any identifying details will not be published in the study and your details will remain confidential. In any transcribed material, or subsequent mention of your contributions, a pseudonym will be used (if absolutely necessary) instead of your real name.

Additionally, your information will only be used for the purpose of this research project and it will only be disclosed (if need be) with your permission, except as required by law.

The researcher will urge all group members in the Working group to keep all comments spoken during the meetings, confidential.

For maximum data security, the information you provide will be securely stored on University cloud based servers to securely store the de-identified information you provide.

UTS UNIVERSITY
OF TECHNOLOGY
SYDNEY

WHAT IF I HAVE CONCERNS OR A COMPLAINT?

If you have concerns about the research that you think I or my supervisor can help you with, please feel free to contact us on the contact details on the previous page.
You will be given a copy of this form to keep for your records.

NOTE:
This study has been approved in line with the University of Technology Sydney Human Research Ethics Committee [UTS HREC] guidelines. If you have any concerns or complaints about any aspect of the conduct of this research, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: Research.Ethics@uts.edu.au], and quote the UTS HREC reference number. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

UTS UNIVERSITY OF TECHNOLOGY SYDNEY

CONSENT FORM –WORKING GROUP

I _____ [participant's name] agree to participate in the research project An Action Research Based Mindfulness And Resilience Enhancing Intervention For Busy Academics.

and include the UTS HREC application number ETH19-3609 being conducted by Jonny Wells, PhD Student, School of Education, Faculty of Arts and Social Science, Broadway, Sydney, 2007, email jonny.d.wells@student.uts.edu.au / mobile ████████.

1. I have read the Participant Information Sheet.

2. I understand the purposes, procedures and risks of the research as described in the Participant Information Sheet.

3. I have had an opportunity to ask questions and I am satisfied with the answers I have received.

4. I freely agree to participate in this research project as described and understand that I am free to withdraw at any time without affecting my relationship with the researcher or the University of Technology Sydney.

5. I understand that I will be given a signed copy of this document to keep.

I **agree to be:** [Please tick for yes ✓ and cross ✗ for no]

☐ Audio recorded and transcribed

I agree that the research data gathered from this project may be published in a form that:
[Please tick for yes ✓ and cross ✗ for no]

☐ Does not identify me in any way

☐ May be used for future research purposes

☐ I am aware that I can contact Jonny Wells (The Researcher) if I have any concerns about the research.

_____   ____/____/____
Name and Signature [participant]   Date

_____   ____/____/____
Name and Signature [researcher or delegate]   Date

Appendix C. Flyer promoting the pilot group phase

Appendix D. Pilot group P.I.S.

University of Technology Sydney

UTS

Participant Information Sheet/Consent Form

Interventional Study - *Adult providing own consent*

Title	*Mindfulness & Resilience Program for Academics*
Protocol Number	*ETH20-5285*
Project Sponsor	*University Of Technology-Sydney*
Coordinating Principal Investigator/	*Mr Jonathan {Jonny} Wells -PhD Candidate/*
Principal Investigator	*Associate Professor Nick Hopwood*
Location	*Online –via Zoom*

Part 1   What does my participation involve?

1   Introduction

This study is about trailing an online mindfulness and resilience-enhancing program designed specifically for busy academics. You will be asked to take part and practice in weekly 1-hour zoom meetings for 6 weeks and then do some self-practice up to 10-20 minutes every day. We will also ask you to undertake some measurements scales at the start and then end of the program.

You are invited to take part in this research project.
This Participant Information Sheet/Consent Form tells you about the research project. It explains what is involved in taking part in the program. Knowing what is involved will help you decide if you want to take part in the research.

Please read this information carefully. Ask questions about anything that you do not understand or want to know more about. Before deciding whether or not to take part, you might want to talk about it with a relative, friend or your local doctor. Participation in this research is entirely voluntary. If you don't wish to take part, you don't have to and there are no consequences from not partaking in this study.

If you decide you want to take part in the research project, you will be asked to sign the consent section. By signing it you are telling us that you:
• Understand what you have read
• Consent to take part in the research project
• Consent to partake in the program exercises as described in this document.
• Consent to give some brief demographic information about you and your job at UTS.
• Consent to undertake some measurement scales which will help provide data back to the research team.
• Consent to the use of your personal data and a mobile phone as described in this document.

You will be given a copy of this Participant Information and Consent Form to keep for your records.

247

2   What is the purpose of this research?

There is a wealth of research stating how effective mindfulness and resilience building are for educators, however there is little research conducted on university academics, this project hopes to somewhat address this gap in the literature.

The aim of this study is to trial the mindfulness and resilience program with a group of academics to see how it can be further improved and enhanced. A secondary aim is to assess what impact (if any) the program has had.

The research team believe that participation in this project will contribute to this project aims and highlight important aspects to consider when designing programs specifically for an academic context/academic audience as well as address the gap in knowledge that exists in this regard.

.

The results of this research will be used by Jonny Wells to obtain a Doctor of Philosophy (PhD) degree.

3.   Who has instigated this study?

This research has been initiated by the student researcher Mr Jonny Wells.

4   What does participation in this research involve?

Your participation in this project the mindfulness and resilience intervention {MRBI program} will involve the following:

☐   You will be asked to consent to join the pilot program as well as consent to your data being used to help the project findings

☐   You will be asked to undertake a screening questionnaire before enrolment. All participants are asked to do this. This screening questionnaire is a safety mechanism to potentially screen for potential past trauma, recent mental health issues as well as severe psychological illness / depression in potential participants. Screening will be conducted through an online screening questionnaire distributed to the participants before enrolment takes place. This screening will be a series of short questions to ask about your current and past mental health status, the results are confidential and will be securely encrypted and stored.

☐   You will be asked to undertake a short Pre-test online mindfulness and resilience measurement questionnaire which consists of Five Facet Mindfulness Questionnaire (FFMQ) / and the Connor Davidson Resilience Scale Shortened Version (CDRISC2). This will be a series of 41 questions (which takes about 5-10 minutes to complete online).

☐   You will be asked to attend weekly 1 hour sessions which will be delivered via Zoom (online meeting platform). In each session, the researcher will introduce a mindfulness and resilience theme for the week and the group will practice together. The researcher will guide you and share simple and straightforward mindfulness and resilience practices that can be utilised as part of your life (both at work and out of it).

☐   Each online session via Zoom will be audio/video recorded, this is to assist the researcher with transcription of any pertinent comments or observations which may assist the research aims. You will be asked to consent to the audio/video recording of these sessions.

☐   In addition, you (the pilot participant) will be encouraged to practice daily for 10-20 minutes with most practices designed to blend seamlessly into existing daily activities-such as making a cup of hot tea in a mindful fashion/ walking to and from one's office (albeit mindfully and resiliently), mindful bathroom breaks etc. So in many instances this is not additional work, but will be layered and embedded into your existing daily activities.

☐   You will be required to use a smart phone enabled with WhatsApp for this pilot. This requires you to supply your phone number to the researcher. WhatsApp will be utilised in 2 ways in this pilot, both for journaling purposes. Firstly, as a group journal to post comments, suggestions and for the researcher to communicate with the entire group and post the audio recordings for self-practice each week, and for you

to respond. Secondly, it can be utilised by you individually (if you wish) to keep your own reflective journal about your experience. This is done by adding your own phone number into your phone and then joining WhatsApp (instructions will be provided to assist with this). It is anticipated that journaling will not take more than 1-2- minutes on any particular occasion.

- You will be asked to use WhatsApp as a journal to record your observations of your daily practice and your pilot program experience (if you wish). You can use your WhatsApp journal as often as you like throughout each week.

- You will also be encouraged to use the WhatsApp journal to post (if desired) a mindfulness photo each week as a reflective tool to illustrate a moment of experiencing mindfulness or resilience. You will be encouraged to post at least 1 photo per week.

- After completing the 6-week pilot program, you will be asked to re-do the mindfulness and resilience measurement questionnaires FFMQ /CDRISC2. These will be re-administered to you by email link and will be a repeat of the 41 questions you answered previously.

- You will be invited to a 20-minute Question and Answer interview with the researcher online via Zoom 2 months following the completion of the 6-week online program. The researcher would like to ask you some semi-structured questions about your experience and the design of the pilot program. This will assist the researcher to gain further insights and feedback in order to improve the program for others.

5. Your time commitment throughout this project

- Your participation each week has been calculated as likely being:
- 1 hour of mindfulness and resilience workshop time with the researcher (via Zoom) each week
- Plus, between 10-20 minutes of mindfulness and resilience practice every day (in your own time / 6-7 days per week), however these practices for the most part will likely blend very well into your normal routine and everyday habits/existing living practices.
- This program will continue for 6 consecutive weeks
- Whatsapp journaling is done at your discretion, but should not take more than 1-2 minutes on any occasion that you wish to comment.
- There will be a 20-minute informal Q+A interview with the researcher after 2 months of the program end in order for the researcher to gain further insights and suggestions from you.

In total, your participation will require approximately 15.5 hours over 6 weeks.
Please note: Your participation in this study will NOT BEGIN until you have completed and signed a consent form and returned this to the researcher (and they have confirmed receipt of this with you).

6. Costs associated with this pilot project (costs of partaking in this project)
There are no costs at all to you associated with participating in this research project.

7. Reimbursement
You will not be paid for participating in this pilot study. All practices as part of the research project will be provided to you free of charge via WhatsApp and online/or via your work UTS email account.

In addition, you will (as part of this study) have to access your own personal device (smart phone /tablet) in order to partake in this project. No payments are paid for use of such personal devices, nor are any payments made for the use of their associated Wi-Fi/broadband internet charges or data usage in relation to the pilot program or use of personal mobile phones or devices.

8. What do you have to do If you would like to participate in this study:
Please consider carefully if you allocate the time to partake in the study over the 6 weeks (1 hr per week workshop time) and the time commitment each week to be able to practice mindfulness and resilience (estimated to be approximately 10-20 minutes per day / 6-7 days per week).

Please read this participant information pack carefully and ask any questions that you might have.

Please undertake the screening questions to ensure you are eligible to take part in the pilot program.

Please consider your personal circumstances and current life situation and whether such an intervention at this time suits your circumstances.

If you are happy to participate, please sign the consent form and send it back to the researcher directly. Places are limited in the pilot.

9. What might restrict anyone from taking part in this study

a) Anyone who is considered to be of risk after completing the screening questions will be informed that participation is not possible at this point in time.
b) Anyone not able for any reason to attend (in theory) all 6 weeks (perhaps due to other commitments) will be informed that enrolment into the pilot is not possible at this moment.
c) Anyone not able to use a personal device (smart phone, tablet or p.c) as well as the app WhatsApp (and unable to gain access to them for the duration of the study), will unfortunately not be able to join in the study at this time.

10. Other relevant information about the research project

The researcher of this project is also a trained mindfulness facilitator. He also has a background in education and program design. The mindfulness and resilience practices have been jointly designed by a group of university academics working together in this Action Research project.

11. Do I have to take part in this research project?

You do not have to take part if you do not want to. Participation in any research project is voluntary. If you do not wish to take part, you do not have to.

Also, if you decide to take part and later change your mind, you are free to withdraw from the project at any stage.

If you do decide to take part, you will be given this Participant Information and Consent Form to sign and you will be given a copy to keep. Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with those facilitating this program, the research team or your relationship with the University of Technology Sydney in any way.

12. What are the possible benefits of taking part?

We cannot guarantee or promise that you will receive any benefits from this research; however, possible benefits may include:

☐ Research shows that using mindfulness and resilience might help boost attention, clarity and decision making in areas of one's life.
☐ It also may be possible to gain an increased sense of perspective on priorities in work and life.
☐ Learning mindfulness practices may assist in day to day living in managing negative feelings or emotions, or simply experiencing more joy and contentment throughout one's day.
☐ There may be benefits in meeting other people who may have similar interests in mindfulness and resilience as yourself.
☐ There may be benefits gained in sharing useful tips and strategies with other pilot participants on cultivating beneficial mindfulness and resilience in work practices and day to day living.
☐ There could be benefits from understanding better how to cultivate space for personal time, reflection and meditation in one's busy life.

250

13.   What are the possible risks and disadvantages of taking part?

This study includes possible risks or disadvantages which are detailed as follows, as well as the level of magnitude (how much and how long). The researcher of this pilot will take every opportunity to eliminate these risks and also provide support service information to all participants, should it be needed. The identified risks are as follows:

1. There is a possible likelihood of experiencing inconvenience. Attending pilot group meetings may conflict with other schedules or create an extra burden Likelihood = it is possible; /magnitude = temporary inconvenience, not ongoing.

2. There is a slight likelihood of feeling uncomfortable during the pilot discussions and feeling unease as a result. Matters discussed in the pilot group meetings, may raise uncomfortable memories, or create anxiety from interactions in meetings, even though discussions will be carefully monitored and positively framed throughout. Likelihood = slight possibility; magnitude = temporary discomfort.

3. There is the slight likelihood of breached confidentiality in the group. Risk of other participants repeating comments /disclosing information to others during the pilot group, however a strict confidentiality code will be enforced with participants and the researcher will enforce this each pilot session and will remind all participants not to repeat anything said in this pilot to other people. Likelihood = slight; magnitude = possible discomfort.

4. There is a slight likelihood of expressing upsetting negative opinions. Pilot group participants might express some negative comments about their workplace stressors/employers/supervisors which may cause distress to themselves / others. The researcher will encourage participants to be respectful and not create an atmosphere of airing complaints / grievances in sessions, as this is not the pilot program's purpose. Likelihood = slight possibility of distress ; magnitude = possible temporary discomfort.

5. There is a slight likelihood of feeling judged about expressing negative opinions before others. Pilot group participants might experience stress in expressing negative comments and/or feel stressed about the implications of expressing negative comments in front of others, or fear of creating reputational harm for themselves. The researcher will in each session remind participants only to share things with which they are comfortable to share with the others; and to be respectful of language being used. Likelihood = slightly possible; magnitude = discomfort.

If distress is experienced at any point in this pilot, the participants are urged to speak with the researcher and also access the safety protocol and list of support services that will be shared with the group upon enrolment.

14.   Possible side effects from this pilot

This pilot is intended for mentally well individuals who have been screened for serious previous trauma or mental ill-health; and who will engage in short, focused, beginner's mindfulness and resilience enhancing practices tailored to academics. These practices have all been tested prior (in a previous phase of this project (phase 3)). Therefore, the possibility of side effects from attending this mindfulness resilience based program (MRBI) are considered to be extremely low. In mentally healthy adults who have not experienced severe trauma, psychological illness or mental unwellness, and who are not meditating for extended periods of time (1 hour to many hours at a time e.g. in a retreat), the risks are very low (Novak, 2018; Treleaven, 2010, 2018).

15.   If psychological distress does occur as a result of being in this pilot.

If you become upset or distressed as a result of your participation in the research, the researcher will ensure you are provided with a safety protocol and a list of contact support services and professional mental health contact information (including UTS Counselling) to assist you. All services suggested provide their services free of charge. The researcher will provide all participants with a safety protocol and self-access support service list upon enrolment.

251

16. What if new information arises during this research project?

Sometimes during the course of a research project, new information becomes available about the mindfulness and resilience practices that are being studied. If this happens, the researcher (Jonny Wells) will tell you about it and discuss with you whether you want to continue in the research project. If you decide to withdraw, this will not impact you in any way. If you decide to continue in the research project, you will be asked to sign an updated consent form.

Also, on receiving new information, the researcher in consultation with the research team and Ethics Office might consider it to be in your best interests to withdraw you from the research project. If this happens, the researcher will explain the reasons and arrange for your smooth withdrawal from this pilot program.

17. What if I choose to withdraw from this research project?

It is OK to withdraw from this study if you wish to. However, if you decide to withdraw from the project, please notify a member of the research team before you withdraw. This notice will allow that person to discuss any health risks or special requirements linked to withdrawing and provide any assistance to you that you may need.

If you do withdraw your consent to participate during the research project, the researcher will not collect additional personal information from you, although personal information already collected will be retained to ensure that the results of the research project can be measured properly and to comply with law. You should be aware that data collected up to the time you withdraw will form part of the research project results. If you do not this, you must tell the researcher before you join the research project.

18. Could this research project be stopped unexpectedly?

This research project may be stopped unexpectedly for a variety of reasons. These may include reasons such as: unforeseen circumstances or if there were serious adverse effects or adverse effects occurring (in any of the participants) during the 6-week online pilot. In that case, the researcher (in consultation with the UTS Ethics Committee Research Office, and his main supervisor), could terminate the pilot study before its completion.

19. What happens when the research project ends?

Once the project is completed (i.e. after the 2-month post program interviews are completed), the researcher will then spend the next few months analysing the data before preparing to summarise it for his thesis. Brief highlights of what the data is indicating can be requested by contacting the researcher directly.

Part 2   How is the research project being conducted?

20. What will happen to information about me?

The researcher will ensure confidentiality as much as possible by using pseudonyms for each participant in this pilot so that individuals are not identifiable. All of the information relating to participants' identities will be confidential and not disclosed in any way to outsiders and also will not be identifiable to others.

The security of the data will be ensured by being in compliance with the Research Data Management Vice Chancellor's Directive (UTS, 2014). Therefore, data records will be stored in the following format: handwritten notes, audio/video recordings and transcripts. Audio/video data will be stored on Cloudstor and on a password protected hard drive. Anonymised data will be saved on UTS OneDrive, a backup copy will be saved and password protected in Cloudstor, the university cloud storage system, and in accordance with the requirements of the university unit responsible for records (UTS, 2017) it will be saved in UTS Stash data management infrastructure. Data in storage will not contain participants' personal details. The information will be stored for 5 years and at the end of this storage date, the data will be destroyed.
Your consent is being asked for the storage and use of any of the data taken by the researcher for use, as described in the relevant section of the Participant Information Sheet, for:

252

- This specific research project
- Other research that is closely related to this research project
- Any future research

-The researcher will ensure that all data will be securely stored and be password protected on UTS OneDrive, Cloudstor and Stash and in accordance with NHMRC guidelines (National Statement on Ethical Conduct in Human Research (2007) - Updated 2018 | NHMRC, n.d.).

