The Effects of the 8-Week Mindfulness Based Living Course (MBLC) When Delivered to a Mixed Group of Health Care Staff: A Prospective Pilot Study

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A Work Based Project presented in partial fulfilment of the requirements for the degree of MSc in Studies in Mindfulness at the School of Education, University of Aberdeen

I declare that this Work Based Project has been composed by myself, that it has not been accepted in any previous application for a degree, that the work of which it is a record has been done by myself, and that all the quotations have been distinguished appropriately and the source of information specifically acknowledged.

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Abstract

There is a substantial body of research that highlights the causes and negative implications that prolonged exposure to stress may have for health care staff (HCS). In an attempt to address this, the current study examined the effects of the Mindfulness Based Living Course on a mixed group of HCS when delivered during the working day. A total of 31 HCS participated in this prospective uncontrolled pilot study. 28 of the 31 HCS (90%) remained in the study and 26 of the 31 (84%) participants completed a minimum of six of the eight weekly sessions. Self-reported perceived stress, self-compassion and mindfulness were measured at the beginning and end of the 8-week intervention and pre and post-change scores showed that significant improvements were obtained across all three measures. Participants demonstrated a 49% reduction in perceived stress, a 24% increase in self-compassion and a 36% increase in dispositional mindfulness.

Qualitative data was also collected from participants using a variety of methods, such as the Weekly Home Practice Evaluation Forms, recording participant discussions during weekly meetings and a Post-Course Feedback Form. A thematic analysis of this data uncovered a variety of benefits for the participants, which included becoming more self aware, improvements in sleep, relaxation and communication with others. Participants also reported an improved ability to manage and respond to difficult or challenging situations and the ability to manage and prioritise their own health and well-being. Challenges were also associated with participation in the MBLC; with issues such as finding the time to practice, coping with work and family related pressures and dealing with difficult emotions that arose during practice emerging as common themes in the data. The results of this study suggest that participation in an 8-week MBLC is associated with significant benefits for HCS in relation to their health and well-being, which suggests a need for continued research in this area with a more powerful study design.

Keywords: Health Care Staff Well-Being; Mindfulness at Work; Compassion Fatigue

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> "Compassion is not devoid of discernment and courage. Just as we need the courage to respond to the anguish of others, so we need the discernment to know our limitations and the ability to say "no." A compassionate life is one in which our resources are used to optimum effect. Just as we need to know when and how to give ourselves fully to a task, so we need to know when and how to stop and rest" (Batchelor, 1997, p.89).

The Effects of the 8-Week Mindfulness Based Living Course (MBLC) When Delivered to a Mixed Group of Health Care Staff: A Prospective Pilot Study

Chapter 1: Introduction

To begin with the issue of stress among those working in the health care professions will be highlighted and some of the more popular terms that describe the types of stress faced by health care staff (HCS) will be defined. Prolonged exposure to stress may result in a negative impact to a health care staff's physical and psychological well-being, which may in turn have an adverse effect on the way a HCS may view their work and the clients they serve. The term Compassion Fatigue (CF) has been offered as a way of describing what may happen to a HCS over time (Fahy, 2007) and the signs, symptoms and causes of CF will be listed. There are many studies that focus on the negative cost of caring (Boisaubin and Levine, 2001, Gilroy, Carrol, et al., 2002 and Smith and Moss, 2009), however, there is also evidence to show that HCS can transform the stress of this type of exposure into growth. A list of measures that aim to help prevent CF or burnout will be shown, and the apparent applicability of using mindfulness based interventions as a self-care strategy will emerge; mindfulness will then be defined and its positive effects will be listed.

Research shows that mindfulness confers significant benefits on health, well-being and quality of life in general (Cullen, 2011). This in turn has significant benefits and implications for people's performance in the workplace; either in terms of the workers levels of stress and productivity or in the qualities of interpersonal relationships (Chaskalson, 2011). The applicability of mindfulness based interventions (MBI) in work settings has generated an increasing amount of interest in recent years; with the Mindfulness Based Stress Reduction (MBSR) programme developed by Kabat-Zinn, as the most frequently cited MBI in this particular area of research (Poulin, Mackenzie, et al., 2008). There are, however, an increasing variety of MBI being researched with HCS in work settings. In light of these findings, studies that aimed to explore the effects of using MBI as part of a self-care programme for HCS will be reviewed. The literature review will provide an overview of the key concepts highlighted by these studies and recommendations will be offered based on this information, as the literature review draws to a close.

This author currently works in the Health Service as a Drug and Alcohol Counsellor, who specialises in working with children and adolescents and, therefore, understands first-hand the pressures that HCS face. This author is also a long-term practitioner of mindfulness and is currently enrolled on the Studies in Mindfulness MSc with the University of Aberdeen. The 8-Week MBLC is taught as part of the curriculum on the Studies in Mindfulness MSc and may be a viable alternative to the other 8-Week MBI currently utilised in this area of research. The MBLC may make a positive contribution to the health and well-being of HCS and, therefore, warrants further study.

Because of the recent emergence of the MBLC (2011), to date, this author knows of no published studies that have introduced the MBLC as a model of self-care for HCS. This study aimed to address this gap in the research within this context. The purpose of this study, therefore, was to determine the effects of the MBLC when delivered to a mixed group of HCS during the working day. The effectiveness of the MBLC will be measured by using variety of quantitative and qualitative methods, to explore if and how participation in the MBLC may be beneficial for the health care staff's own health and well-being. The challenges associated with participation in such a programme will also be analysed. Pre and post-course validated self-report measures will be completed by participants, in relation to the level of dispositional mindfulness, perceived stress and self-compassion and qualitative data will also be collected to explore the participants experience in more detail. The findings from this study will be analysed and discussed and further recommendations will be presented as this study draws to a close.

1.1 Background

The modern day working environment can move at a relentless and demanding pace. Increased administrative responsibilities, real time connectivity and the complexity of issues that employees in certain jobs may face, name but a few of the issues that may cause employees to work beyond their capabilities for sustained periods of time. This may in turn increase the likelihood that the worker may experience adverse health conditions as a consequence of their job.

Recent estimates from the Labour Force Survey (LFS) as published on the Health and Safety Executive website (undated, paragraph. 1), show the following in relation to stress-related and psychological disorders in Great Britain:

- The total number of cases of stress in 2011/12 was 428 000 (40%) out of a total of 1073 000 for all work-related illnesses
- The estimated cases of work-related stress, both total and new cases, have remained broadly flat over the past decade
- The industries that reported the highest rates of total cases of work-related stress (three-year average) were human health and social work, education and public administration and defence
- The occupations that reported the highest rates of total cases of work-related stress (three-year average) were health professionals (in particular nurses), teaching and educational professionals, and caring personal services (in particular welfare and housing associate professionals)
- The main work activities attributed by respondents as causing their work-related stress, or making it worse, was work pressure, lack of managerial support and work-related violence and bullying

There is a substantial body of research that highlights the fact that HCS who work with clients who are suffering from distress and or trauma are prone to experiencing stress in a variety of ways (Shapiro, Astin, et al., 2005). The terms used to describe these negative costs of caring are varied, but the most common include burnout, compassion fatigue, vicarious traumatisation and secondary traumatic stress. Although there is some overlap in the concepts that describe these terms and they are often used interchangeably in the literature; different definitions have been noted as follows:

> "Burnout is characterized by feelings of depersonalisation, emotional exhaustion and lack of feelings of satisfaction and accomplishment." "It may result from prolonged work with emotionally challenged clients" (Barnett, Baker, et al., 2007, p. 604).

As cited in Craig and Sprang (2010, p.319), Lazarus and Folkman (1984, p. 19) explain:

Stress involves a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being.

Secondary traumatic stress (STS) refers to a set of symptoms that parallel those of post traumatic stress disorder and vicarious trauma (VT) focuses on the way in which the core beliefs of the worker may change over time in relation to the engagement with the client. This may cause a disruption in the workers view of self, others and the world in general and signs of VT and STS may be feelings of grief anger, sorrow, hyper vigilance and numbing (McCann and Pearlman, 1990, as cited by Bober and Regehr, 2006, p.1).