It is anticipated that the results of this research project will be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that you cannot be identified.

21. Complaints and compensation

If you suffer any complaints or complications as a result of this research project, you should contact the researcher or his supervisor (Associate Professor Nick Hopwood) as soon as possible.

22. Who is organising and funding the research?

This research project is being conducted by Jonny Wells (PhD Student, FASS, UTS).

No participant or research team member will benefit financially from their involvement in this research project.

No member of the research team will receive a personal financial benefit from your involvement in this research project (other than their ordinary wages).

23. Who has reviewed the research project?

All research in Australia involving humans is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this research project have been approved by the HREC of The University of Technology -Sydney. This project will be carried out according to the National Statement on Ethical Conduct in Human Research (2007). This statement has been developed to protect the interests of people who agree to participate in human research studies.

24. Further information and who to contact

The person you may need to contact will depend on the nature of your query.

If you want any further information concerning this project, you can contact the following people directly
The researcher (jonny wells) email jonny.d.wells@student.uts.edu.au /
Jonny's main supervisor (Associate Professor Nick Hopwood) nick.hopwood@uts.edu.au
/ +61 2 95144658

25. Research pilot contact person

Name	Jonny Wells
Position	PhD Student /Researcher of this project
Telephone	
Email	Jonny.d.wells@student.uts.edu.au

26. Complaints contact person

Name	Associate Professor Nick Hopwood
Position	Associate Professor/ Jonny's PhD Supervisor
Telephone	+61 2 95144658
Email	nick.hopwood@uts.edu.au

If you have any complaints about any aspect of the project, the way it is being conducted or any questions about being a research participant in general, then you may contact Nick on the contact details above.

27. Reviewing HREC approving this research and HREC Executive Officer details

Reviewing HREC name	University Of Technology -Sydney)
HREC Executive Officer	Dr. Emma Kirk
Telephone	61 (02) 9514 2478
Email	research.ethics@uts.edu.au

28. Local HREC Office contact (Single Site -Research Governance Officer)

Name	Dr.Emma Kirk
Position	HREC Executive Officer
Telephone	61 (02) 9514 2478
Email	research.ethics@uts.edu.au

254

Consent Form – UTS Academic

Title	Mindfulness & Resilience Program for Academics
Protocol Number	ETH20-5285
Project Sponsor	University of Technology Sydney
Coordinating Principal Investigator/	Mr Jonny Wells/ PhD candidate Principal Investigator
Associate Investigator(s)	Assoc Prof. Nick Hopwood
Location	Online via Zoom

Declaration by Participant

a) I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

b) I understand the purposes, procedures and risks of the research described in the project.

c) I give permission for the researcher and research team to use my data for the purposes of this project. I understand that such information will remain confidential and de-identified.

d) I understand each of the online sessions (Zoom) will be audio/video recorded to help assist the researcher with transcription and data analysis.

e) I understand I will need to use a smartphone enabled with Whatsapp for this pilot study and will need to supply its associated phone number to the researcher for him to contact me via Whatsapp.

f) I have had an opportunity to ask questions and I am satisfied with the answers I have received.

g) I freely agree to participate in this research project as described and understand that I am free to withdraw at any time during the study without affecting my future health care.

h) I understand that I will be given a signed copy of this consent document to keep.

Name of Participant (please print) _____
Signature _____ Date _____

Declaration by Study Researcher†

I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

Name of / Researcher† (please print) _____
Signature _____ Date _____

Note: All parties signing the consent section must date their own signature.

255

Data Usage Consent

I consent to the storage and use of any of the data taken from me for use, as described in the relevant section of the Participant Information Sheet, for:
• This specific research project
• Other research that is closely related to this research project
• Any future research

For participant use:

Name of Participant (please print) _____
Signature _____ Date _____

Researcher Use only

Name of Researcher (please print) _____
Signature _____ Date _____

Note: All parties signing the consent section must date their own signature.

End of document

256

Form for Withdrawal of Participation — UTS Academic

Title	Mindfulness & Resilience Program for Academics

Protocol Number	ETH20-5285
Project Sponsor	University of Technology - Sydney
Coordinating Principal Investigator/ Principal Investigator	Mr Jonny Wells
Associate Investigator(s)	Associate Professor Nick Hopwood
Location	Online – via Zoom

Declaration by Participant

I wish to withdraw from participation in the above research project and understand that such withdrawal will not affect, my relationship with the research team nor my relationship with University of Technology –Sydney.

Name of Pilot Participant (please _____

Signature _____ Date _____

*For the researcher:
In the event that the participant's decision to withdraw is communicated verbally, the Researcher will need to provide a description of the circumstances below.

Declaration by Researcher'

I have given a verbal explanation of the implications of withdrawal from the research project and I believe that the participant has understood that explanation.

Name of Researcher' (please print) _____

Signature _____ Date _____

' A senior member of the research team must provide the explanation of and information concerning withdrawal from the research project.

Note: All parties signing the consent section must date their own signature.

End of document

Participant Information Sheet/Consent Form [Date]
(Note: Site specific footers may be required per instructions on page ii]

Page 1 of 1

Safety Screening –self screening

The following safety self-screening questions are utilised to safeguard you and everyone else participating in the Mindfulness and Resilience Pilot Program. This is to ensure that your safety and that of others is paramount to this pilot program. Thank you for your understanding.

Instructions:

1. Please read the questions 1-11 carefully in the next section below.

2. YOU DO NOT NEED TO SUBMIT THE ANSWERS TO THESE QUESTIONS IN ANY WAY TO THE RESEARCH TEAM – THEY ARE FOR SELF-SCREENING PURPOSES ONLY.

3. If the answer to any of the questions 1-11 below is YES –this means that unfortunately you are ineligible to join this pilot group at this stage. Thank you for your interest and there is nothing more that you need to do.

4. If the answer to ALL of the questions below are NO, then you are eligible to join this pilot program, please proceed with joining by reading the participant information sheet and then signing the consent form if you are happy to do so.

Screening Questions

1. Are there current stressors in your life which you feel you are not adequately able to cope with on your own?

   {consider the following: health, relationships, work, COVID19, caring duties, finances, job security for example}?

2. Are there experiences from your past that are still causing you high levels of stress and anxiety?

3. Have you ever suffered from moderate to severe depression?

4. Do you have a history of trauma?

5. If you have had a history of trauma are you still experiencing symptoms that feel connected to this trauma?

6. Are you currently seeing a counsellor, psychologist or therapist and if so, do they know that you have applied for this pilot program?

7. Have you ever attempted to take your own life?

8. Are you currently taking medications for any psychological conditions?

9. Are there any other health considerations, physical ailments or chronic illness that you think might seriously impact your participation in this 6-week online pilot program?

10. Have you ever had a serious psychological negative reaction to a meditation, contemplative practice or mindfulness program/course before?

11. Is there anything else that may seriously negatively impact your participation, or your wellbeing in this 6-week program that you think the researcher should be aware of [physical, emotional, social, psychological]?

If you have answered yes to any of these questions above, at this moment unfortunately, you are ineligible for this pilot program. These safety screening questions have been informed by David Treleaven's (Treleaven, 2010, 2018) research in offering safe and trauma informed mindfulness practices to others. Your safety and the safety of others in this program are paramount.

However, I am hoping that perhaps there will be further opportunities for you to join this program in the future. Thank you for your interest and participation thus far. Meanwhile some recommended apps to try on a smart phone in the meantime are:

- 1 Giant mind
- Mindfulness coach
- Insight timer

If you answered NO to questions 1-11, please proceed with enrolling into the pilot program by reading the participant information sheet and then competing the consent form if you are happy to do so. Thank you.

End of document

Appendix F. FFMQ Questionnaires (Likert scales)

Five Facet Mindfulness Questionnaire (FFMQ)

Please rate each of the following statements with the number that best describes *your own opinion* of what is *generally true for you.*		Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
FFQM 1	When I'm walking, I deliberately notice the sensations of my body moving. (OBS)	1	2	3	4	5
FFQM 2	I'm good at finding words to describe my feelings. (D)	1	2	3	4	5
FFQM 3	I criticize myself for having irrational or inappropriate emotions. (NJ-R)	5	4	3	2	1
FFQM 4	I perceive my feelings and emotions without having to react to them. (NR)	1	2	3	4	5
FFQM 5	When I do things, my mind wanders off and I'm easily distracted. (AA-R)	5	4	3	2	1
FFQM 6	When I take a shower or bath, I stay alert to the sensations of water on my body. (OBS)	1	2	3	4	5
FFQM 7	I can easily put my beliefs, opinions, and expectations into words. (D)	1	2	3	4	5
FFQM 8	I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted. (AA-R)	5	4	3	2	1
FFQM 9	I watch my feelings without getting lost in them. (NR)	1	2	3	4	5
FFQM 10	I tell myself I shouldn't be feeling the way I'm feeling. (NJ-R)	5	4	3	2	1
FFQM 11	I notice how foods and drinks affect my thoughts, bodily sensations, and emotions. (OBS)	1	2	3	4	5
FFQM 12	It's hard for me to find the words to describe what I'm thinking. (D-R)	5	4	3	2	1
FFQM 13	I am easily distracted. (AA-R)	5	4	3	2	1
FFQM 14	I believe some of my thoughts are abnormal or bad and I shouldn't think that way. (NJ-R)	5	4	3	2	1
FFQM 15	I pay attention to sensations, such as the wind in my hair or sun on my face. (OBS)	1	2	3	4	5
FFQM 16	I have trouble thinking of the right words to express how I feel about things. (D-R)	5	4	3	2	1
FFQM 17	I make judgments about whether my thoughts are good or bad. (NJ-R)	5	4	3	2	1
FFQM 18	I find it difficult to stay focused on what's happening in the present. (AA-R)	5	4	3	2	1

		Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
FFQM 19	When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it. (NR)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 20	I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing. (OBS)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 21	In difficult situations, I can pause without immediately reacting. (NR)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 22	When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words. (D-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 23	It seems I am "running on automatic" without much awareness of what I'm doing. (AA-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 24	When I have distressing thoughts or images, I feel calm soon after. (NR)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 25	I tell myself that I shouldn't be thinking the way I'm thinking. (NJ-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 26	I notice the smells and aromas of things. (OBS)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 27	Even when I'm feeling terribly upset, I can find a way to put it into words. (D)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 28	I rush through activities without being really attentive to them. (AA-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 29	When I have distressing thoughts or images, I am able just to notice them without reacting. (NR)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 30	I think some of my emotions are bad or inappropriate and I shouldn't feel them. (NJ-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 31	I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow. (OBS)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 32	My natural tendency is to put my experiences into words. (D)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 33	When I have distressing thoughts or images, I just notice them and let them go. (NR)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 34	I do jobs or tasks automatically without being aware of what I'm doing. (AA-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 35	When I have distressing thoughts or images, I judge myself as good or bad depending what the thought or image is about. (NJ-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 36	I pay attention to how my emotions affect my thoughts and behavior. OBS)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

		Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true
FFQM 37	I can usually describe how I feel at the moment in considerable detail. (D)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
FFQM 38	I find myself doing things without paying attention. (AA-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
FFQM 39	I disapprove of myself when I have irrational ideas. (NJ-R)	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Scoring:
(Note: R = reverse-scored item)

Subscale Directions	Your Score TOTAL	Your score item Avg.
Observing: Sum items 1 + 6 + 11 + 15 + 20 + 26 + 31 + 36		
Describing: Sum items 2 + 7 + 12R + 16R + 22R + 27 + 32 + 37.		
Acting with Awareness: Sum items 5R + 8R + 13R + 18R + 23R + 28R + 34R + 38R.		
Nonjudging of inner experience: Sum items 3R + 10R + 14R + 17R + 25R + 30R + 35R + 39R.		
Nonreactivity to inner experience: Sum items 4 + 9 + 19 + 21 + 24 + 29 + 33.		
TOTAL FFMQ (add subscale scores)		

NOTE: Some researchers divide the total in each category by the number of items in that category to get an average category score. The Total FFMQ can be divided by 39 to get an average item score.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*(1), 27–45.

CD -RISC2

Connor-Davidson Resilience Scale 2 ®
(CD-RISC 2)

initials ☐☐☐   ID# ☐☐☐☐☐☐☐   date ☐☐ ☐☐·☐☐☐☐   visit ☐☐   age ☐☐

For each item, please mark an 'x' in the box below that best indicates how much you agree with the following statements as they apply to you over the last **month**. If a particular situation has not occurred recently, answer according to how you think you would have felt.

	not true at all (0)	rarely true (1)	sometimes true (2)	often true (3)	true nearly all the time (4)
1. I am able to adapt when changes occur.	☐	☐	☐	☐	☐
2. I tend to bounce back after illness, injury, or other hardships	☐	☐	☐	☐	☐

Add up your score for each column   0 + ___ + ___ + ___ + ___

Add each of the column totals to obtain CD-RISC-2 score = _____

Appendix H. UTS Human Research Ethics Committee approval

Dear Applicant

Thank you for your response to the Committee's comments for your project titled, "Mindfulness And Resilience Enhancement For Busy Higher Education Academics: An Action Research Study". The Committee agreed that this application now meets the requirements of the National Statement on Ethical Conduct in Human Research (2007) and has been approved on that basis. You are therefore authorised to commence activities as outlined in your application.

You are reminded that this letter constitutes ethics approval only. This research project must also be undertaken in accordance with all UTS policies and guidelines including the Research Management Policy (http://www.gsu.uts.edu.au/policies/research-management-policy.html).

Your approval number is UTS HREC REF NO. ETH19-3609.

Approval will be for a period of five (5) years from the date of this correspondence subject to the submission of annual progress reports.

The following standard conditions apply to your approval:

• Your approval number must be included in all participant material and advertisements. Any advertisements on Staff Connect without an approval number will be removed.

• The Principal Investigator will immediately report anything that might warrant review of ethical approval of the project to the Ethics Secretariat (Research.Ethics@uts.edu.au).

• The Principal Investigator will notify the UTS HREC of any event that requires a modification to the protocol or other project documents, and submit any required amendments prior to implementation. Instructions can be found at https://staff.uts.edu.au/topichub/Pages/Researching/Research%20Ethics%20and%20Integrity/Human%20research%20ethics/Post-approval/post-approval.aspx#tab2.

• The Principal Investigator will promptly report adverse events to the Ethics Secretariat (Research.Ethics@uts.edu.au). An adverse event is any event (anticipated or otherwise) that has a negative impact on participants, researchers or the reputation of the University. Adverse events can also include privacy breaches, loss of data and damage to property.

• The Principal Investigator will report to the UTS HREC annually and notify the HREC when the project is completed at all sites. The Principal Investigator will notify the UTS HREC of any plan to extend the duration of the project past the approval period listed above through the progress report.

• The Principal Investigator will obtain any additional approvals or authorisations as required (e.g. from other ethics committees, collaborating institutions, supporting organisations).

• The Principal Investigator will notify the UTS HREC of his or her inability to continue as Principal Investigator including the name of and contact information for a replacement.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term environmental effects, or research considered of national or international significance, importance, or controversy. If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

You should consider this your official letter of approval. If you require a hardcopy please contact Research.Ethics@uts.edu.au.

If you have any queries about your ethics approval, or require any amendments to your research in the future, please do not hesitate to contact Research.Ethics@uts.edu.au.

Yours sincerely,

A/Prof Beata Bajorek
Chairperson
UTS Human Research Ethics Committee
C/- Research Office
University of Technology Sydney
E: Research.Ethics@uts.edu.au

REF: E38

Appendix I. UTS Health and Medical Research Ethics Committee approval

Dear Applicant

Re: ETH20-5285 - "Mindfulness and Resilience Enhancement for Academics"

Thank you for your response to the Committee's comments for your project. The Committee agreed that this application now meets the requirements of the National Statement on Ethical Conduct in Human Research (2007) and has been approved on that basis. You are therefore authorised to commence activities as outlined in your application.

You are reminded that this letter constitutes ethics approval only. This research project must also be undertaken in accordance with all UTS policies and guidelines including the Research Management Policy.

Your approval number is UTS HREC REF NO. ETH20-5285.

Approval will be for a period of five (5) years from the date of this correspondence subject to the submission of annual progress reports.

The following standard conditions apply to your approval:
- Your approval number must be included in all participant material and advertisements. Any advertisements on Staff Connect without an approval number will be removed.
- The Principal Investigator will immediately report anything that might warrant review of ethical approval of the project to the Ethics Secretariat (Research.Ethics@uts.edu.au).
- The Principal Investigator will notify the UTS HREC of any event that requires a modification to the protocol or other project documents, and submit any required amendments prior to implementation. Instructions on how to submit an amendment application can be found here.
- The Principal Investigator will promptly report adverse events to the Ethics Secretariat. An adverse event is any event (anticipated or otherwise) that has a negative impact on participants, researchers or the reputation of the University. Adverse events can also include privacy breaches, loss of data and damage to property.
- The Principal Investigator will report to the UTS HREC annually and notify the HREC when the project is completed at all sites. The Principal Investigator will notify the UTS HREC of any plan to extend the duration of the project past the approval period listed above through the progress report.
- The Principal Investigator will obtain any additional approvals or authorisations as required (e.g. from other ethics committees, collaborating institutions, supporting organisations).
- The Principal Investigator will notify the UTS HREC of his or her inability to continue as Principal Investigator including the name of and contact information for a replacement.

This research must be undertaken in compliance with the Australian Code for the Responsible Conduct of Research and National Statement on Ethical Conduct in Human Research.

You should consider this your official letter of approval. If you require a hardcopy please contact the Ethics Secretariat.

If you have any queries about your ethics approval, or require any amendments to your research in the future, please don't hesitate to contact the Ethics Secretariat and quote the ethics application number (e.g. ETH20-xxxx) in all correspondence.