For HCS working with traumatized clients, this excessive stress may result in burnout, and may manifest in a condition called compassion fatigue (CF), that can transform the professional's sense of self and negatively impact the workers psychological and physical well-being. CF may in turn also have an adverse effect on the way HCS may view their work and the clients they serve; for a more in-depth review of the various terms, see Craig and Sprang (2010) and Linley and Joseph (2007).

As Germer (2009, p. 182) sees it, the result of overextending ourselves too much is called compassion fatigue (CF), but that this term is actually a misnomer because compassion itself isn't fatiguing and using the term "attachment fatigue" is more appropriate. Fahy (2007) suggests that burnout can have a blaming component to it and the unspoken message is that if you are burned out it is already too late. According to Fahy, CF may be a more useful term to encourage dialogue between workers and supervisors and to enable them to come up with solutions. This author agrees with both Germer and Fahy's viewpoint, however, the term compassion fatigue or CF will be used

throughout the remainder of this assignment when referring to HCS stress, unless citing directly from the literature.

Work issues or negative client behaviours that may increase the risk CF include, but are not limited to, suicide, aggressiveness, professional and emotional isolation, lack of therapeutic success, and demanding paperwork and administration duties. Other contributors may include relationship issues, financial difficulties, change in family structure, blame culture fear and personal illness (Smith and Moss, 2009, p.2).

Some signs of CF include reduced energy, impaired concentration, decreased patience and decreased confidence. These symptoms may not be directly observable by others, due to the personal nature of symptoms and the independence and isolation with which some professionals function (Smith and Moss, 2009, p.5). Also cited in Smith and Moss (2009), are signs that are more apparent to others: becoming more isolated, withdrawn, irritable (Gilroy, Carrol, et al., 2002), quantity and quality of work suffers, putting in longer hours to accomplish tasks normally carried out in a regular working day (Boisaubin and Levine, 2001). Increase in substance use, intoxication or hangover at inappropriate times, changes in behaviour, arriving late to appointments or meetings, poor self-care or hygiene, and frequent, unexplained absences (Corlin, 2002). Germer (2009, p.182) also lists two signs of CF: 1) believing that you (in this case the HCS) are indispensable and 2) feeling resentment toward those you are trying to help.

> "The antidote to compassion fatigue is self-compassion. When your emotional supplies are depleted, take a break and care for yourself in whatever way you can" (Germer, 2009, p.182).

If this level of stress goes unchecked, a worker's health may deteriorate and lead to or worsen disorders and diseases such as heart disease, anxiety, depression, hypertension, substance use and gastrointestinal disorders and may become a contributing factor for lifestyle behaviours that increase vulnerability to diseases such as lung cancer, cardiovascular disease, and obesity (Schure, Christopher et al., 2008, p.47). These stressors may have harmful effects on the staff member's effectiveness and success by reducing their capacity for attention, concentration, and decision-making skills (Smith and Moss, 2009, p.2). When stressed, anxious or feeling under threat, it is common for a person to feel as if their body and mind is closing down and withdrawing,

either to prepare itself for the imagined (or real) hurt to arrive or to gather resources for further action. Self-care strategies could, therefore, address this issue and identify exercises that promote self-awareness and acceptance for the way things may be at a particular time.

Germer brings further attention to this point, and describes the instinctive responses to danger; the stress responses of fight, flight or freeze. These three strategies help someone survive physically, but when they're applied to mental and emotional functioning, problems arise. When there's no enemy to defend against, there is a tendency to have three unfortunate reactions: "Fight" becomes self-criticism, "flight" becomes self-isolation, and "freeze" becomes self-absorption, getting locked into one's own thoughts (Germer, 2009, p.85).

It is clear that HCS are at times under a large amount of stress and imagine that they would be well placed to seek emotional support of their own given their inside knowledge and experience. However, for a variety of reasons, HCS may seldom be encouraged to express doubts or concerns about themselves, especially in the case of a lack of effective management or clinical supervision, job at risk in current economic climate, or the financial implications of paying for own therapy (Stebnicki, 2008). HCS may also network together and know other people working in relevant fields of work indirectly and as a result, a HCS may hide, discount or rationalise their own behaviour. The downside of this type of pressure and belief, may bring on feelings of inadequacy, as stated by Sherman (1996) as cited in Smith and Moss (2009) and create additional levels of stress.

There are many studies highlighting the negative effects of CF, however, there is also evidence to show that HCS have the ability to transform the stress of this type of exposure into growth.

> "Where a professional carer is able to understand and make sense of their caring role, they have an opportunity to create meaning out of the chaos of distress" (Tehrani, 2010, p.134).

Tehrani put forward a list of qualities that have been shown to be transformative in caring professionals: a) create positive emotional states and an ability to challenge the negative emotional affect, b) generate high levels of physical and mental energy, c) create meaning and to live life for the moment and d) feel connected to and behave altruistically to others (2010, p. 134).

> "These salutogenic or health-enhancing effects of understanding and making sense of traumatic or distressing event can be facilitated by a range of personal and professional activities, including maintaining physical health and fitness, enjoying a healthy work / life balance, using reflection, meditation or other form of reflective practice, accessing and using social support, having defined professional boundaries and accessing professional supervision or consultative support" (Tehrani, 2010, p.134).

Kearney, Weininger, et al., (2009, p. 1159) also put forward a list of measures that may help prevent burnout, which included the following activities that may in some way be related to mindfulness practice in general: Mindful meditation, reflective writing, development of self-awareness skills, practice of self-care activities and meaning-centred interventions for the staff team.

Kearney, Weininger, et al., and Tehrani summarise the basis of an effective self-care system very well and highlight the apparent applicability of using mindfulness as a self-care strategy. Smith and Moss (2009), also stress the importance and emergence of mindfulness in enhancing and ensuring one's emotional well-being.

1.2 Mindfulness Based Interventions

Mindfulness based interventions (MBI) have a substantial research-based evidence and over the past three decades, researchers have examined their efficacy in a variety of medical, social, educational and work-based settings. Glomb, Duffy, et al., (2011, pp. 121-122) summarise the four main areas in which mindfulness has demonstrated positive effects:

- Physical health, mainly in the area of reducing the symptoms or distress caused by physical disease
- Psychological health, linked to the reduction of the symptoms of mental, psychological, and psychiatric conditions
- The promotion of well-being and human flourishing
- Neuroscience research has focused on the effects of mindfulness-based practices on changes in the brain's activity and structure

While mindfulness practices are centuries old with their roots in Buddhism; interest in mindfulness-based approaches has been brought to the forefront of our attention by people such as the Dalai Lama in his ongoing dialogue with western scientists and contemplative practitioners (Dalai Lama and Goleman, 2003), Kabat-Zinn in his development of the MBSR programme and Nairn through his presentation of meditation and Buddhist psychology. Glomb, Duffy, et al., and Nairn gave the following definitions of mindfulness:

> "Mindfulness is the process of paying attention to what is happening in the moment – both internal (thoughts, bodily sensations) and external stimuli (physical and social environment) – and observing those stimuli without judgement or evaluation, and without assigning meaning to them" Glomb, Duffy, et al., (2011, p.118).

> "Mindfulness can be defined as knowing what is happening while it is happening, without preference" Nairn (2008) lecture at Tara Rokpa Centre in South Africa.

Nairn suggested three stages to training in mindfulness. First training ourselves to be present in the moment with what is there. Second, developing the attitude of self-acceptance so that whatever arises is OK, thus coming to terms with ourselves and third, abandoning all goals. Nairn clarified this third stage further by stating "That if we let go of the idea of getting anywhere we come to see that we are already there. There is nowhere to go" (2001, p. 19).