Yours sincerely,

Prof Meera Agar & Dr Tim Luckett

Chairpersons

UTS Health and Medical Research Ethics Committee

C/- Research Office University of Technology Sydney

E: Research.Ethics@uts.edu.au

Appendix J. Interview guide

	Possible question	JW rationale for asking
1	What are your thoughts on the challenges facing university Academics and managing stress and workloads?	*Understanding background situation in academia through their perspective*
2	Can you please tell me about your experience with mindfulness, resilience or professional wellbeing, either as personal practice or your teaching/informing/researching of it?	*Understanding their experience and background*
3	What do you think are some of the most significant things to be aware of in designing my intervention for academics?	*Gaining contextualisation insights*
4	How can I make the intervention resonate with academics? From your experience, how should I contextualise the intervention specifically for academics?	*How to build engagement of the participants into the MRBi*
5	In your experience, what specific mindfulness/resilience practices would best suit these academics do you think?	*Obtaining advice on relevant practices*
6	What would be one or two really key practices (mindfulness/resilience/wellbeing) that link to academic's work practices (please give examples).	*Obtaining advice on relevant practices and connecting to academic's work*
7	In your opinion, what would you advise about creating buy-in and engagement from the academics?	*Obtaining advice on how to seek engagement from participants*
8	What are some pitfalls to be aware of in offering/designing/facilitating a mindfulness/resilience intervention (program) for university academics?	*Asking what should be avoided in the MRBi*
9	In your experience what have you found to be most effective (either in your personal practice or in teaching/informing others) in mindfulness/ resilience/wellbeing?	*Asking for the most effective suggestions to include in the intervention*
10	In your opinion, how can we make the MRBi be practical and doable to undertake?	*Asking how to make it as practical an intervention as possible*
11	How can we get the participants to embody the practices?	*Enquiring how to make the practices embodied by the participants*
12	Is there anything else you'd like to add before I wrap up?	*Giving an opportunity to include any other useful information*
13	Who else would you recommend that I should approach to talk to?	*Asking for further contacts/useful people to contact for advice*

Appendix K. Handwritten notes during expert interview example

Appendix L. Completed working group feedback sheet example

AUDIO RECORDINGS FEEDBACK

e.g Content/ tone/ pacing/ relevancy/ rigour/
usefulness/ language use/ ease of use/

WEEK 2

WK2.

Recording 1

What was good:

What could improve/
My suggestions:

Move in/ move out
+ move back in
'macro' framing
of the guidance.

→ Time → how to adapt over time.
   as peoples practices and
   engagement happens.
→ Where is this being aimed with
   respect to experience,

   PD

→ Focus at beginning → what happened
   to feeling the 'knees', shoulder, arms
   + head'?
→ 2 minutes (?) into guidance it was
   noted the word 'begin' when it had
   already 'begun'

Recording 2

What was good:

What could improve/
My suggestions:

Background 'music'
winding down to
nil as progressed.

Focus on body

AIRFLOW + All
B ackground noise
S.
Importance
Interlude.
Research

Redefin.

Appendix M.   MRBi (v1) curriculum – drafted prior to Phase 1

V1.

Sample curriculum of the MRBi intervention:

A) Sample Formal Taught Practices.

Week #	Mindfulness practice theme for the intervention – FORMAL PRACTICE	Buddhist concepts/inherent wisdom	Resilience reflection 1 minute reflections
Week 1	Focused breathing exercise- 10 breaths Focused breathing exercise -1 minute Mindful counting breath exercise – 5 minutes Mindful listening (intro)	– Developing concentration – Non–striving – Non–judging	3 things I am grateful for.
Week 2	Focused breathing exercise 1 minute Focused breathing exercise 5 minutes Awareness of the breath Intro to the body scan.	– Increasing attention – Non–striving – Open monitoring of sensation (body and mind)	2 positive experiences that happened in the last 24 hours.
Week 3	Awareness of the senses –listening Awareness of the senses –touch Feel your feet exercise	– Open awareness practice	An engaging supportive relationship that I have in my life, and how this supports me.
Week 4	Awareness of the body – body scan Seated silent practice.	– Mind body connection	The positive insights from my mindfulness practice.
Week 5	Seated silent practice Body scan Mindful listening – sound scapes	– Mind body connection – Mindful Listening	A random act of kindness I have recently performed, or one I will do in the next 48 hours.
Week 6	Mindful looking practice Mindful walking practice	– Developing presence (in everyday life)	My own motto for developing resilience
Week 7	Mindful eating Awareness of emotional discomfort and troubling thoughts.	– Developing presence (in everyday life) – Attitudinal attention	A challenge I have faced in my like/ work life but have managed to overcome.
Week 8	Mindful gratitude Body scan Mindful breathing	– Loving kindness practice	How paying attention to cultivating mindfulness assists me in daily life.

B) Sample Informal Practices (At Home/Work Each Day).

Week #	Mindfulness practice theme for the intervention – Informal PRACTICE	Resilience reflection 1 minute reflections
Week 1	Focused breathing exercise -10 minutes + 1-minute listening to sounds around you. + Resilience exercise (see right)	3 things I am grateful for.
Week 2	Intro to the body scan -10 minutes + Resilience exercise (see right)	2 positive experiences that happened in the last 24 hours.
Week 3	Awareness of the senses –listening + Resilience exercise (see right)	An engaging supportive relationship that I have in my life, and how this supports me.
Week 4	Awareness of the body – body scan – 5 minutes + Seated silent practice -3 minutes + Resilience exercise (see right)	The positive insights from my mindfulness practice.
Week 5	Mindful listening – sound scapes + Resilience exercise (see right)	A random act of kindness I have recently performed, or one I will do in the next 48 hours.
Week 6	Mindful walking practice + Resilience exercise (see right)	My own motto for developing resilience
Week 7	Awareness of emotional discomfort and troubling thoughts. + Resilience exercise (see right)	A challenge I have faced in my like/ work life but have managed to overcome.
Week 8	Mindful gratitude & kindness -8 minutes + Seated silent practice -3 minutes + Resilience exercise (see right)	How paying attention to cultivating mindfulness assists me in daily life

270

Appendix N. MRBi (v2) curriculum – Phase 2 WG

Week no	Duration/time	Mindfulness practice theme – formal/informal practices	Contextualisation discussions required	Buddhist concepts/inherent wisdom + empirical research	*1 minute resilience reflections*	Empirical research + Buddhist concepts embedded + key messaging
1	60 mins Group session	**Depth at speed:** mindful focused breathing grounding exercise – **1 min** **Depth at speed:** Connecting with mindful breath exercise – **10 mins** **Depth at speed:** Mindful counting breath exercise – 5 mins **Depth at speed:** Mindful listening (intro)	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice	– Developing concentration – Non-striving – Nonjudgmental – Beginner's mind – Neuroscience benefits from mindfulness literature – Mindfulness enhances resilience literature	*3 things I am grateful for – 1 min*	– Non-striving – Nonjudgmental – Beginner's mind – Neuroscience benefits from mindfulness literature – Mindfulness enhances resilience literature
2	60 mins Group session	**Depth at speed:** mindful focused breathing grounding exercise – **1 min** **Depth at speed:** Five senses awareness practice – **10 mins**	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice	– Increasing attention – Non-striving – Open monitoring of sensation (body and mind) – Improved productivity literature	*2 positive experiences that happened in the last 24 hours – 1 min*	– Increasing attention – Non-striving – Beginner's mind – Improved productivity literature
3	60 mins Group session	**Depth at speed:** Mindful focused short body scan and resilience practice – **10 mins** Awareness of the senses – touch Feel your feet exercise	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice		*An engaging supportive relationship that I have in my life, and how this supports me – 1 min*	– Embodiment/bodily present moment awareness – Mind-body connection – Improved creative literature
4	60 mins Group session	**Depth at speed:** Open awareness practice – noticing your surroundings and resilience embedded practice and resilience practice – **10 mins**	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice		*The positive insights from my mindful practice – 1 min*	– Spacious (open) awareness – mindfulness practice to take in all stimuli – Improved decision-making literature

Week no	Duration/time	Mindfulness practice theme – formal/informal practices	Contextualisation discussions required	Buddhist concepts/inherent wisdom + empirical research	1 minute resilience reflections	Empirical research + Buddhist concepts embedded + key messaging
5	60 mins Group session	**Depth at speed:** mindful listening practice – **10 mins** Mindful listening – soundscapes	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice	− Listening and tuning into your surroundings/ environment − Mindful listening − Improved resilience literature	*A random act of kindness I have recently performed, or one I will do in the next 48 hours – **1 min***	− Reduce reactivity − Improved resilience literature
6	60 mins Group session	**Depth at speed:** longer open awareness practice – noticing your surroundings + resilience embedded practice – **10 mins** Mindful walking practice	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice	− Developing mindful presence (in everyday life) − Improved life satisfaction and increased happiness literature	*Forming your own motto for developing resilience – **1 min***	− Improved life satisfaction − Increased happiness literature
7	60 mins Group session	**Depth at speed:** Mindful focused short body scan and resilience practice – **10 mins** Mindful eating and drinking practice – **10 mins**	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice	− Developing presence (in everyday life) − Developing gratitude − Attitudinal attention − Increased insight literature	*A challenge I have faced in my life/work life but have managed to overcome – **1 min***	− Developing gratitude − Attitudinal attention − Increased insight literature
8	60 mins Group session	**Depth at speed:** mindful breathing **Depth at speed:** habit breaker (ABC) practice	How to recontextualise the mindfulness and resilience practices – **10 mins** for each practice	− Interrupting automatic pilot – becoming mindful/ increasing attention − Long-term beneficial effects of mindfulness meditation literature	*How paying attention to cultivating mindfulness assists me in daily life – **1 min***	− Interrupting automatic pilot – becoming mindful/ increasing attention − Long-term beneficial effects of mindfulness meditation literature

Appendix O.   MRBi (v3) online curriculum – Phase 3 PG

Week #	Session aim	Overarching theme	Teaching point / *Pertinent Foundation of Mindfulness	Taught practice in class [formal practices]	Audio -10 mins practice each day x 2	Instant mindfulness -2 min practice BSB practice	Resilience reflection
week 1	⇹Giving participants an easy, quick and *DEEP* MM&R experience & understanding of practicing	**Becoming mindful** Developing an awareness of the present moment. DEEP EXPERIENCE OF MINDFULNESS	Respect to traditional owners Master your mind **Mind gym –need for practice** **Being not doing** **NOTICING** *Non-striving. *Non judging	✛Intro to course and practice. ◆deep breathing to start ◆ Quick and deep experience of MM through listening, body, breath. **Finish with doing the audio practice they'll use all week**	**Deep mindfulness through** --listening -Your body -Your breath sounds Longer version of stop Notice Breath Notice body Notice sounds Notice thoughts ☺Practice at work/home by themselves	**BSB practice =** **Stop** **Deep Breaths** **Feel Body** **Listen Sounds** **Notice your thoughts –let them go** [2 min practice]	**Expert said** 'resilience lies within you' **Practise of mindfulness builds resilience In helping to master our minds** **Resilience model explained briefly**
week 2	⇹Deeping our practice of MMR	**Using our 5 senses to become mindful** Slowing reactivity and lessening automatic pilot. Observing our thoughts	*Snow globe metaphor* *Being not doing NOTICING (and not noticing is still noticing!!) *Non-striving. *Non judging Observing our thoughts Breaking automatic pilot *Always have this capacity to be mindful with us (by tapping into our senses) –it's the easiest way [no need for an app, phone]*	◆Insights from practice from group ◆deep breathing to start Using our 5 senses to become mindful practice Link to resilience –brief statement /positive thought exercise **Finish with doing the audio practice they'll use all week**	**Using the 5 senses to become mindful** Sound Touch Smell sight Taste	**BSB practice =** **Stop** **Deep Breaths** **Feel Body** **Listen Sounds** **Notice your thoughts –let them go** [2 min practice]	**Reflecting on 2 positive experiences in the last 24 hours** **Mindfulness promotes resilience by reducing excessive worry, anxious thoughts & habitual rumination (Bajaj & Pande, 2011, Shapiro, Brown & Biegel, 2007).**

Week #	Session aim	Overarching theme	Teaching point *Pertinent Foundation of Mindfulness	Taught practice in class [formal practices]	Audio -10 mins practice each day x 2	Instant mindfulness -2 min practice	Resilience reflection
week 3	⚘Embodying and widening our practice	**The mind and body (mindful) connection.**	Snow globe metaphor *Breaking automatic pilot Making the connection between our body and mind *Using our body to come into the present	◆Insights from practice from group ◆deep breathing to start ◆Mindful practice body scan [awareness of body and mind connection] Mindful walking Link to resilience-brief statement Mindful sitting [body scan in seat] **Finish with doing the audio practice they'll use all week**	◎ Body Scan listening practice	**BSB practice =** **Stop Deep Breaths Feel Body Listen Sounds Notice your thoughts –let them go** **[2 min practice]**	Reflect on a supportive relationship Possible option Give thanks for (gratitude) for what our body gives us [sight, sound, touch, taste, smell]
week 4	⚘Expressing mindful gratitude and its links to resiliency	**Mindful gratitude**	*Gratitude and well-being Snow globe metaphor	◆Insights from practice from group ◆deep breathing to start ◆Mindful practice —mindful drinking and gratitude Mindful eating –and gratitude Link to resilience –brief statement **Finish with doing the audio practice they'll use all week**	◎ Cultivating gratitude listening practice	**BSB practice =** **Stop Deep Breaths Feel Body Listen Sounds Notice your thoughts –let them go** **[2 min practice]**	3 things to be grateful for. Reflect on a random act of kindness I have recently performed or that I'll do in the next 48 hours Increased resilience reduces burnout (Bajaj & Pande, 2016 & Thompson, Arnkoff & Glass, 2011).

Week #	Session aim	Overarching theme	Teaching point *Pertinent Foundation of Mindfulness	Taught practice in class [formal practices]	Audio -10 mins practice each day x 2	Instant mindfulness -2 min practice	Resilience reflection
week 5	⚘Developing equanimity	**Being with the highs and lows/ Equanimity**	What we resist persists Embracing the good and bad and looking them in the eye *Developing equanimity *Snow globe metaphor*	◆Insights from practice from group ◆deep breathing to start ◆Mindful practice –resiliency – bouncing back [but bouncing forward] ◆Mindful practice –opening to equanimity & resilience **Finish with doing the audio practice they'll use all week**	Being with the highs and lows Dealing with difficult thoughts and emotions	BSB practice = Stop Deep Breaths Feel Body Listen Sounds Notice your thoughts –let them go [2 min practice]	Reflect on a challenge you have faced in your life or work but successfully managed to overcome. **Mindfulness and resilience practices** really just improve your overall productivity and it improves your headspace too. It just generally improves your health, it's just fabulous WSU academic.
week 6	⚘Anchoring our ongoing practice into the future	**Living mindfully –making a life practice**	Cumulative effect of Mindfulness Compound interest *Being present in the moment/ being present in our lives *Snow globe metaphor*	◆Insights from practice from group ◆deep breathing to start ◆Mindful practice –resiliency brief statement ◆ Embedding in our lives/living the practice –making MM easy /effortless **Finish with doing the audio practice they'll use all week**	◎ Open awareness practice 🕐Practice at work/home by themselves 🚶 Suggested work practice –open awareness practice / + with mindful walking	BSB practice = Stop Deep Breaths Feel Body Listen Sounds Notice your thoughts –let them go [2 min practice]	Reflect on the difference of 'paying attention to the present moment' in your life

275

References

Abenavoli, R. M., Jennings, P. A., Greenberg, M. T., Harris, A. R., & Katz, D. A. (2013). The protective effects of mindfulness against burnout among educators [Special Edition article]. *The Psychology of Education Review (Online)*, *37*(2), 57–69. https://doi.org/10.53841/bpsper.2013.37.2.57

Adams, W. C. (2015). Conducting semi-structured interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of practical program evaluation* (pp. 492–505). John Wiley & Sons, Inc. https://doi.org/10.1002/9781119171386.ch19

Adelman, C. (1993). Kurt Lewin and the origins of Action Research. *Educational Action Research*, *1*(1), 7–24. https://doi.org/10.1080/0965079930010102

Aggarwal, R., Deutsch, J. K., Medina, J., & Kothari, N. (2017). Resident wellness: An intervention to decrease burnout and increase resiliency and happiness. *MedEdPORTAL*, *13*, 10651. https://doi.org/10.15766/mep_2374-8265.10651

Aizik-Reebs, A., Shoham, A., & Bernstein, A. (2021). First, do no harm: An intensive experience sampling study of adverse effects to mindfulness training. *Behaviour Research and Therapy*, *145*, 103941–103941. https://doi.org/10.1016/j.brat.2021.103941

Allison, E. (2011). The resilient leader. *Educational Leadership*, *69*(4), 79–82.

Althammer, S. E., Reis, D., van der Beek, S., Beck, L., & Michel, A. (2021). A mindfulness intervention promoting work–life balance: How segmentation preference affects changes in detachment, well-being, and work–life balance. *Journal of Occupational and Organizational Psychology*, *94*(2), 282–308. https://doi.org/10.1111/joop.12346

Ameli, R., Sinaii, N., West, C. P., Luna, M. J., Panahi, S., Zoosman, M., Rusch, H. L., & Berger, A. (2020). Effect of a brief mindfulness-based program on stress in health care professionals at a US biomedical research hospital: A randomized clinical trial. *JAMA Network Open*, *3*(8), e2013424–e2013424. https://doi.org/10.1001/jamanetworkopen.2020.13424

Anālayo, B. (2016). Early Buddhist mindfulness and memory, the body, and pain. *Mindfulness*, *7*(6), 1271–1280. https://doi.org/10.1007/s12671-016-0573-1

Anālayo, B. (2020). The myth of McMindfulness. *Mindfulness*, *11*(2), 472–479. https://doi.org/10.1007/s12671-019-01264-x

Anderson, R., McKenzie, K., & Noone, S. (2019). Effects of a mindfulness-based stress reduction course on the psychological well-being of individuals with an intellectual disability. *Learning Disability Practice*, *22*(2), 20–25. https://doi.org/10.7748/ldp.2019.e1981

Anderson, T., & Farb, N. A. S. (2018). Personalising practice using preferences for meditation anchor modality. *Frontiers in Psychology*, *9*, 2521–2521. https://doi.org/10.3389/fpsyg.2018.02521

Arpaia, P., D'Errico, G., De Paolis, L. T., Moccaldi, N., & Nuccetelli, F. (2022). A narrative review of mindfulness-based interventions using virtual reality. *Mindfulness*, *13*(3), 556–571. https://doi.org/10.1007/s12671-021-01783-6

Arthur, L. (2009). From performativity to professionalism: Lecturers' responses to student feedback. *Teaching in Higher Education*, *14*(4), 441–454. https://doi.org/10.1080/13562510903050228

Askins, K., & Blazek, M. (2017). Feeling our way: Academia, emotions and a politics of care. *Social & Cultural Geography*, *18*(8), 1086–1105. https://doi.org/10.1080/14649365.2016.1240224

Baer, R., Crane, C., Miller, E., & Kuyken, W. (2019). Doing no harm in mindfulness-based programs: Conceptual issues and empirical findings. *Clinical Psychology Review*, *71*, 101–114. https://doi.org/10.1016/j.cpr.2019.01.001

Baer, R. A., Carmody, J., & Hunsinger, M. (2012). Weekly change in mindfulness and perceived stress in a mindfulness-based stress reduction program. *Journal of Clinical Psychology*, *68*(7), 755–765. https://doi.org/10.1002/jclp.21865

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment (Odessa, Fla.)*, *13*(1), 27–45. https://doi.org/10.1177/1073191105283504

Bajaj, B., & Pande, N. (2016). Mediating role of resilience in the impact of mindfulness on life satisfaction and affect as indices of subjective well-being. *Personality and Individual Differences*, *93*, 63–67. https://doi.org/10.1016/j.paid.2015.09.005

Baker, F. R. L., Baker, K. L., & Burrell, J. (2021). Introducing the skills-based model of personal resilience: Drawing on content and process factors to build resilience in the workplace. *Journal of Occupational and Organizational Psychology*, *94*(2), 458–481. https://doi.org/10.1111/joop.12340

Banerjee, M., Cavanagh, K., & Strauss, C. (2017). A qualitative study with healthcare staff exploring the facilitators and barriers to engaging in a self-help mindfulness-based intervention. *Mindfulness*, *8*(6), 1653–1664. https://doi.org/10.1007/s12671-017-0740-z

Banerjee, M., Cavanagh, K., & Strauss, C. (2018). Barriers to mindfulness: A Path Analytic model exploring the role of rumination and worry in predicting psychological and physical engagement in an online mindfulness-based intervention. *Mindfulness*, *9*(3), 980-992. https://doi.org/10.1007/s12671-017-0837-4

Barkhuizen, N., Rothmann, S., & van de Vijver, F. J. R. (2014). Burnout and work engagement of academics in higher education Institutions: Effects of dispositional optimism: Burnout and work engagement in higher education institutions. *Stress and Health*, *30*(4), 322–332. https://doi.org/10.1002/smi.2520

Basso, J. C., McHale, A., Ende, V., Oberlin, D. J., & Suzuki, W. A. (2019). Brief, daily meditation enhances attention, memory, mood, and emotional regulation in non-experienced meditators. *Behavioural Brain Research*, *356*, 208–220. https://doi.org/10.1016/j.bbr.2018.08.023

Bautista, T., Cash, T., Meyerhoefer, T., & Pipe, T. (2022). Equitable mindfulness: The practice of mindfulness for all. *Journal of Community Psychology*, *50*(7), 3141–3155. https://doi.org/10.1002/jcop.22821

Becker, M., Bartalotta, A., Morton, M., Helminen, E., Clawson, A., & Felver, J. (2020). The effects of mindfulness-based stress reduction in the higher education workplace: A pilot study. *Journal of Integrated Social Sciences*, *10*(1), 136–154. https://www.jiss.org/documents/volume_10/JISS%202020%2010(1)%20136-154%20Mindfulness.pdf

Behan, C. (2020). The benefits of meditation and mindfulness practices during times of crisis such as COVID-19. *Irish Journal of Psychological Medicine*, *37*(4), 256–258. https://doi.org/10.1017/ipm.2020.38

Berghoff, C. R., Wheeless, L. E., Ritzert, T. R., Wooley, C. M., & Forsyth, J. P. (2017). Mindfulness meditation adherence in a college sample: Comparison of a 10-min versus 20-min 2-week daily practice. *Mindfulness*, *8*(6), 1513–1521. https://doi.org/10.1007/s12671-017-0717-y

Berkovich-Ohana, A., Dor-Ziderman, Y., Glicksohn, J., & Goldstein, A. (2013). Alterations in the sense of time, space, and body in the mindfulness-trained brain: A neurophenomenologically-guided MEG study. *Frontiers in Psychology*, *4*, 912–912. https://doi.org/10.3389/fpsyg.2013.00912

Biggers, A., Spears, C. A., Sanders, K., Ong, J., Sharp, L. K., & Gerber, B. S. (2020). Promoting mindfulness in African American communities. *Mindfulness*, *11*(10), 2274–2282. https://doi.org/10.1007/s12671-020-01480-w

Birchinall, L., Spendlove, D., & Buck, R. (2019). In the moment: Does mindfulness hold the key to improving the resilience and wellbeing of pre-service teachers? *Teaching and Teacher Education*, *86*, 102919. https://doi.org/10.1016/j.tate.2019.102919

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology (New York, N.Y.)*, *11*(3), 230–241. https://doi.org/10.1093/clipsy.bph077

Black, A. (2015). *The little pocket book of mindfulness* (2nd ed.). CICO.

Bodenlos, J. S., Wells, S. Y., Noonan, M., & Mayrsohn, A. (2015). Facets of dispositional mindfulness and health among college students. *The Journal of Alternative and Complementary Medicine (New York, N.Y.)*, *21*(10), 645–652. https://doi.org/10.1089/acm.2014.0302

Bourbonnais, A., Ducharme, F., Landreville, P., Michaud, C., Gauthier, M.-A., & Lavallée, M.-H. (2020). An action research to optimize the well-being of older people in nursing homes: Challenges and strategies for implementing a complex intervention. *Journal of Applied Gerontology*, *39*(2), 119-128. https://doi.org/10.1177/0733464818762068

Brandmeyer, T., & Delorme, A. (2021). Meditation and the wandering mind: A theoretical framework of underlying neurocognitive mechanisms. *Perspectives on Psychological Science*, *16*(1), 39–66. https://doi.org/10.1177/1745691620917340

Brandsma, R. (2017). *The mindfulness teaching guide: Essential skills and competencies for teaching mindfulness-based interventions* (1st ed.). New Harbinger Publications.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Bravo, V., Hobach, D., & Basnet, S. (2019, April 5). *Comparisons of the effectiveness of mindfulness-based interventions and their study designs* [Poster]. 11th Annual Undergraduate Research Symposium, University of Wisconsin Milwaukee. https://dc.uwm.edu/uwsurca/2019/Posters/15/

Brazeau, G. A., Frenzel, J. E., & Prescott, W. A. (2020). Facilitating wellbeing in a turbulent time. *American Journal of Pharmaceutical Education*, *84*(6), 688–691. https://doi.org/10.5688/ajpe8154

Brewster, L., Jones, E., Priestley, M., Wilbraham, S. J., Spanner, L., & Hughes, G. (2022). 'Look after the staff and they would look after the students' cultures of wellbeing and mental health in the university setting. *Journal of Further and Higher Education*, *46*(4), 548–560. https://doi.org/10.1080/0309877X.2021.1986473

Bright, J., & Pokorny, H. (2013). Contemplative practices in higher education: Breathing heart and mindfulness into the staff and student experience. *HERDSA News*, *35*(1), 9–12.

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), 822–848. https://doi.org/10.1037/0022-3514.84.4.822

Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, *18*(4), 211–237. https://doi.org/10.1080/10478400701598298

Bull, F. C., Kreuter, M. W., & Scharff, D. P. (1999). Effects of tailored, personalized and general health messages on physical activity. *Patient Educ Couns*, *36*(2), 181–192. https://doi.org/10.1016/s0738-3991(98)00134-7

Bush, M. (2011). Mindfulness in higher education. *Contemporary Buddhism*, *12*(1), 183–197. https://doi.org/10.1080/14639947.2011.564838

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, *56*(3), 1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Campbell, K. H. (2013). A call to action: Why we need more practitioner research. *Democracy & Education*, *21*(2), 1–8, Article 7.

Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, *44*(4), 585–599. https://doi.org/10.1016/j.brat.2005.05.001

Carlson, L. E., Tamagawa, R., Stephen, J., Doll, R., Faris, P., Dirkse, D., & Speca, M. (2014). Tailoring mind-body therapies to individual needs: Patients' program preference and psychological traits as moderators of the effects of mindfulness-based cancer recovery and supportive-expressive therapy in distressed breast cancer survivors. *Journal of the National Cancer Institute. Monographs*, *2014*(50), 308–314. https://doi.org/10.1093/jncimonographs/lgu034

Carnegie, G. D., Guthrie, J., & Martin-Sardesai, A. (2022). Public universities and
impacts of COVID-19 in Australia: Risk disclosures and organisational change.
Accounting, Auditing & Accountability Journal, *35*(1), 61–73.
https://doi.org/10.1108/AAAJ-09-2020-4906

Cavanagh, K., Churchard, A., O'Hanlon, P., Mundy, T., Votolato, P., Jones, F., Gu, J., &
Strauss, C. (2018). A randomised controlled trial of a brief online mindfulness-
based intervention in a non-clinical population: Replication and extension.
Mindfulness, *9*(4), 1191–1205. https://doi.org/10.1007/s12671-017-0856-1

Chan, H., Mazzucchelli, T. G., & Rees, C. S. (2021). The battle-hardened academic: An
exploration of the resilience of university academics in the face of ongoing
criticism and rejection of their research. *Higher Education Research and
Development*, *40*(3), 446–460.
https://doi.org/10.1080/07294360.2020.1765743

Chapman, C., & Van Gordon, W. (2018). Effects of a brief online mindfulness
intervention on mindfulness, psychological distress and parenting stress in
preschool parents. *Mindfulness & Compassion*, *3*(2), 55–70.

Cheung, K. (2020). Defining health and religion: Mindfulness and Buddhism. *Religious
Studies Review*, *46*(3), 359–366. https://doi.org/10.1111/rsr.14712

Chinareva, S., Jones, J., Tumia, N., Kumpik, D., Shah, P., & Everitt, A. (2020, April 25–
30). *Lotus: Mediating mindful breathing* [Extended abstract]. CHI '20: CHI
Conference on Human Factors in Computing Systems, Honolulu, HI, USA.

Chmitorz, A., Kunzler, A., Helmreich, I., Tüscher, O., Kalisch, R., Kubiak, T., Wessa, M., &
Lieb, K. (2018). Intervention studies to foster resilience: A systematic review
and proposal for a resilience framework in future intervention studies. *Clinical
Psychology Review*, *59*, 78–100. https://doi.org/10.1016/j.cpr.2017.11.002

Choe, E. Y., Jorgensen, A., & Sheffield, D. (2021). Examining the effectiveness of
mindfulness practice in simulated and actual natural environments: Secondary
data analysis. *Urban Forestry & Urban Greening*, *66*, 127414.
https://doi.org/10.1016/j.ufug.2021.127414

Chowdhury, M. R. (2019)(2022). *The Five Facet Mindfulness Questionnaire (FFMQ)*.
Positive Psychology. Retrieved February 11, 2023 from
https://positivepsychology.com/five-facet-mindfulness-questionnaire-ffmq/

Chozen Bays, J. (2018). *Mindfulness on the go: Simple meditation practices you can do anywhere*. Shambhala.

Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, *26*(2), 120–123. https://uwe-repository.worktribe.com/preview/937606/Teaching%20.

Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, *12*(3), 297–298. https://doi.org/10.1080/17439760.2016.1262613

Clarkson, M., Heads, G., Hodgson, D., & Probst, H. (2019). Does the intervention of mindfulness reduce levels of burnout and compassion fatigue and increase resilience in pre-registration students? A pilot study. *Radiography (London, England. 1995)*, *25*(1), 4–9. https://doi.org/10.1016/j.radi.2018.08.003

Colgan, D. D., Christopher, M., Michael, P., & Wahbeh, H. (2016). The body scan and mindful breathing among veterans with PTSD: Type of intervention moderates the relationship between changes in mindfulness and post-treatment depression. *Mindfulness*, *7*(2), 372–383. https://doi.org/10.1007/s12671-015-0453-0

Colquhoun, H. L., Squires, J. E., Kolehmainen, N., Fraser, C., & Grimshaw, J. M. (2017). Methods for designing interventions to change healthcare professionals' behaviour: A systematic review. *Implementation Science: IS*, *12*(1), 1–11. https://doi.org/10.1186/s13012-017-0560-5

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, *18*(2), 76–82. https://doi.org/10.1002/da.10113

Coonan, E. (2022). From survival to self-care: Performative professionalism and the self in the neoliberal university. In N. Lemon (Ed.), *Healthy relationships in higher education* (1st ed., Vol. 1, pp. 145–158). Routledge. https://doi.org/10.4324/9781003144984-14

Cooper, D., Yap, K., & Batalha, L. (2018). Mindfulness-based interventions and their effects on emotional clarity: A systematic review and meta-analysis. *Journal of Affective Disorders*, *235*, 265–276. https://doi.org/10.1016/j.jad.2018.04.018

Corbera, E., Anguelovski, I., Honey-Rosés, J., & Ruiz-Mallén, I. (2020). Academia in the time of COVID-19: Towards an ethics of care. *Planning Theory & Practice*, *21*(2), 191–199. https://doi.org/10.1080/14649357.2020.1757891

Correia, H. (2020). BRiTE Mind: Introducing mindfulness to cultivate personal and professional resilience in teachers. In C. F. Mansfield (Ed.), *Cultivating teacher resilience: International approaches, applications and impact* (pp. 159–174). Springer Singapore. https://doi.org/10.1007/978-981-15-5963-1_10

Costello, P. J. M. (2011). What is action research? In P. J. M. Costello (Ed.), *Effective action research: Developing reflective thinking and practice* (2nd ed., pp. 3–14). Continuum International Pub. Group.

Craig, P., Di Ruggiero, E., Frohlich, K. L., Mykhalovskiy, E., & White, M. (2018). *Taking account of context in population health intervention research: Guidance for producers, users and funders of research*. NIHR Journals Library. https://doi.org/10.3310/CIHR-NIHR-01

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: The new Medical Research Council guidance. *BMJ*, *337*, 979–983. https://doi.org/10.1136/bmj.a1655

Crane, C., & Williams, J. M. G. (2010). Factors associated with attrition from mindfulness-based cognitive therapy in patients with a history of suicidal depression. *Mindfulness*, *1*(1), 10–20. https://doi.org/10.1007/s12671-010-0003-8

Crane, R. S. (2008). The three minute breathing space. In R. Crane (Ed.), *Mindfulness-based cognitive therapy* (1st ed., pp. 143–148). Routledge. https://doi.org/10.4324/9781315627229-23

Crane, R. S., Bartley, T., Evans Karunavira, A., Sansom, S., Silverton, S., Soulsby, J., Williams, V., Kuyken, W., Williams, M., Yiangou, A., Fennell, M., Surawy, C., Eames, C., Fletcher, M., Hastings, R., Koerbel, L., & Octigan, K. (2021). *Mindfulness-Based Interventions: Teaching Assessment Criteria (MBI:TAC)* (3rd ed.). Bangor University. https://mbitac.bangor.ac.uk/documents/MBITACsummary0517.pdf

Crane, R. S., Brewer, J., Feldman, C., Kabat-Zinn, J., Santorelli, S., Williams, J. M. G., & Kuyken, W. (2017). What defines mindfulness-based programs? The warp and the weft. *Psychological Medicine*, *47*(6), 990–999. https://doi.org/10.1017/S0033291716003317

Crane, R. S., & Hecht, F. M. (2018). Intervention integrity in mindfulness-based research. *Mindfulness*, *9*(5), 1370–1380. https://doi.org/10.1007/s12671-018-0886-3

Crane, R. S., Hecht, F. M., Brewer, J., Griffith, G. M., Hartogensis, W., Koerbel, L., Moran, P., Sansom, S., Yiangou, A., & Kuyken, W. (2020). Can we agree what skilled mindfulness-based teaching looks like? Lessons from studying the MBI:TAC. *Global Advances in Health and Medicine*, *9*, 2164956120964733–2164956120964733. https://doi.org/10.1177/2164956120964733

Crane, R. S., & Kuyken, W. (2019). The Mindfulness-Based Interventions: Teaching Assessment Criteria (MBI:TAC): Reflections on implementation and development. *Current Opinion in Psychology*, *28*, 6–10. https://doi.org/10.1016/j.copsyc.2018.10.004

Creswell, J. D. (2017). Mindfulness interventions. *Annual Review of Psychology*, *68*, 491–516. https://doi.org/10.1146/annurev-psych-042716-051139

Creswell, J. D., Pacilio, L. E., Lindsay, E. K., & Brown, K. W. (2014). Brief mindfulness meditation training alters psychological and neuroendocrine responses to social evaluative stress. *Psychoneuroendocrinology*, *44*, 1–12. https://doi.org/10.1016/j.psyneuen.2014.02.007

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications Inc.