Mindfulness Based Stress Reduction (MBSR) is the most frequently cited method of mindfulness training in the clinical and non-clinical domain (Baer, 2003, p.126). A programme developed by Kabat-Zinn in a behavioural medicine setting for clients with a wide range of physical and mental health issues. Meta-analyses have demonstrated significant MBSR effects on a range of physical and mental health outcomes among a variety of clinical populations as cited by Baer (2003) in Poulin, Mackenzie, et al., (2008, p. 36). Based on MBSR model, Mindfulness-Based Cognitive Therapy (MBCT) is a manualized intervention combining both mindfulness and incorporating elements of CBT, designed to prevent relapse related to recurrent depression. Mindfulness is also a central part of other multi-component interventions such as Dialectical Behaviour Therapy (DBT) an approach used to treat borderline personality disorder and Acceptance and Commitment Therapy (ACT) a psychotherapeutic modality based on Relational Frame Theory (RFT) which also uses several strategies which are consistent with mindfulness-based approaches (Zgierska, Rabago, et al., 2009, p.2 and Baer, 2003, pp.126-127).

A variety of studies have suggested that the introduction of mindfulness and compassion based interventions should be an integral part of a health care professionals training, continued professional development and ongoing self-care programme (Barnett 2007, Shapiro, Brown, et al., 2007; McCollum and Gehart; 2010 and Aggs and Bambling; 2011). Smith and Moss (2009) highlight the negative implications of leaving self-care out of graduate training; by bringing attention to a study carried out by Kuyken, Peters et al., (2000), who studied the maladjustment of psychology trainees across several years of coursework and found that trainees reported increased problems with work adjustment, depression, and interpersonal difficulties over three years of clinical training. Shapiro, Brown, et al., (2007, pp.111-112), examined the effects of incorporating Mindfulness Based Stress Reduction (MBSR) into a therapists training.

They found significant pre-post course declines in perceived stress, negative affect, state and trait anxiety, rumination, and significant increases in positive affect and self-compassion.

In light of these findings there has been a call for initiatives aimed at promoting the health and well-being of staff in work-based settings and the applicability of MBI in work settings has generated an increasing amount of interest in recent years. The U.K. Mental Health Foundation's 2010 Mindfulness Report, as cited in Chaskalson (2011, p. 3), suggests that research shows that mindfulness confers significant benefits on health, well-being and quality of life in general. This in turn has significant benefits and implications for people's performance in the workplace; either in terms of their levels or stress and productivity or in terms of the qualities of interpersonal relationships. Chaskalson (2011, p.10), lists the characteristics of a more mindful workplace:

- Lower levels of stress and illness-related absenteeism
- More employee engagement
- Less conflict
- Higher levels of job satisfaction
- Lower levels of employee turnover
- Higher levels of creativity and innovation
- Greater productivity

> "All in all the, given the relatively low cost of mounting such trainings, the potential return on investment is considerable" Chaskalson (2011, p.10).

Glomb, Duffy, et al., (2011), offer a model of the mental and neurobiological processes by which mindfulness and mindfulness-based practices improve self-regulation of thoughts, emotions, and behaviours, linking them to both performance and employee well-being in the workplace. This model consists of three core and seven secondary processes that when linked together attempt to demonstrate how mindfulness and related practices might affect employees directly, in both task and relational functioning. Glomb, Duffy, et al., also focus on three areas where they expect

mindfulness to most strongly affect employees: improved social relationships, resilience and task performance and decision making. The constraints of this study prevent a detailed analysis of the text, however, a summary of the model provided by Glomb, Duffy, et al., (2011, p.124) is as follows:

Core and Secondary Processes Linking Mindfulness to Self-Regulation

Glomb, Duffy, et al., identify two core mental processes and one core neurobiological process that are affected by mindfulness: a) a decoupling of the self (i.e., ego) from events, experiences, thoughts, and emotions; b) a decrease in automaticity of mental processes in which past experiences, schemas and cognitive habits constrain thinking; and c) increased awareness and regulation of physiological systems. In addition to these three core processes, Glomb, Duffy, et al., identify seven additional, secondary processes by which mindfulness-based practices are expected to improve employee functioning: a) decreased rumination, b) greater empathy, c) increased response flexibility, d) improved affective regulation, e) increased self-determination and greater persistence, f) enhanced working memory, and g) greater accuracy in affective forecasting.