Darbishire, P., Isaacs, A. N., & Miller, M. L. (2020). Faculty burnout in pharmacy education. *American Journal of Pharmaceutical Education*, *84*(7), 881–883. https://doi.org/10.5688/ajpe7925

Davoudi, S., Shaw, K., Haider, L. J., Quinlan, A. E., Peterson, G. D., Wilkinson, C., Fünfgeld, H., McEvoy, D., Porter, L., & Davoudi, S. (2012). Interface. Applying the resilience perspective to planning: Critical thoughts from theory and practice. *Planning Theory & Practice*, *13*(2), 299–333. https://doi.org/10.1080/14649357.2012.677124

Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, *30*(5), 479–495. https://doi.org/10.1016/j.cpr.2010.03.003

de Allicon, K. (2020). A mindfulness toolkit to optimise incident management and business continuity exercises. *Journal of Business Continuity & Emergency Planning*, *13*(3), 220–229. https://doi.org/10.69554/QOOU5540

de Bruin, E. I., Meppelink, R., & Bögels, S. M. (2015). Mindfulness in higher education: Awareness and attention in university students increase during and after participation in a mindfulness curriculum course. *Mindfulness*, *6*(5), 1137–1142. https://doi.org/10.1007/s12671-014-0364-5

de los Reyes, E. J., Blannin, J., Cohrssen, C., & Mahat, M. (2022). Resilience of higher education academics in the time of 21st century pandemics: A narrative review. *Journal of Higher Education Policy and Management*, *44*(1), 39–56. https://doi.org/10.1080/1360080X.2021.1989736

de Vibe, M., Solhaug, I., Rosenvinge, J. H., Tyssen, R., Hanley, A., & Garland, E. (2018). Six-year positive effects of a mindfulness-based intervention on mindfulness, coping and well-being in medical and psychology students: Results from a randomized controlled trial. *PloS ONE*, *13*(4), e0196053–e0196053. https://doi.org/10.1371/journal.pone.0196053

Department of Education. (2024). *Australian Universities Accord: Interim report*. Australian Government. https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report

Dick, B. (2015). Reflections on the SAGE Encyclopedia of Action Research and what it says about action research and its methodologies. *Action Research (London, England)*, *13*(4), 431–444. https://doi.org/10.1177/1476750315573593

Dick, B., Stringer, E., & Huxham, C. (2009). Theory in action research: Introduction. *Action Research (London, England)*, *7*(1), 5–12. https://doi.org/10.1177/1476750308099594

Dinu, L. M., Dommett, E. J., Baykoca, A., Mehta, K. J., Everett, S., Foster, J. L. H., & Byrom, N. C. (2021). A case study investigating mental wellbeing of university academics during the COVID-19 pandemic. *Education Sciences*, *11*(702). https://doi.org/10.3390/educsci11110702

Duane, A., Casimir, A. E., Mims, L. C., Kaler-Jones, C., & Simmons, D. (2021). Beyond deep breathing: A new vision for equitable, culturally responsive, and trauma-informed mindfulness practice. *Middle School Journal*, *52*(3), 4–14. https://doi.org/10.1080/00940771.2021.1893593

Duggleby, W., & Williams, A. (2016). Methodological and epistemological considerations in utilizing qualitative inquiry to develop interventions. *Qualitative Health Research*, *26*(2), 147–153. https://doi.org/10.1177/1049732315590403

Egeland, B., Carlson, E., & Sroufe, L. A. (1993). Resilience as process. *Development and Psychopathology*, *5*(4), 517–528.

Eliuk, K., & Chorney, D. (2017). Calming the monkey mind. *International Journal of Higher Education*, *6*(2), 1–7. https://doi.org/10.5430/ijhe.v6n2p1

Ergas, O., Hadar, L. L., Albelda, N., & Levit-Binnun, N. (2018). Contemplative neuroscience as a gateway to mindfulness: Findings from an educationally framed teacher learning Program. *Mindfulness*, *9*(6), 1723–1735. https://doi.org/10.1007/s12671-018-0913-4

Fernandez, A., Howse, E., Rubio-Valera, M., Thorncraft, K., Noone, J., Luu, X., Veness, B., Leech, M., Llewellyn, G., & Salvador-Carulla, L. (2016). Setting-based interventions to promote mental health at the university: A systematic review. *International Journal of Public Health*, *61*(7), 797–807. https://doi.org/10.1007/s00038-016-0846-4

Fetherston, C., Fetherston, A., Batt, S., Sully, M., & Wei, R. (2021). Wellbeing and work-life merge in Australian and UK academics. *Studies in Higher Education*, *46*(12), 2774–2788. https://doi.org/10.1080/03075079.2020.1828326

Fletcher, D., & Sarkar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist*, *18*(1), 12–23. https://doi.org/10.1027/1016-9040/a000124

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

Fonkoue, I. T., Hu, Y., Jones, T., Vemulapalli, M., Sprick, J. D., Rothbaum, B., & Park, J. (2020). Eight weeks of device-guided slow breathing decreases sympathetic nervous reactivity to stress in posttraumatic stress disorder. *American Journal of Physiology. Regulatory, Integrative and Comparative Physiology*, *319*(4), R466–R475. https://doi.org/10.1152/ajpregu.00079.2020

Forner, C. C. (2017). *Dissociation, mindfulness, and creative meditations: Trauma-informed practices to facilitate growth* (1 ed.). Routledge. https://doi.org/10.4324/9781315734439

Frank, J. L., Reibel, D., Broderick, P., Cantrell, T., & Metz, S. (2015). The effectiveness of mindfulness-based stress reduction on educator stress and well-being: Results from a pilot study. *Mindfulness*, *6*(2), 208–216. https://doi.org/10.1007/s12671-013-0246-2

Fraser, M. W., & Galinsky, M. J. (2010). Steps in intervention research: Designing and developing social programs. *Research on Social Work Practice*, *20*(5), 459–466. https://doi.org/10.1177/1049731509358424

Fridhandler, B. M. (1986). Conceptual note on state, trait, and the state-trait distinction. *Journal of Personality and Social Psychology*, *50*(1), 169–174. https://doi.org/10.1037/0022-3514.50.1.169

Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A., Lathia, N., Howarth, E., & Jones, P. B. (2018). A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): A pragmatic randomised controlled trial. *The Lancet. Public Health*, *3*(2), e72–e81. https://doi.org/10.1016/S2468-2667(17)30231-1

Galli, N., & Vealey, R. S. (2008). "Bouncing back" from adversity: Athletes' experiences of resilience. *The Sport Psychologist*, *22*(3), 316–335. https://doi.org/10.1123/tsp.22.3.316

Gardner, P., & Grose, J. (2015). Mindfulness in the academy – Transforming our work and ourselves 'one moment at a time' *Collected Essays on Learning and Teaching*, *8*, 35–46. https://doi.org/10.22329/celt.v8i0.4252

Garner, P. W., Bender, S. L., & Fedor, M. (2018). Mindfulness-based SEL programming to increase preservice teachers' mindfulness and emotional competence. *Psychology in the Schools*, *55*(4), 377–390. https://doi.org/10.1002/pits.22114

Gause, R., & Coholic, D. (2010). Mindfulness-based practices as a holistic philosophy and method. *Currents: New Scholarship in the Human Services*, *9*(2).

Gereluk, D. (2018). Flourishing and well-being in the academy: A capabilities approach. *Philosophical Inquiry in Education*, *25*(2), 171–187.

Giurge, L. M., Whillans, A. V., & West, C. (2020). Why time poverty matters for individuals, organisations and nations. *Nature Human Behaviour*, *4*(10), 993–1003. https://doi.org/10.1038/s41562-020-0920-z

Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). Mindfulness at work. In A. Joshi, H. Liao, & J. J. Martocchio (Eds.), *Research in personnel and human resources management* (Vol. 30, pp. 115–157). Emerald Group Publishing Limited. https://doi.org/10.1108/S0742-7301(2011)0000030005

Godara, M., Silveira, S., Matthäus, H., Heim, C., Voelkle, M., Hecht, M., Binder, E. B., & Singer, T. (2021). Investigating differential effects of socio-emotional and mindfulness-based online interventions on mental health, resilience and social capacities during the COVID-19 pandemic: The study protocol. *PloS ONE*, *16*(11), e0256323–e0256323. https://doi.org/10.1371/journal.pone.0256323

Goddard, T., & Kenny, M. A. (2016). Teaching in Australia. In D. McCown, D. Reibel, & M. S. Micozzi (Eds.), *Resources for teaching mindfulness: An international handbook* (pp. 191–208). Springer.

Goldberg, S. B., Tucker, R. P., Greene, P. A., Simpson, T. L., Kearney, D. J., & Davidson, R. J. (2017). Is mindfulness research methodology improving over time? A systematic review. *PloS ONE*, *12*(10), e0187298–e0187298. https://doi.org/10.1371/journal.pone.0187298

Grant, C., & Clarke, C. (2020). Digital resilience: A competency framework for agile workers In C. Grant & E. Russell (Eds.), *Agile working and well-being in the digital age* (1st ed., pp. 117–130). Palgrave McMillan.

Grant, L., & Kinman, G. (2013). 'Bouncing back?' Personal representations of resilience of student and experienced social workers. *Practice*, *25*(5), 349–366. https://doi.org/10.1080/09503153.2013.860092

Greenberg, J., Braun, T. D., Schneider, M. L., Finkelstein-Fox, L., Conboy, L. A., Schifano, E. D., Park, C., & Lazar, S. W. (2018). Is less more? A randomized comparison of

home practice time in a mind-body program. *Behaviour Research and Therapy*,

    111, 52–56. https://doi.org/10.1016/j.brat.2018.10.003

Greene, R. R., Galambos, C., & Lee, Y. (2004). Resilience theory. *Journal of Human*

    Behavior in the Social Environment, *8*(4), 75–91.

    https://doi.org/10.1300/J137v08n04_05

Griffith, G. M., Bartley, T., & Crane, R. S. (2019). The Inside Out Group model: Teaching

    groups in mindfulness-based programs. *Mindfulness*, *10*(7), 1315–1327.

    https://doi.org/10.1007/s12671-019-1093-6

Gunatillake, R. (2018). *Mindfulness cards: Simple practices for everyday life*. Chronicle

    Books.

Hägglund, K., Kenttä, G., Thelwell, R., & Wagstaff, C. R. D. (2022). Mindful self-

    reflection to support sustainable high-performance coaching: A process

    evaluation of a novel method development in elite sport. *Journal of Applied*

    Sport Psychology, *34*(6), 1125–1148.

    https://doi.org/10.1080/10413200.2021.1925782

Hanh, T. N. (1991). *Peace is every step: The path of mindfulness in everyday life*.

    Bantam.

Harris, K. I. (2017). A teacher's journey to mindfulness: Opportunities for joy, hope,

    and compassion. *Childhood Education*, *93*(2), 119–127.

    https://doi.org/10.1080/00094056.2017.1300490

Hassard, J., Teoh, K. R. H., Visockaite, G., Dewe, P., Cox, T., & Chen, P. Y. (2018). The

    cost of work-related stress to society: A systematic review. *Journal of*

    Occupational Health Psychology, *23*(1), 1–17.

    https://doi.org/10.1037/ocp0000069

Hassed, C. (2021). Mindfulness: Is It Buddhist or universal? *The Humanistic*

    Psychologist, *49*(1), 72–88. https://doi.org/10.1037/hum0000169

Hatfield, M. K., Ashcroft, E., Maguire, S., Kershaw, L., & Ciccarelli, M. (2023). "Stop and

    just breathe for a minute": Perspectives of children on the Autism Spectrum

    and their caregivers on a Mindfulness Group. *Journal of Autism and*

    Developmental Disorders, *53*(9), 3394–3405. https://doi.org/10.1007/s10803-

    022-05542-x

Heath, G., Cooke, R., & Cameron, E. (2015). A theory-based approach for developing interventions to change patient behaviours: A medication adherence example from paediatric secondary care. *Healthcare (Basel)*, *3*(4), 1228–1242. https://doi.org/10.3390/healthcare3041228

Hegney, D., Tsai, L., Craigie, M., Crawford, C., Jay, S., & Rees, C. (2021). Experiences of university employees of the impact of a mindful self-care and resiliency program on their well-being. *Higher Education Research & Development*, *40*(3), 524–537. https://doi.org/10.1080/07294360.2020.1764508

Helmreich, I., Kunzler, A., Chmitorz, A., König, J., Binder, H., Wessa, M., & Lieb, K. (2017). Psychological interventions for resilience enhancement in adults. *Cochrane Database of Systematic Reviews*, *2017*(2), Art. No.: CD012527. https://doi.org/10.1002/14651858.CD012527

Horan, K. A., & Taylor, M. B. (2018). Mindfulness and self-compassion as tools in health behavior change: An evaluation of a workplace intervention pilot study. *Journal of Contextual Behavioral Science*, *8*, 8–16. https://doi.org/10.1016/j.jcbs.2018.02.003

Howarth, A., Smith, J. G., Perkins-Porras, L., & Ussher, M. (2019). Effects of brief mindfulness-based interventions on health-related outcomes: A systematic review. *Mindfulness*, *10*(10), 1957–1968. https://doi.org/10.1007/s12671-019-01163-1

Huberty, J., Green, J., Glissmann, C., Larkey, L., Puzia, M., & Lee, C. (2019). Efficacy of the mindfulness meditation mobile app "Calm" to reduce stress among college students: Randomized controlled trial. *JMIR mHealth and uHealth*, *7*(6), e14273–e14273. https://doi.org/10.2196/14273

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

Hunt, C. A., Hoffman, M. A., Mohr, J. J., & Williams, A.-l. (2020). Assessing perceived barriers to meditation: The Determinants of Meditation Practice Inventory-Revised (DMPI-R). *Mindfulness*, *11*(5), 1139–1149. https://doi.org/10.1007/s12671-020-01308-7

Hunter, L. (2016). Making time and space: The impact of mindfulness training on nursing and midwifery practice. A critical interpretative synthesis. *Journal of Clinical Nursing*, *25*(7–8), 918–929. https://doi.org/10.1111/jocn.13164

Husbands, M., & Prescott, J. (2023). Wellbeing and pedagogical role of higher education academics in the COVID-19 pandemic: A systematized review. *A Life in the Day*, *27*(1), 20–36. https://doi.org/10.1108/MHSI-09-2022-0065

Husgafvel, V. (2018). The 'Universal Dharma Foundation' of mindfulness-based stress reduction: Non-duality and Mahāyāna Buddhist influences in the work of Jon Kabat-Zinn. *Contemporary Buddhism*, *19*(2), 275–326. https://doi.org/10.1080/14639947.2018.1572329

Hwang, Y.-S., Bartlett, B., Greben, M., & Hand, K. (2017). A systematic review of mindfulness interventions for in-service teachers: A tool to enhance teacher wellbeing and performance. *Teaching and Teacher Education*, *64*, 26–42. https://doi.org/10.1016/j.tate.2017.01.015

Hyland, T. (2014). Mindfulness-based interventions and the affective domain of education. *Educational Studies*, *40*(3), 277–291. https://doi.org/10.1080/03055698.2014.889596

Ingram, C. M., Breen, A. V., & van Rhijn, T. (2019). Teaching for well-being? Introducing mindfulness in an undergraduate course. *Journal of Further and Higher Education*, *43*(6), 814–825. https://doi.org/10.1080/0309877X.2017.1409343

Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing*, *60*(1), 1–9. https://doi.org/10.1111/j.1365-2648.2007.04412.x

Jackson, K. (2019). *Resilience at work: Practical tools for career success* (1st ed.). Routledge. https://doi.org/10.4324/9780203729038

Jamieson, S. D., & Tuckey, M. R. (2017). Mindfulness interventions in the workplace: A critique of the current state of the literature. *Journal of Occupational Health Psychology*, *22*(2), 180–193. https://doi.org/10.1037/ocp0000048

Jarvis, L., Wallace, T., Morris, J. T., & Caves, K. (2020). Smart Home Stress Assist: A real-time intervention for PTSD. *Journal on Technology and Persons with Disabilities*, 40–52.

Jayawardene, W. P. M. D. P., Lohrmann, D. K. P., Erbe, R. G. M. S., & Torabi, M. R. P. (2017). Effects of preventive online mindfulness interventions on stress and mindfulness: A meta-analysis of randomized controlled trials. *Preventive Medicine Reports*, *5*(C), 150–159. https://doi.org/10.1016/j.pmedr.2016.11.013

Jayman, M., Glazzard, J., & Rose, A. (2022). Tipping point: The staff wellbeing crisis in higher education. *Frontiers in Education*, *7*, 1–7. https://doi.org/10.3389/feduc.2022.929335

Jennings, P. A. (2016). CARE for teachers: A mindfulness-based approach to promoting teachers' social and emotional competence and well-being. In K. A. Schonert-Reichl & R. W. Roeser (Eds.), *Handbook of mindfulness in education: Integrating theory and research into practice* (pp. 133–148). Springer-Verlag Publishing/Springer Nature. https://doi.org/10.1007/978-1-4939-3506-2_9

Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., Rasheed, D., DeWeese, A., DeMauro, A. A., Cham, H., & Greenberg, M. T. (2017). Impacts of the CARE for Teachers program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology*, *109*(7), 1010–1028. https://doi.org/10.1037/edu0000187

Johnson, S. J., Willis, S. M., & Evans, J. (2019). An examination of stressors, strain, and resilience in academic and non-academic U.K. university job roles. *International Journal of Stress Management*, *26*(2), 162–172. https://doi.org/10.1037/str0000096

Joyce, S., Shand, F., Tighe, J., Laurent, S. J., Bryant, R. A., & Harvey, S. B. (2018). Road to resilience: A systematic review and meta-analysis of resilience training programmes and interventions. *BMJ Open*, *8*(6), e017858–e017858. https://doi.org/10.1136/bmjopen-2017-017858

Juberg, M., Spencer, S. D., Martin, T. J., Vibell, J., da Costa Ferro, A., Kam, B., & Masuda, A. (2019). A mindfulness-based intervention for college students, faculty, and staff: A preliminary investigation. *Clinical Case Studies*, *18*(3), 185–199. https://doi.org/10.1177/1534650119836166

Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Piatkus.

Kabat-Zinn, J. (1996). Mindfulness meditation: What it is, what it isn't, and its role in health care and medicine. In Y. Haruki, Y. Ishii, & M. Suzuki (Eds.), *Comparative and psychological study on meditation*. Eburon.

Kabat-Zinn, J. (2001). *Mindfulness meditation for everyday life*. Piatkus.

Kabat-Zinn, J. (2003). 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. (2004). *Wherever you go, there you are: Mindfulness meditation for everyday life*. Piatkus. (1994)

Kabat-Zinn, J. (2011). Some reflections on the origins of MBSR, skillful means, and the trouble with maps. *Contemporary Buddhism*, *12*(1), 281–306. https://doi.org/10.1080/14639947.2011.564844

Kabat-Zinn, J. (2015). Mindfulness for beginners. *Journal of Collective Bargaining in the Academy*, *0*(Article 24). https://doi.org/10.58188/1941-8043.1544

Kabat-Zinn, J. (2018). *Falling awake: How to practice mindfulness in everyday life*.

Kabat-Zinn, J. (2019). Foreword: Seeds of a necessary global renaissance in the making: The refining of psychology's understanding of the nature of mind, self, and embodiment through the lens of mindfulness and its origins at a key inflection point for the species. *Current Opinion in Psychology*, *28*, xi–xvii. https://doi.org/10.1016/j.copsyc.2019.02.005

Kakoschke, N., Hassed, C., Chambers, R., & Lee, K. (2021). The importance of formal versus informal mindfulness practice for enhancing psychological wellbeing and study engagement in a medical student cohort with a 5-week mindfulness-based lifestyle program. *PloS ONE*, *16*(10), e0258999. https://doi.org/10.1371/journal.pone.0258999

Kangas-Dick, K., & O'Shaughnessy, E. (2020). Interventions that promote resilience among teachers: A systematic review of the literature. *International Journal of School & Educational Psychology*, *8*(2), 131–146. https://doi.org/10.1080/21683603.2020.1734125

Kelly, A., & Garland, E. L. (2016). Trauma-informed mindfulness-based stress reduction for female survivors of interpersonal violence: Results from a Stage I RCT.

Journal of Clinical Psychology, *72*(4), 311–328.
https://doi.org/10.1002/jclp.22273

Kelly, C. (2017). Stress in the higher education sector: Causes and yoga-mindfulness interventions. *Journal of Yoga and Physiotherapy*, *3*(3), 1–14.
https://doi.org/10.19080/JYP.2017.03.555613

Kennedy, D. P., Haley, A., & Evans, R. (2023). Design of a mindfulness-based intervention to support teachers' emotional regulation behaviors. *Current Psychology*, *42*(18), 15674–15687. https://doi.org/10.1007/s12144-022-02696-w

Khoury, B., Knäuper, B., Pagnini, F., Trent, N., Chiesa, A., & Carrière, K. (2017). Embodied mindfulness. *Mindfulness*, *8*(5), 1160–1171.
https://doi.org/10.1007/s12671-017-0700-7

Khoury, B., Lecomte, T., Fortin, G., Masse, M., Therien, P., Bouchard, V., Chapleau, M.-A., Paquin, K., & Hofmann, S. G. (2013). Mindfulness-based therapy: A comprehensive meta-analysis. *Clinical Psychology Review*, *33*(6), 763–771.
https://doi.org/10.1016/j.cpr.2013.05.005

Kiken, L. G., Garland, E. L., Bluth, K., Palsson, O. S., & Gaylord, S. A. (2015). From a state to a trait: Trajectories of state mindfulness in meditation during intervention predict changes in trait mindfulness. *Personality and Individual Differences*, *81*, 41–46. https://doi.org/10.1016/j.paid.2014.12.044

Kim, S., Crooks, C. V., Bax, K., & Shokoohi, M. (2021). Impact of trauma-informed training and mindfulness-based social–emotional learning program on teacher attitudes and burnout: A mixed-methods study. *School Mental Health*, *13*(1), 55–68. https://doi.org/10.1007/s12310-020-09406-6

Kinman, G., & Johnson, S. (2019). Special section on well-being in academic employees. *International Journal of Stress Management*, *26*(2), 159–161.
https://doi.org/10.1037/str0000131

Kinman, G., & Jones, F. (2008). A life beyond work? Job demands, work-life balance, and wellbeing in UK academics. *Journal of Human Behavior in the Social Environment*, *17*(1-2), 41–60. https://doi.org/10.1080/10911350802165478

Kinman, G., & Wray, S. (2014). *Taking its toll: Rising stress levels in further education. UCU Stress Survey 2014* [Report]. University and College Union.

https://www.ucu.org.uk/media/7264/UCU-stress-survey-2014/pdf/ucu_festressreport14.pdf

Klingbeil, D. A., & Renshaw, T. L. (2018). Mindfulness-based interventions for teachers: A meta-analysis of the emerging evidence base. *School Psychology Quarterly*, *33*(4), 501–511. https://doi.org/10.1037/spq0000291

Koncz, R., Wolfenden, F., Hassed, C., Chambers, R., Cohen, J., & Glozier, N. (2016). Mindfulness-based stress release program for university employees: A pilot, waitlist-controlled trial and implementation replication. *Journal of Occupational and Environmental Medicine*, *58*(10), 1021–1027. https://doi.org/10.1097/JOM.0000000000000856

Kopel, J., Hier, D., & Thomas, P. (2019). Electronic health records: Is mindfulness the solution? *Proceedings – Baylor University. Medical Center*, *32*(3), 459–461. https://doi.org/10.1080/08998280.2019.1588839

Korkmaz, M., Yucel, A. S., & Karta, N. (2015). An examination of the occupational burnout levels of academic staff. *Advances in Environmental Biology*, *9*(18), 46–53. https://www.researchgate.net/publication/332553158_An_examination_of_the_occupational_burnout_levels_of_academic_staff

Kossek, E. E., & Ollier-Malaterre, A. (2020). Desperately seeking sustainable careers: Redesigning professional jobs for the collaborative crafting of reduced-load work. *Journal of Vocational Behavior*, *117*, 103315. https://doi.org/10.1016/j.jvb.2019.06.003

Krägeloh, C. U. (2016). Importance of morality in mindfulness practice. *Counseling and Values*, *61*(1), 97–110. https://doi.org/10.1002/cvj.12028

Kreuter, M. W., & Skinner, C. S. (2000). Tailoring: What's in a name? *Health Education Research*, *15*(1), 1–4. https://doi.org/10.1093/her/15.1.1

Kriakous, S. A., Elliott, K. A., Lamers, C., & Owen, R. (2021). The effectiveness of mindfulness-based stress reduction on the psychological functioning of healthcare professionals: A systematic review. *Mindfulness*, *12*(1), 1–28. https://doi.org/10.1007/s12671-020-01500-9

Lacková, L., Franiok, P., Hanuš, D., Burkovičová, R., & García, A. R. (2023). Promoting the development of resilience in university teachers through the practice of

mindfulness. *The New Educational Review*, *71*, 205–215.

https://czasopisma.marszalek.com.pl/images/pliki/tner/202301/tner7116.pdf

Lantieri, L., Kyse, E. N., Harnett, S., & Malkmus, C. (2011). Building inner resilience in teachers and students. In G. M. Reevy & E. Frydenberg (Eds.), *Personality, stress, and coping: Implications for education* (pp. 267–292). Information Age Publishing, Incorporated.

Lantieri, L., Nambiar, M., Harnett, S., & Kyse, E. N. (2016). Cultivating inner resilience in educators and students: The inner resilience program. In K. A. Schonert-Reichl & R. W. Roeser (Eds.), *Handbook of mindfulness in education: Integrating theory and research into practice* (pp. 119–132). Springer New York. https://doi.org/10.1007/978-1-4939-3506-2_8

Lanz, J. J. (2020). Evidence-based resilience intervention for nursing students: A randomized controlled pilot trial. *International Journal of Applied Positive Psychology*, *5*(3), 217–230. https://doi.org/10.1007/s41042-020-00034-8

Lau, M. A., Bishop, S. R., Segal, Z. V., Buis, T., Anderson, N. D., Carlson, L., Shapiro, S., Carmody, J., Abbey, S., & Devins, G. (2006). The Toronto mindfulness scale: Development and validation. *Journal of Clinical Psychology*, *62*(12), 1445–1467. https://doi.org/10.1002/jclp.20326

Laurie, J., & Blandford, A. (2016). Making time for mindfulness. *International Journal of Medical Informatics*, *96*, 38–50. https://doi.org/10.1016/j.ijmedinf.2016.02.010

Leggett, W. (2022). Can mindfulness really change the world? The political character of meditative practices. *Critical Policy Studies*, *16*(3), 261–278. https://doi.org/10.1080/19460171.2021.1932541

Lemon, N., & McDonough, S. (2018a). Mindfully living and working in the academy: Continuing the conversation. In N. Lemon & S. McDonough (Eds.), *Mindfulness in the academy: Practices and perspectives from scholars* (pp. 259–283). Springer Singapore Pte. Limited. https://doi.org/10.1007/978-981-13-2143-6_17

Lemon, N., & McDonough, S. (2018b). *Mindfulness in the academy: Practices and perspectives from scholars* (1st ed.). Springer Singapore. https://doi.org/10.1007/978-981-13-2143-6

Li, Z.-S., & Hasson, F. (2020). Resilience, stress, and psychological well-being in nursing students: A systematic review. *Nurse Education Today*, *90*, 104440–104440. https://doi.org/10.1016/j.nedt.2020.104440

Liu, X., Wang, Q., & Zhou, Z. (2022). The association between mindfulness and resilience among university students: A meta-analysis. *Sustainability*, *14*(16), 10405. https://doi.org/10.3390/su141610405

Lloyd, A., White, R., Eames, C., & Crane, R. (2018). The utility of home-practice in mindfulness-based group interventions: A systematic review. *Mindfulness*, *9*(3), 673–692. https://doi.org/10.1007/s12671-017-0813-z

Lomas, T., Cartwright, T., Edginton, T., & Ridge, D. (2015). A qualitative analysis of experiential challenges associated with meditation practice. *Mindfulness*, *6*(4), 848–860. https://doi.org/10.1007/s12671-014-0329-8

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. https://doi.org/10.1016/j.tate.2016.10.008

Lomas, T., Medina, J. C., Ivtzan, I., Rupprecht, S., & Eiroa-Orosa, F. J. (2019). Mindfulness-based interventions in the workplace: An inclusive systematic review and meta-analysis of their impact upon wellbeing. *The Journal of Positive Psychology*, *14*(5), 625–640. https://doi.org/10.1080/17439760.2018.1519588

London, T. (2009). Mindfulness in activism: Fighting for justice as a self-reflective emancipatory practice. In S. F. Hick (Ed.), *Mindfulness and social work* (pp. 188–201). Oxford University Press. https://www.researchgate.net/publication/375394063_Mindfulness_in_Activism_Fighting_for_Justice_as_a_Self-Reflective_Emancipatory_Practice

Long, R., Kennedy, M., Spink, K. M., & Lengua, L. J. (2023). Promoting college student and staff well-being through a mindfulness-based coping program. *OBM Integrative and Complementary Medicine*, *08*(03), 034. https://doi.org/10.21926/obm.icm.2303034

Loucks, E. B., Crane, R. S., Sanghvi, M. A., Montero-Marin, J., Proulx, J., Brewer, J. A., & Kuyken, W. (2022). Mindfulness-based programs: Why, when, and how to

adapt? *Global Advances in Health and Medicine*, *11*, 21649561211068805–21649561211068805. https://doi.org/10.1177/21649561211068805

Luken, M., & Sammons, A. (2016). Systematic review of mindfulness practice for reducing job burnout. *The American Journal of Occupational Therapy*, *70*(2), 7002250020p7002250021–7002250010. https://doi.org/10.5014/ajot.2016.016956

Luthar, S. S., Sawyer, J. A., & Brown, P. J. (2006). Conceptual issues in studies of resilience: Past, present, and future research. *Annals of the New York Academy of Sciences*, *1094*(1), 105–115. https://doi.org/10.1196/annals.1376.009

Lutovac, S., Kaasila, R., Komulainen, J., & Maikkola, M. (2017). University lecturers' emotional responses to and coping with student feedback: A Finnish case study. *European Journal of Psychology of Education*, *32*(2), 235–250. https://doi.org/10.1007/s10212-016-0301-1

Lymeus, F., Ahrling, M., Apelman, J., Florin, C. d. M., Nilsson, C., Vincenti, J., Zetterberg, A., Lindberg, P., & Hartig, T. (2020). Mindfulness-Based Restoration Skills Training (ReST) in a natural setting compared to conventional mindfulness training: Psychological functioning after a five-week course. *Frontiers in Psychology*, *11*, 1560–1560. https://doi.org/10.3389/fpsyg.2020.01560

Macaulay, R., Lee, K., Johnson, K., & Williams, K. (2022). Mindful engagement, psychological restoration, and connection with nature in constrained nature experiences. *Landscape and Urban Planning*, *217*, 104263. https://doi.org/10.1016/j.landurbplan.2021.104263

Macquarie Dictionary. (2024). Restoration. In *Macquarie Dictionary*.

Mantzios, M., & Egan, H. (2019). An experiential reflection of a mindful lecturer: Exploring enhancement of active learning in higher education. *Higher Education Pedagogies*, *4*(1), 304–306. https://doi.org/10.1080/23752696.2019.1629826

Mantzios, M., & Giannou, K. (2019). A real-world application of short mindfulness-based practices: A review and reflection of the literature and a practical proposition for an effortless mindful lifestyle. *American Journal of Lifestyle Medicine*, *13*(6), 520–525. https://doi.org/10.1177/1559827618772036

Marais, G., Lantheaume, S., Fiault, R., & Shankland, R. (2020). Mindfulness-based programs improve psychological flexibility, mental health, well-being and time

management in academics. *European Journal of Investigation in Health, Psychology and Education*, *10*, 1035–1050. https://doi.org/10.3390/ejihpe10040073

Marlowe, S. (2017). Supporting young children visited by big emotions: Mindfulness, emotion regulation, and neurobiology. In M.-N. Beaudoin & J. Duvall (Eds.), *Collaborative therapy and neurobiology* (1 ed., pp. 50–61). Routledge. https://doi.org/10.4324/9781315622484-5

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum: Qualitative Social Research*, *11*(3), 1–19.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *The American Psychologist*, *56*(3), 227–238. https://doi.org/10.1037/0003-066X.56.3.227

Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology*, *23*(2), 493–506. https://doi.org/10.1017/S0954579411000198

Masten, A. S. (2016). Resilience in the context of ambiguous loss: A commentary. *Journal of Family Theory & Review*, *8*(3), 287–293. https://doi.org/10.1111/jftr.12154

Mazorco Salas, J. E., & Cuenca Botero, A. C. (2020). A practical pilot experience of a mindfulness program in university teacher—Researcher training. *Human Arenas: An Interdisciplinary Journal of Psychology, Culture, and Meaning*, *3*(3), 360–367. https://doi.org/10.1007/s42087-019-00084-8

McCown, D., Reibel, D., & Micozzi, M. S. (2010). *Teaching mindfulness: A practical guide for clinicians and educators* (1st ed.). Springer Science. https://doi.org/10.1007/978-0-387-09484-7

McDermid, F., Peters, K., Daly, J., & Jackson, D. (2016). Developing resilience: Stories from novice nurse academics. *Nurse Education Today*, *38*, 29–35. https://doi.org/10.1016/j.nedt.2016.01.002

McDonough, S., & Lemon, N. (2018). Mindfulness in the academy: An examination of mindfulness perspectives. In N. Lemon & S. McDonough (Eds.), *Mindfulness

in the academy: Practices and perspectives from scholars (pp. 1–21). Springer Singapore Pte. Limited. https://doi.org/10.1007/978-981-13-2143-6_1

McGrath, L., Mullarkey, S., & Reavey, P. (2020). Building visual worlds: Using maps in qualitative psychological research on affect and emotion. *Qualitative Research in Psychology*, *17*(1), 75–97. https://doi.org/10.1080/14780887.2019.1577517

McManus, F., Surawy, C., Muse, K., Vazquez-Montes, M., & Williams, J. M. G. (2012). A randomized clinical trial of mindfulness-based cognitive therapy versus unrestricted services for health anxiety (hypochondriasis). *Journal of Consulting and Clinical Psychology*, *80*(5), 817–828. https://doi.org/10.1037/a0028782

McNiff, J. (2017). *Action research: All you need to know* (1st ed.). SAGE.

McNiff, J., & Whitehead, J. (2011). *All you need to know about action research* (2nd ed.). SAGE.