Chapter 2: Literature Review

In this stage of the literature review this author chose to review studies which aimed to explore the effects of using mindfulness-based interventions (MBI) as part of a self-care program for health care staff (HCS) in a work setting. Additional articles were also included in this review, if thought to be relevant to the criteria studied. This literature review will provide a brief overview of the more pertinent issues highlighted by these studies, i.e., the format of the intervention; the findings; programme retention and follow up; the challenges encountered by the participants and the types of data collected. Future recommendations will be given based on this information, as well as the influence this review may have on the present study, in relation to the study design, data collection methods and so on.

2.1 Method

The following databases were searched up until February, 2013: Aberdeen Library Catalogue (ALEPH), JSTOR, SCOPUS (Elsevier), Primo Central (Ex Libris) and Google Scholar. The search combined terms for "mindfulness" with a number of other terms related to healthcare professionals and work-based settings, such as cultivating mindfulness with health care staff in their place of work. Abstracts of articles were screened for suitability and references of relevant articles were hand searched for further information. A number of websites were also searched, for example, www.themindfulworkplace.com which then led on to other resources in this area. Only publications in English were selected and both quantitative and qualitative studies were included if they evaluated a MBI with HCS and measured variables related to the health and well-being of staff.

14 separate journal articles from 12 studies were reviewed based on the above criteria; resulting in a mixture of both quantitative (n=10) and qualitative (n=4) studies. Two of these articles (De-Zoysa, Ruths, et al., 2012 and Cohen-Katz, Wiley, et al., 2005) were qualitative follow up studies directly linked to earlier work captured here by Ruths, De-Zoysa, et al., (2012) and Cohen-Katz, Wiley, et al., (2005). Klatt, Buckworth, et al., (2009), study on University employees (not HCS) was also included in this review, as it attempted to deliver a short-form version of the MBSR course in a work setting, which this author felt was relevant to the review.

In addition to the articles mentioned above, other studies were also included in the larger context of this stage of the review if thought to be relevant to the criteria as listed above. Examples include a review of MBI's when used with health care professionals (Boellinghus, Jones, et al., 2012 and Irving, Dobkin, et al., 2009), a review of MBSR for Stress Management in Healthy People (Chiesa and Serretti, 2009), and Mindfulness-Based Trauma Prevention for Social Work Professionals (Berceli and Napoli, 2006).

2.2 Mindfulness-Based Intervention Used

Findings indicate that the Mindfulness Based Stress Reduction (MBSR) model (the programme developed by Kabat-Zinn in 1979), or combinations of MBSR with other cognitive approaches (Schenstrom, Ronnberg, et al., 2006, Galantino, Baime, et al., 2005), is the main MBI being researched with HCS. This is also consistent with the Poulin, Mackenzie, et al., (2008, p. 36), claim that studies with a variety of clinical populations have thus far predominantly focused on evaluating the MBSR programme as an intervention. This review did, however, find separate studies that used MBCT (Ruths, De-Zoysa, et al., 2012), calm abiding meditation (Rocco, Dempsey, et al., 2012) and mindfulness meditation (Krasner, Epstein, et al., 2009), methods incorporated into the overall intervention.

2.2.1 Format of Intervention

Eight studies followed a standard format similar to the MBSR programme in design, where participants met once a week as a group for 2-2.5 hours over an 8-week period; with the expectation that participants would practice mindfulness on a daily basis for 30-45 minutes. Variations on this format were Klatt, Buckworth, et al., (2009), who attempted to offer a short-form of the MBSR programme, consisting of a 6-week intervention, a 1-hour per week meeting held at lunch time. The participants were encouraged to engage in 20 minutes of practice each day, that participants could do during their break time using a guided audio practice and the full-day retreat within the traditional MBSR programme was omitted. Mackenzie, Poulin, et al., (2006), and Poulin, Mackenzie, et al., (2008), also attempted to offer a short-form version of the MBSR programme (brief or bMBSR), offering a 4-week intervention, where the group met for 30 minutes once a week and participants were instructed to practice for at least

10 minutes a day, five days per week. Schenstrom, Ronnberg, et al., (2006), attempted an entirely different approach, in terms of the structure of the programme, with the intervention delivered over 3x2 days and 1x1 day with 2-4 weeks in-between each intervention.