Meggs, J., & Chen, M. (2021). The effect of a brief-mindfulness intervention on psychophysiological exertion and flow-state among sedentary adults. *Perceptual and Motor Skills*, *128*(3), 1078–1090. https://doi.org/10.1177/0031512520984422

Meiklejohn, J., Phillips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., Frank, J., Burke, C., Pinger, L., Soloway, G., Isberg, R., Sibinga, E., Grossman, L., & Saltzman, A. (2012). Integrating mindfulness training into K-12 education: Fostering the resilience of teachers and students. *Mindfulness*, *3*(4), 291–307. https://doi.org/10.1007/s12671-012-0094-5

Mellner, C., Osika, W., & Niemi, M. (2022). Mindfulness practice improves managers' job demands-resources, psychological detachment, work-nonwork boundary control, and work-life balance: A randomized controlled trial. *International Journal of Workplace Health Management*, *15*(4), 493–514. https://doi.org/10.1108/IJWHM-07-2021-0146

Melnyk, B. M., Hsieh, A. P., Tan, A., Gawlik, K. S., Hacker, E. D., Ferrell, D., Simpson, V., Burda, C., Hagerty, B., Scott, L. D., Holt, J. M., Gampetro, P., Farag, A., Glogocheski, S., & Badzek, L. (2021). The state of mental health and healthy lifestyle behaviors in nursing, medicine and health sciences faculty and students at Big 10 Universities with implications for action. *Journal of*

Professional Nursing, *37*(6), 1167–1174.
https://doi.org/10.1016/j.profnurs.2021.10.007

Ménard, J., Pratte, K., Flaxman, P. E., Lavigne, G., & Foucreault, A. (2023). Keeping
perfectionistic academics safe from themselves with mindfulness. *Personality
and Individual Differences*, *206*, 112143.
https://doi.org/10.1016/j.paid.2023.112143

Mertler, C. A. (2017). Overview of the action research process. In C. A. Mertler (Ed.),
Action research: Improving schools and empowering educators (5th ed., pp. 34–
50). SAGE Publications, Inc. https://doi.org/10.4135/9781483396484.n2

Mesmer-Magnus, J., Manapragada, A., Viswesvaran, C., & Allen, J. W. (2017). Trait
mindfulness at work: A meta-analysis of the personal and professional
correlates of trait mindfulness. *Human Performance*, *30*(2–3), 79–98.
https://doi.org/10.1080/08959285.2017.1307842

Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new
method for characterising and designing behaviour change interventions.
Implementation Science, *6*(1), 42–42. https://doi.org/10.1186/1748-5908-6-42

Mo, X., Qin, Q., Wu, F., Li, H., Tang, Y., Cheng, Q., & Wen, Y. (2021). Effects of breathing
meditation training on sustained attention level, mindfulness attention
awareness level, and mental state of operating room nurses. *American Journal
Health & Behavior*, *45*(6), 993–1001. https://doi.org/10.5993/ajhb.45.6.4

Moffatt-Bruce, S. D., Nguyen, M. C., Steinberg, B., Holliday, S., & Klatt, M. (2019).
Interventions to reduce burnout and improve resilience: Impact on a health
system's outcomes. *Clin Obstet Gynecol*, *62*(3), 432–443.
https://doi.org/10.1097/grf.0000000000000458

Montero-Marin, J., Tops, M., Manzanera, R., Piva Demarzo, M. M., Álvarez de Mon, M.,
& García-Campayo, J. (2015). Mindfulness, resilience, and burnout subtypes in
primary care physicians: The possible mediating role of positive and negative
affect. *Frontiers in Psychology*, *6*, 1895–1895.
https://doi.org/10.3389/fpsyg.2015.01895

Morrish, L. (2019). *Pressure vessels: The epidemic of poor mental health among higher
education staff* HEPI Occasional Paper 2, https://www.hepi.ac.uk/wp-
content/uploads/2019/05/HEPI-Pressure-Vessels-Occasional-Paper-20.pdf

Mrazek, A. J., Mrazek, M. D., Cherolini, C. M., Cloughesy, J. N., Cynman, D. J., Gougis, L. J., Landry, A. P., Reese, J. V., & Schooler, J. W. (2019). The future of mindfulness training is digital, and the future is now. *Current Opinion in Psychology*, *28*, 81–86. https://doi.org/10.1016/j.copsyc.2018.11.012

Mula-Falcón, J., & Caballero, K. (2022). Neoliberalism and its impact on academics: A qualitative review. *Research in Post-compulsory Education*, *27*(3), 373–390. https://doi.org/10.1080/13596748.2022.2076053

Nash, C. (2023). Team mindfulness in online academic meetings to reduce burnout. *Challenges*, *14*(1), 15. https://doi.org/10.3390/challe14010015

Neumann, M. M., & Tillott, S. (2022). Why should teachers cultivate resilience through mindfulness? *Journal of Psychologists and Counsellors in Schools*, *32*(1), 3–14. https://doi.org/10.1017/jgc.2021.23

Nguyen, V. H. H., Palmer, S. B., Aday, J. S., Davoli, C. C., & Bloesch, E. K. (2020). Meditation alters representations of peripersonal space: Evidence from auditory evoked potentials. *Consciousness and Cognition*, *83*, 102978–102978. https://doi.org/10.1016/j.concog.2020.102978

Noar, S. M., Benac, C. N., & Harris, M. S. (2007). Does tailoring matter? Meta-analytic review of tailored print health behavior change interventions. *Psychological Bulletin*, *133*(4), 673–693. https://doi.org/10.1037/0033-2909.133.4.673

Nolte, H., Huff, J., & McComb, C. (2022). No time for that? An investigation of mindfulness and stress in first-year engineering design. *Design Science*, *8*, 1–33. https://doi.org/10.1017/dsj.2022.5

Norris, C. J., Creem, D., Hendler, R., & Kober, H. (2018). Brief mindfulness meditation Improves attention in novices: Evidence from ERPs and moderation by neuroticism. *Frontiers in Human Neuroscience*, *12*, 315–315. https://doi.org/10.3389/fnhum.2018.00315

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1–13. https://doi.org/10.1177/1609406917733847

O'Brien, T., & Guiney, D. (2018). *Staff wellbeing in higher education: A research study for Education Support Partnership*. Education Support Partnership.

https://www.educationsupport.org.uk/media/fs0pzdo2/staff_wellbeing_he_re
search.pdf

O'Connor, M., Stapleton, A., O'Reilly, G., Murphy, E., Connaughton, L., Hoctor, E., & McHugh, L. (2023). The efficacy of mindfulness-based interventions in promoting resilience: A systematic review and meta-analysis of randomised controlled trials. *Journal of Contextual Behavioral Science*, *28*, 215–225. https://doi.org/10.1016/j.jcbs.2023.03.005

O'Shaughnessy, A. (2018). Transforming teaching and learning through mindfulness-based restorative practices. In M. Thorsborne, N. Riestenberg, & G. McCluskey (Eds.), *Getting More out of Restorative Practices in Schools* (pp. 144–158). Jessica Kingsley Publishers.

Obradović, J., Sulik, M. J., & Armstrong-Carter, E. (2021). Taking a few deep breaths significantly reduces children's physiological arousal in everyday settings: Results of a preregistered video intervention. *Developmental Psychobiology*, *63*(8), e22214. https://doi.org/10.1002/dev.22214

Ohadomere, O., & Ogamba, I. K. (2021). Management-led interventions for workplace stress and mental health of academic staff in higher education: A systematic review. *The Journal of Mental Health Training, Education, and Practice*, *16*(1), 67–82. https://doi.org/10.1108/JMHTEP-07-2020-0048

Oneda, B., Ortega, K. C., Gusmão, J. L., Araújo, T. G., & Mion, D., Jr. (2010). Sympathetic nerve activity is decreased during device-guided slow breathing. *Hypertension Research*, *33*(7), 708–712. https://doi.org/10.1038/hr.2010.74

Osin, E. N., & Turilina, I. I. (2022). Mindfulness meditation experiences of novice practitioners in an online intervention: Trajectories, predictors, and challenges. *Applied Psychology: Health and Well-being*, *14*(1), 101–121. https://doi.org/10.1111/aphw.12293

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Parcover, J., Coiro, M. J., Finglass, E., & Barr, E. (2018). Effects of a brief mindfulness based group intervention on college students. *Journal of College Student Psychotherapy*, *32*(4), 312–329. https://doi.org/10.1080/87568225.2017.1407722

Pinto, S., Close, K., McDonough, S., Lemon, N., McDonough, S., & Lemon, N. (2018). Casualisation, mindfulness and the working lives of academics. In N. Lemon & S. McDonough (Eds.), *Mindfulness in the academy: Practices and perspectives from scholars* (pp. 217–230). Springer Singapore Pte. Limited. https://doi.org/10.1007/978-981-13-2143-6_14

Plaza García, I., Sánchez, C. M., Espilez, Á. S., García-Magariño, I., Guillen, G. A., & García-Campayo, J. (2017). Development and initial evaluation of a mobile application to help with mindfulness training and practice. *International Journal of Medical Informatics*, *105*, 59–67. https://doi.org/10.1016/j.ijmedinf.2017.05.018

Poland, B., Krupa, G., & McCall, D. (2009). Settings for health promotion: An analytic framework to guide intervention design and implementation. *Health Promotion Practice*, *10*(4), 505–516. https://doi.org/10.1177/1524839909341025

Pollard, A., Burchell, J. L., Castle, D., Neilson, K., Ftanou, M., Corry, J., Rischin, D., Kissane, D. W., Krishnasamy, M., Carlson, L. E., & Couper, J. (2017). Individualised mindfulness-based stress reduction for head and neck cancer patients undergoing radiotherapy of curative intent: A descriptive pilot study. *Eur J Cancer Care (Engl)*, *26*(2). https://doi.org/10.1111/ecc.12474

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. https://doi.org/10.1080/14635240.2008.10708132

Power, C. (2018, October 16). Missing class. *Blog*. https://home.mindfulness-network.org/missing-class-by-colette-power/

Powietrzynska, M., Tobin, K., & Alexakos, K. (2015). Facing the grand challenges through heuristics and mindfulness. *Cultural Studies of Science Education*, *10*(1), 65–81. https://doi.org/10.1007/s11422-014-9588-x

Priyatama, A. N., Zainuddin, M., & Handoyo, S. (2018). The influence of self-efficacy, optimism, hope and resilience on work engagement: Role of perceived organizational support as mediator. *Journal of Educational, Health and Community Psychology*, *7*(1). https://doi.org/10.12928/jehcp.v7i2.8540

Proulx, J., Croff, R., Hebert, M., & Oken, B. (2020). Results of a mindfulness intervention feasibility study among elder African American women: A qualitative analysis. *Complementary Therapies in Medicine*, *52*, 102455–102455. https://doi.org/10.1016/j.ctim.2020.102455

Puāwai Collective. (2019). Assembling disruptive practice in the neoliberal university: An ethics of care. *Geografiska Annaler. Series B, Human Geography*, *101*(1), 33–43. https://doi.org/10.1080/04353684.2019.1568201

Querstret, D., Morison, L., Dickinson, S., Cropley, M., & John, M. (2020). Mindfulness-based stress reduction and mindfulness-based cognitive therapy for psychological health and well-being in nonclinical samples: A systematic review and meta-analysis. *International Journal of Stress Management*, *27*(4), 394–411. https://doi.org/10.1037/str0000165

Raddon, D. (2023). *Improving resilience and reducing anxiety, stress, and burnout for faculty members during the COVID-19 pandemic through mindful meditation* [Doctoral thesis, University of La Verne]. https://researchworks.laverne.edu/esploro/outputs/doctoral/Improving-Resilience-and-Reducing-Anxiety-Stress/991004200460006311#file-0

Rahmat, M. R. (2024). Compassion-based training for cultivating well-being and building resilience in online adjunct faculty. In T. McGlashing Tarbutton & L. B. Doyle (Eds.), *Adjunct faculty in online higher education: Best practices for teaching adult learners* (pp. 20–48). IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-6684-9855-2.ch002

Ray, T. N., Franz, S. A., Jarrett, N. L., & Pickett, S. M. (2021). Nature enhanced meditation: Effects on mindfulness, connectedness to nature, and pro-environmental behavior. *Environment and Behavior*, *53*(8), 864–890. https://doi.org/10.1177/0013916520952452

Rees, C., Craigie, M., Slatyer, S., Heritage, B., Harvey, C., Brough, P., & Hegney, D. (2018). Mindful Self-Care and Resiliency (MSCR): Protocol for a pilot trial of a

brief mindfulness intervention to promote occupational resilience in rural general practitioners. *BMJ Open*, *8*(6), e021027–e021027. https://doi.org/10.1136/bmjopen-2017-021027

Rees, C. S., Breen, L. J., Cusack, L., & Hegney, D. (2015). Understanding individual resilience in the workplace: The international collaboration of workforce resilience model. *Frontiers in Psychology*, *6*, 73–73. https://doi.org/10.3389/fpsyg.2015.00073

Rich, R. M., Ogden, J., & Morison, L. (2021). A randomized controlled trial of an app-delivered mindfulness program among university employees: Effects on stress and work-related outcomes. *International Journal of Workplace Health Management*, *14*(2), 201–216. https://doi.org/10.1108/IJWHM-04-2020-0046

Riepenhausen, A., Wackerhagen, C., Reppmann, Z. C., Deter, H.-C., Kalisch, R., Veer, I. M., & Walter, H. (2022). Positive cognitive reappraisal in stress resilience, mental health, and well-being: A comprehensive systematic review. *Emotion Review*, *14*(4), 310–331. https://doi.org/10.1177/17540739221114642

Riva, E., Freeman, R., Schrock, L., Jelicic, V., Ozer, C.-T., & Caleb, R. (2020). Student wellbeing in the teaching and learning environment: A study exploring student and staff perspectives. *Higher Education Studies*, *10*(4), 103–115. https://www.researchgate.net/publication/347014537_Student_Wellbeing_in_the_Teaching_and_Learning_Environment_A_Study_Exploring_Student_and_Staff_Perspectives

Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology*, *88*(3), 533–562. https://doi.org/10.1111/joop.12120

Rocha, F. L., Jesus, L. C. d., Marziale, M. H. P., Henriques, S. H., Paulo Marôco Domingos, J., & Alvares Duarte Bonini Campos, J. (2020). Burnout syndrome in university professors and academic staff members: Psychometric properties of the Copenhagen Burnout Inventory–Brazilian version. *Psicologia, reflexão e crítica*, *33*(1), 1–11. https://doi.org/10.1186/s41155-020-00151-y

Roche, A. I., Kroska, E. B., & Denburg, N. L. (2019). Acceptance- and mindfulness-based interventions for health behavior change: Systematic reviews and meta-

analyses. *Journal of Contextual Behavioral Science*, *13*, 74–93.
https://doi.org/10.1016/j.jcbs.2019.06.002

Roche, M., Good, D., Lyddy, C., Tuckey, M. R., Grazier, M., Leroy, H., & Hülsheger, U.
(2020). A Swiss army knife? How science challenges our understanding of
mindfulness in the workplace. *Organizational Dynamics*, *49*(4), 100766.
https://doi.org/10.1016/j.orgdyn.2020.100766

Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R.,
Oberle, E., Thomson, K., Taylor, C., & 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

Rogers, H. B. (2013). Mindfulness meditation for increasing resilience in college
students. *Psychiatric Annals*, *43*(12), 545–548.
https://doi.org/10.3928/00485713-20131206-06

Romcevich, L. E., Reed, S., Flowers, S. R., Kemper, K. J., & Mahan, J. D. (2018). Mind-
body skills training for resident wellness: A pilot study of a brief mindfulness
intervention. *Journal of Medical Education and Curricular Development*, *5*,
2382120518773061–2382120518773061.
https://doi.org/10.1177/2382120518773061

Rooney, D., Küpers, W., Pauleen, D., & Zhuravleva, E. (2021). A developmental model
for educating wise leaders: The role of mindfulness and habitus in creating time
for embodying wisdom. *Journal of Business Ethics*, *170*(1), 181–194.
https://doi.org/10.1007/s10551-019-04335-0

Rosenbalm, K., DeKonty, E., & Fleming, S. (2020). North Carolina resilience and learning
project. In R. M. Reardon & J. Leonard (Eds.), *Alleviating the educational impact
of adverse childhood experiences: School-university-community collaboration*
(pp. 1–38). Information Age Publishing, Incorporated.

Rung, A. L., Oral, E., Berghammer, L., & Peters, E. S. (2020). Feasibility and acceptability
of a mobile mindfulness meditation intervention among women: Intervention
study. *JMIR mHealth and uHealth*, *8*(6), e15943–e15943.
https://doi.org/10.2196/15943

Russ, S. L., Maruyama, G., Sease, T. B., & Jellema, S. (2017). Do early experiences matter? Development of an early meditation hindrances scale linked to novice meditators' intention to persist. *Psychology of Consciousness*, *4*(3), 274–287. https://doi.org/10.1037/cns0000129

Rutter, M. (2007). Resilience, competence, and coping. *Child Abuse & Neglect*, *31*(3), 205–209. https://doi.org/10.1016/j.chiabu.2007.02.001

Rutter, M. (2012). Resilience as a dynamic concept. *Development and Psychopathology*, *24*(2), 335–344. https://doi.org/10.1017/S0954579412000028

Ryan, P., & Lauver, D. R. (2002). The efficacy of tailored interventions. *Journal of Nursing Scholarship*, *34*(4), 331–337. https://doi.org/10.1111/j.1547-5069.2002.00331.x

Saban, K. L., Tell, D., & De La Pena, P. (2022). Nursing implications of mindfulness-informed interventions for stroke survivors and their families. *Stroke*, *53*(11), 3485–3493. https://doi.org/10.1161/STROKEAHA.122.038457

Sass, S. M., Berenbaum, H., & Abrams, E. M. (2013). Discomfort with emotion moderates distress reduction in a brief mindfulness intervention. *International Journal of Behavioral and Consultation Therapy*, *7*(4), 24–27. https://doi.org/10.1037/h0100962

Scheff, S. W. (2016). Nonparametric statistics. In S. W. Scheff (Ed.), *Fundamental statistical principles for the neurobiologist: A survival guide* (1st ed., pp. 157–182). Elsevier Science & Technology. https://doi.org/10.1016/B978-0-12-804753-8.00008-7

Schonert-Reichl, K. A., & Roeser, R. W. (2016). *Handbook of mindfulness in education: Integrating theory and research into practice*. Springer.