2.2.2 Findings

All 12 of the studies demonstrated in some way that the MBI used had a positive effect on the participants exposed to it, as follows:

Quantitative Studies

Schenstrom, Ronnberg, et al., (2006), piloted a newly developed mindfulness-based cognitive attitude training with a variety of HCS (doctors, nurses, physical therapists, occupational therapists and social workers, n=52) in a primary care setting and found that the perceived well-being of participants increased, whilst the degree of stress at work and at home decreased during course participation. The level of mindfulness increased during the course and persisted at 3-month follow-up, however, the degree of positive change in mindfulness showed a positive correlation with the extent of practice at home. Those who practiced more achieved a significant increase in mindfulness, whereas those who practiced little or not all achieved no significant changes.

Shapiro, Astin, et al., (2005), conducted a randomised controlled study with a mixed group of health care professionals (doctors, nurses, psychologists, social workers and physical therapists, n=38) using the MBSR programme as an intervention. Results indicated that participants in the experimental condition showed decreased perceived stress and greater self-compassion when compared with controls. Reported psychological distress and job burnout were decreased; however, the differences between the experimental and control groups along these dimensions was not significant.

Galantino, Baime, et al., (2005), used a mindfulness meditation programme utilising material from MBSR and cognitive therapy, which was adapted for presentation in a health care setting. The association of subject-reported stress symptoms and salivary cortisol with a group of staff serving in administrative and direct

care capacities in a University hospital was evaluated (n=84). Participants showed a significant improvement in emotional exhaustion and mood, however, there were no changes in empathy or salivary cortisol. Cohen-Katz, Wiley, et al., (2005), conducted a randomised controlled study with a group of nurse practitioners using MBSR as the intervention. The treatment group demonstrated a significant reduction in emotional exhaustion and depersonalisation when compared to the wait-list control group.

Using an abbreviated version of the MBSR programme (a 4-week intervention, where participants met for 30 minutes on a weekly basis), Mackenzie, Poulin, et al., (2006), conducted a randomised controlled trial with a group of nurses and nurse aides. The intervention group demonstrated a significant reduction in burnout symptoms and an increase in relaxation and life satisfaction in comparison to the control group. In a follow up to the Mackenzie, Poulin, et al., study by Poulin, Mackenzie, et al., (2008), a similar intervention was offered to a group of nursing staff to examine how the short-form version of the MBSR compared to a traditional relaxation programme. Results demonstrated that both interventions significantly improved relaxation and life satisfaction, with mindfulness participants exhibiting a trend toward particular improvements in emotional exhaustion.

Klatt, Buckworth, et al., (2009), also used a shortened version of the MBSR programme, in a randomised controlled study with staff and faculty at a University. Self-reported perceived stress, sleep quality and mindfulness were measured in the beginning and end of the 6-week intervention. Significant reductions in perceived stress and increases in mindfulness were found in the intervention group only, although both groups reported an increase in the quality of their sleep.

Krasner, Epstein, et al., (2009), sought to determine whether an intensive educational programme in mindfulness, communication, and self-awareness would be associated with an improvement in primary care physicians' well-being, psychological distress, burnout and capacity for relating to patients. Participants in this programme showed improvements in measures of well-being, including burnout (emotional exhaustion, depersonalisation and personal accomplishment) and improved mood. Participants also experienced positive changes in empathy and psychosocial beliefs, associated with a more patient-centred orientation to clinical care.