Schuman-Olivier, Z., Trombka, M., Lovas, D. A., Brewer, J. A., Vago, D. R., Gawande, R., Dunne, J. P., Lazar, S. W., Loucks, E. B., & Fulwiler, C. (2020). Mindfulness and behavior change. *Harv Rev Psychiatry*, *28*(6), 371–394. https://doi.org/10.1097/hrp.0000000000000277

Schumer, M. C., Lindsay, E. K., & Creswell, J. D. (2018). Brief mindfulness training for negative affectivity: A systematic review and meta-analysis. *Journal of*

Consulting and Clinical Psychology, *86*(7), 569–583.

https://doi.org/10.1037/ccp0000324

Schussler, D. L., Deweese, A., Rasheed, D., Demauro, A., Brown, J., Greenberg, M., & Jennings, P. A. (2018). Stress and release: Case studies of teacher resilience following a mindfulness-based intervention. *American Journal of Education*, *125*(1), 1–28. https://doi.org/10.1086/699808

Schwind, J. K., Beanlands, H., McCay, E., Wang, A., Binder, M., Aksenchuk, S., & Martin, J. (2022). Mindful practices to support university faculty sense of wellbeing and enhance their teaching-learning scholarship: A mixed-method pilot study. *Journal of Further and Higher Education*, *46*(2), 159–171. https://doi.org/10.1080/0309877X.2021.1895092

Scott, C. (2018, March 9–11). *Putting mindfulness into practice: Promoting well-being, reflection, and the formation of professional identity* Externships 9: Coming of age, Athens, USA.

https://digitalcommons.law.uga.edu/xconf/2018/Schedule/24/

Sears, S. R., Kraus, S., Carlough, K., & Treat, E. (2011). Perceived benefits and doubts of participants in a weekly meditation study. *Mindfulness*, *2*(3), 167–174. https://doi.org/10.1007/s12671-011-0055-4

Sesel, A.-L., Sharpe, L., Beadnall, H. N., Barnett, M. H., Szabo, M., & Naismith, S. L. (2021). Development of a web-based mindfulness program for people with multiple sclerosis: Qualitative co-design study. *Journal of Medical Internet Research*, *23*(3), e19309–e19309. https://doi.org/10.2196/19309

Shahidi, S., Akbari, H., & Zargar, F. (2017). Effectiveness of mindfulness-based stress reduction on emotion regulation and test anxiety in female high school students. *Journal of Education and Health Promotion*, *6*. https://doi.org/10.4103/jehp.jehp_98_16

Shaner, L., Kelly, L., Rockwell, D., & Curtis, D. (2017). Calm abiding: The lived experience of the practice of long-term meditation. *The Journal of Humanistic Psychology*, *57*(1), 98–121. https://doi.org/10.1177/0022167815594556

Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of

therapists in training. *Training and Education in Professional Psychology*, *1*(2), 105–115. https://doi.org/10.1037/1931-3918.1.2.105

Sharma, M., & Rush, S. E. (2014). Mindfulness-based stress reduction as a stress management intervention for healthy individuals: A systematic review. *Journal of Evidence-based Complementary & Alternative Medicine*, *19*(4), 271–286. https://doi.org/10.1177/2156587214543143

Sharma, V., Sood, A., Prasad, K., Loehrer, L., Schroeder, D., & Brent, B. (2014). Bibliotherapy to decrease stress and anxiety and increase resilience and mindfulness: A pilot trial. *Explore*, *10*(4), 248–252. https://doi.org/10.1016/j.explore.2014.04.002

Shiner, R. L., & Masten, A. S. (2012). Childhood personality as a harbinger of competence and resilience in adulthood. *Development and Psychopathology*, *24*(2), 507–528. https://doi.org/10.1017/S0954579412000120

Siambabala, B. M., O'Brien, G., O'Keefe, P., & Rose, J. (2011). Disaster resilience: A bounce back or bounce forward ability? *Local Environment*, *16*(5), 417–424. https://doi.org/10.1080/13549839.2011.583049

Siegel, R. D. (2010). *The mindfulness solution: Everyday practices for everyday problems*. Guilford Press.

Siegel, R. D., Germer, C. K., & Olendzki, A. (2009). Mindfulness: What is it? Where did it come from? In F. Didonna (Ed.), *Clinical handbook of mindfulness* (pp. 17–35). Springer New York. https://doi.org/10.1007/978-0-387-09593-6_2

Sims-Schouten, W., & Edwards, S. (2016). 'Man up!' Bullying and resilience within a neoliberal framework. *Journal of Youth Studies*, *19*(10), 1382–1400. https://doi.org/10.1080/13676261.2016.1171831

Sinclair, M., & Seydel, J. (2013). *Mindfulness for busy people: Turning from frantic and frazzled into calm and composed* (1st ed.). Pearson Education UK.

Singh, C., Cross, W., Munro, I., & Jackson, D. (2020). Occupational stress facing nurse academics: A mixed-methods systematic review. *Journal of Clinical Nursing*, *29*(5-6), 720–735. https://doi.org/10.1111/jocn.15150

Singla, R. (2011). Origins of mindfulness and meditation: Interplay of Eastern & Western psychology. *Psyke & Logos*, *32*(1), 220–239.

Slatyer, S., Craigie, M., Heritage, B., Davis, S., & Rees, C. (2018). Evaluating the

    effectiveness of a brief Mindful Self-Care and Resiliency (MSCR) intervention

    for nurses: A controlled trial. *Mindfulness*, *9*(2), 534–546.

    https://doi.org/10.1007/s12671-017-0795-x

Smith, K. (2020). The mindfulness guide for people too busy to meditate.

    HealthCentral. https://www.healthcentral.com/mental-health/mindfulness-for-

    the-busy-schedule

Sommers-Spijkerman, M., Austin, J., Bohlmeijer, E., & Pots, W. (2021). New evidence in

    the booming field of online mindfulness: An updated meta-analysis of

    randomized controlled trials. *JMIR Mental Health*, *8*(7), e28168–e28168.

    https://doi.org/10.2196/28168

Sood, A., Prasad, K., Schroeder, D., & Varkey, P. (2011). Stress management and

    resilience training among department of medicine faculty: A pilot randomized

    clinical trial. *Journal of General Internal Medicine: JGIM*, *26*(8), 858–861.

    https://doi.org/10.1007/s11606-011-1640-x

Sood, A., Sharma, V., Schroeder, D. R., & Gorman, B. (2014). Stress Management and

    Resiliency Training (SMART) program among department of radiology faculty: A

    pilot randomized clinical trial. *Explore*, *10*(6), 358–363.

    https://doi.org/10.1016/j.explore.2014.08.002

Spears, C. A., Houchins, S. C., Bamatter, W. P., Barrueco, S., Hoover, D. S., &

    Perskaudas, R. (2017). Perceptions of mindfulness in a low-income, primarily

    African American treatment-seeking sample. *Mindfulness*, *8*(6), 1532–1543.

    https://doi.org/10.1007/s12671-017-0720-3

Spence, G. B. (2016). Mindfulness at work. In *The Wiley Blackwell handbook of the

    psychology of positivity and strengths-based approaches at work* (pp. 110–131).

    https://doi.org/10.1002/9781118977620.ch8

Squyres, E. (2023). *A Mindfulness-Based Intervention for Educators: Cultivating Self-

    Awareness and Self-Compassion to Increase Well-Being and Mitigate Burnout*

    [Masters thesis, Lesley University, Graduate School of Arts and Social Sciences

    (GSASS)]. https://digitalcommons.lesley.edu/mindfulness_theses/74

Stoliker, B. E., Vaughan, A. D., Collins, J., Black, M., & Anderson, G. S. (2022). Building

    personal resilience following an online resilience training program for BScN

students. *Western Journal of Nursing Research*, *44*(8), 755–764.

https://doi.org/10.1177/01939459211017240

Strohmaier, S., Jones, F. W., & Cane, J. E. (2021). Effects of length of mindfulness

practice on mindfulness, depression, anxiety, and stress: A randomized

controlled experiment. *Mindfulness*, *12*(1), 198–214.

https://doi.org/10.1007/s12671-020-01512-5

Struhl, K. J. (2022). The self: What does mindfulness meditation reveal about it? In R.

Repetti (Ed.), *Routledge handbook on the philosophy of meditation* (1st ed., Vol.

1, pp. 256–268). Routledge. https://doi.org/10.4324/9781003127253-20

Subban, P., Laletas, S., Creely, E., Southcott, J., & Fernandes, V. (2022). Under the

sword of Damocles: Exploring the well-being of university academics during a

crisis [Original Research]. *Frontiers in Education*, *7*.

https://doi.org/10.3389/feduc.2022.1004286

Taberner, A. M. (2018). The marketisation of the English higher education sector and

its impact on academic staff and the nature of their work. *International Journal

of Organizational Analysis (2005)*, *26*(1), 129–152.

https://doi.org/10.1108/IJOA-07-2017-1198

Tang, R., Tang, Y.-Y., & Friston, K. J. (2020). Brief mindfulness meditation induces gray

matter changes in a brain hub. *Neural Plasticity*, *2020*(2020), 1–8.

https://doi.org/10.1155/2020/8830005

Tart, C. T. (1990). Extending mindfulness to everyday life. *The Journal of Humanistic

Psychology*, *30*(1), 81–106. https://doi.org/10.1177/0022167890301005

Tashakkori, A., Johnson, B., & Teddlie, C. (2021). *Foundations of mixed methods

research: Integrating quantitative and qualitative approaches in the social and

behavioral sciences* (2nd ed.). SAGE Publications, Inc.

Tateo, L. (2024). Doping existential despair: Mindful of the exotic lure. *Integrative

Physiological and Behavioral Science*, *58*(3), 812–817.

https://doi.org/10.1007/s12124-024-09839-7

Thomas, J. T. (2017). Brief mindfulness training in the social work practice classroom.

Social Work Education, *36*(1), 102–118.

https://doi.org/10.1080/02615479.2016.1250878

Thompson, R. W., Arnkoff, D. B., & Glass, C. R. (2011). Conceptualizing mindfulness and acceptance as components of psychological resilience to trauma. *Trauma, Violence & Abuse*, *12*(4), 220–235. https://doi.org/10.1177/1524838011416375

Tijdink, J. K., Vergouwen, A. C. M., & Smulders, Y. M. (2014). Emotional exhaustion and burnout among medical professors: A nationwide survey. *BMC Medical Education*, *14*(1), 183–183. https://doi.org/10.1186/1472-6920-14-183

Tomal, D. R. (2010). *Action research for educators* (2nd ed.). Rowman & Littlefield Education.

Tonkin, K., Malinen, S., Näswall, K., & Kuntz, J. C. (2018). Building employee resilience through wellbeing in organizations. *Human Resource Development Quarterly*, *29*(2), 107–124. https://doi.org/10.1002/hrdq.21306

Torous, J., Jän Myrick, K., Rauseo-Ricupero, N., & Firth, J. (2020). Digital mental health and COVID-19: Using technology today to accelerate the curve on access and quality tomorrow. *JMIR Mental Health*, *7*(3), e18848–e18848. https://doi.org/10.2196/18848

Treleaven, D. A. (2018). *Trauma-sensitive mindfulness: Practices for safe and transformative healing* (1st ed.). W.W Norton & Company.

Trunk Sirca, N., & Shapiro, A. (2007). Action research and constructivism: Two sides of the same coin? Or, one side? *International Journal of Management in Education*, *1*(1–2), 100–107. https://doi.org/10.1504/IJMIE.2007.014380

Turner, K., O'Brien, S., Wallström, H., Samuelsson, K., & Uusimäki, S.-L. M. (2023). Lessons learnt during COVID-19: Making sense of Australian and Swedish university lecturers' experience. *International Journal of Educational Technology in Higher Education*, *20*(1), 25–17. https://doi.org/10.1186/s41239-023-00395-5

Tytherleigh, M. Y., Webb, C., Cooper, C. L., & Ricketts, C. (2005). Occupational stress in UK higher education institutions: A comparative study of all staff categories. *Higher Education Research and Development*, *24*(1), 41–61. https://doi.org/10.1080/0729436052000318569

University of South Australia. (2024a). *Uni sector scores poor report card when it comes to workplace health*. University of South Australia.

https://unisa.edu.au/media-centre/Releases/2024/uni-sector-scores-poor-report-card-when-it-comes-to-workplace-health/

University of South Australia. (2024b). *Wellbeing @ UniSA: How we develop a culture that ensures everyone thrives*. University of South Australia. https://i.unisa.edu.au/staff/ptc/safety-and-wellbeing/wellbeing/

Urbina-Garcia, A. (2020). What do we know about university academics' mental health? A systematic literature review. *Stress Health*, *36*(5), 563–585. https://doi.org/10.1002/smi.2956

Urquhart, C. (2021). Mindfulness: An essential tool for the modern lawyer. *Brief (East Fremantle, W.A.)*, *48*(5), 15–16.

Vaishnavi, S., Connor, K., & Davidson, J. R. T. (2007). An abbreviated version of the Connor-Davidson Resilience Scale (CD-RISC), the CD-RISC2: Psychometric properties and applications in psychopharmacological trials. *Psychiatry Research*, *152*(2), 293–297. https://doi.org/10.1016/j.psychres.2007.01.006

van Dam, N. T., van Vugt, M. K., Vago, D. R., Schmalzl, L., Saron, C. D., Olendzki, A., Meissner, T., Lazar, S. W., Kerr, C. E., Gorchov, J., Fox, K. C. R., Field, B. A., Britton, W. B., Brefczynski-Lewis, J. A., & Meyer, D. E. (2018). Mind the hype: A critical evaluation and prescriptive agenda for research on mindfulness and meditation. *Perspectives on Psychological Science*, *13*(1), 36–61. https://doi.org/10.1177/1745691617709589

van Der Feltz-Cornelis, C. M., Varley, D., Allgar, V. L., & de Beurs, E. (2020). Workplace stress, presenteeism, absenteeism, and resilience amongst university staff and students in the COVID-19 Lockdown. *Frontiers in Psychiatry*, *11*, 588803–588803. https://doi.org/10.3389/fpsyt.2020.588803

Verhaeghen, P., & Aikman, S. N. (2022). The I in mindfulness: How mindfulness relates to aspects of self and psychological well-being. *Psychology of Consciousness: Theory, Research, and Practice (Washington, D.C.)*. https://doi.org/10.1037/cns0000337

Vidic, Z., St. Martin, M., & Oxhandler, R. (2017). Mindfulness intervention with a U.S. women's NCAA division I basketball team: Impact on stress, athletic coping skills and perceptions of intervention. *The Sport Psychologist*, *31*(2), 147–159. https://doi.org/10.1123/tsp.2016-0077

Visted, E., Vøllestad, J., Nielsen, M. B., & Nielsen, G. H. (2015). The impact of group-based mindfulness training on self-reported mindfulness: A systematic review and meta-analysis. *Mindfulness*, *6*(3), 501–522. https://doi.org/10.1007/s12671-014-0283-5

Wald, H. S. (2020). Optimizing resilience and wellbeing for healthcare professions trainees and healthcare professionals during public health crises: Practical tips for an 'integrative resilience' approach. *Medical Teacher*, *42*(7), 744–755. https://doi.org/10.1080/0142159X.2020.1768230

Wang, X., Smith, C., Ashley, L., & Hyland, M. E. (2019). Tailoring self-help mindfulness and relaxation techniques for stroke survivors: Examining preferences, feasibility and acceptability. *Frontiers in Psychology*, *10*, 391. https://doi.org/10.3389/fpsyg.2019.00391

Weisbaum, E. (2022). Operationalizing mindfulness across education, healthcare & the workplace: Strategic approaches for developing wellbeing amidst the challenges of Covid-19 and beyond. *The Journal of Health Administration Education*, *38*(4), 975–1000.

Westmacott-Brown, N. (2020). *Breathwork: Use the power of breath to energise your body and focus your mind*. Dorling Kindersley Publishing.

Whittet, F. A. (2021). Health and wellbeing of the online lecturer: A phenomenological study. *International Journal of Health Promotion and Education*, *59*(1), 50–64. https://doi.org/10.1080/14635240.2020.1713189

Williams, M., & Penman, D. (2011). *Mindfulness: A practical guide to finding peace in a frantic world*. Piatkus.

Wilson, D., Rodrigues de Oliveira, D., Palace-Berl, F., de Mello Ponteciano, B., Fungaro Rissatti, L., Piassa Pollizi, V., Sardela de Miranda, F., D'Almeida, V., & Demarzo, M. (2022). Fostering emotional self-regulation in female teachers at the public teaching network: A mindfulness-based intervention improving psychological measures and inflammatory biomarkers. *Brain, Behavior, & Immunity. Health*, *21*, 100427. https://doi.org/10.1016/j.bbih.2022.100427

Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, *21*(2), 152–169. https://doi.org/10.1017/S0959259810000420

Wisner, B. L. (2013). Less stress, less drama, and experiencing monkey mind: Benefits and challenges of a school-based meditation program for adolescents. *School Social Work Journal (Follmer Group)*, *38*(1), 49–63.

Wongtongkam, N., Krivokapic-Skoko, B., Duncan, R., & Bellio, M. (2017). The influence of a mindfulness-based intervention on job satisfaction and work-related stress and anxiety. *The International Journal of Mental Health Promotion*, *19*(3), 134–143. https://doi.org/10.1080/14623730.2017.1316760

Wray, S., & Kinman, G. (2020). The psychosocial hazards of academic work: An analysis of trends. *Studies in Higher Education*, *47*(4), 771–782. https://doi.org/10.1080/03075079.2020.1793934

Wray, S., & Kinman, G. (2021). *Supporting staff wellbeing in higher education* [Report]. Education Support. https://www.educationsupport.org.uk/media/x4jdvxpl/es-supporting-staff-wellbeing-in-he-report.pdf

Wu, B. (2022). Authenticity and wellbeing in neoliberal times: Imagining alternatives. In N. Lemon (Ed.), *Healthy Relationships in Higher Education* (1st ed., Vol. 1, pp. 197–209). Routledge. https://doi.org/10.4324/9781003144984-18

Wu, R., Liu, L.-L., Zhu, H., Su, W.-J., Cao, Z.-Y., Zhong, S.-Y., Liu, X.-H., & Jiang, C.-L. (2019). Brief mindfulness meditation improves emotion processing. *Frontiers in Neuroscience*, *13*, 1074–1074. https://doi.org/10.3389/fnins.2019.01074

Xia, Y. (2020). Correlation and association analyses in microbiome study integrating multiomics in health and disease. *Prog Mol Biol Transl Sci*, *171*, 309–491. https://doi.org/10.1016/bs.pmbts.2020.04.003

Zaccaro, A., Piarulli, A., Laurino, M., Garbella, E., Menicucci, D., Neri, B., & Gemignani, A. (2018). How breath-control can change your life: A systematic review on psycho-physiological correlates of slow breathing. *Frontiers in Human Neuroscience*, *12*, 353–353. https://doi.org/10.3389/fnhum.2018.00353

Zhu, B., Hedman, A., Feng, S., Li, H., & Osika, W. (2017). Designing, prototyping and evaluating digital mindfulness applications: A case study of mindful breathing for stress reduction. *Journal of Medical Internet Research*, *19*(6), e197–e197. https://doi.org/10.2196/jmir.6955

Ziaian, T., Sawyer, J., Evans, N., & Gillham, D. (2015). The impact of mindfulness meditation on academic well-being and affective teaching practices. *Creative Education*, *6*, 2174–2185. https://doi.org/10.4236/ce.2015.620222