In a prospective uncontrolled study, Ruths, De-Zoysa, et al., (2012), investigated the adherence of a group of mental health staff to a MBCT programme as well as the impact of MBCT on mindful awareness, attention and psychological well-being. Participants in the study showed a significant improvement in mindful attention and awareness and psychological well-being, however, significant changes were only evident when separating those who continued meditating after the programme from those who did not. This supported Shapiro, Brown et al., (2007), statement as cited in Ruths, De-Zoysa, et al., (2012, p. 125), that suggested that a relationship with some psychological variables may only appear when some critical threshold of practice is met. Asuero and de la Banda (2010), examined a mixed group of HCS (doctors, nurses, psychologists, educational professionals and service industry employees, n=29) in an effort to confirm the effectiveness of MBSR to decrease distress. Participants in the intervention group showed a reduction in distress, rumination and negative affect when compared to the wait list control group.

Qualitative Studies

A relatively small number of studies have employed qualitative methods to examine the experiences of HCS participating in MBI training courses. Both Cohen-Katz, Wiley, et al., (2005), and Shapiro, Astin, et al., (2005), indicated the difficulty of achieving statistically significant data using small sample groups and by using quantitative methods alone, therefore, stressing the importance of the collection of qualitative data to effectively capture the positive changes reported by the participants. In this respect, Irving, Park-Saltzman, et al., (2012), Rocco, Dempsey, et al., (2012), De-Zoysa, Ruths, et al., (2012), and Cohen-Katz, Wiley, et al., (2005), carried out a more detailed analysis of the qualitative experience of the participants. Other studies also added an additional qualitative component to the study design, asking participants to share their experiences of the programme in more detail (Asuero, and de la Banda, 2010 and Shapiro, Astin, et al., 2005).

In a follow up study to Ruths, De-Zoysa, et al., (2012), a small group of Clinical Psychologists (n=7) in De-Zoysa, Ruths, et al., (2012), reported that mindfulness had a positive impact on the processing of strong emotions. Participants also reported feeling calmer, less reactive, in addition to experiencing greater concentration, focus and

reduced rumination. In a three-part series of articles studying MBSR on nurse stress and burnout, Cohen-Katz, Wiley, et al., (2005), revealed that participants reported a sense of being able to slow down, relax and be in the moment. Participants also experienced feelings of calmness, patience, and greater self-acceptance, self-awareness and self-care.

Rocco, Dempsey, et al., (2012), taught an 8-week calm abiding meditation course to mental health service staff working in a child and adolescent facility. The authors stated that the intervention differed from the majority of 8-week MBI's (including MBSR) in two distinct ways (p.196): recognition and inclusion of traditional Buddhist practices, and the structure, content and pedagogy of weekly classes. Participants in this study reported being less reactive and better able to manage emotions, having heightened self-awareness, self-acceptance and acceptance of others and of circumstances; and, in the longer term, were better able to make healthier lifestyle choices.

Irving, Dobkin, et al., (2012), examined the experiences of groups of health care professionals (doctors, nurses, psychologists, social workers and counsellors, n=26) who participated in mindfulness-based medical practice (an intervention closely modelled after MBSR) a programme offered to staff over two consecutive years. Participants in this study demonstrated enhanced attention and awareness brought about through mindfulness practice, as well as the cultivation of an increasingly open and self-compassionate attitude towards themselves. Half of the participants discussed the salience of group support, and a number reported that the experience (i.e., the weekly group meetings with other professionals) had remedied a sense of professional isolation.

2.2.3 Programme Retention and Follow up

Shapiro, Astin, et al., (2005), study experienced a high attrition rate (44% dropped out); with participants reporting that dropping out was due to a lack of time and increased responsibility rather than a lack of interest in or need for stress management. Shapiro, Astin, et al., (2005, p.172), suggested that adding a 2-hour intervention, plus daily home practice to an already demanding schedule may not be feasible for a substantial number of HCS.

Galantino, Baime, et al., (2005), attempted to solve the issue of expecting participants to practice at home, by providing time at the end of the work day for practice. In addition to practice, 61% of participants in Galantino, Baime, et al., study completed pre and post measures at this time, suggesting that the day's end was not the best time for practice, even though it was scheduled in during work time. Galantino, Baime, et al., (p.260), experienced a significant attrition in the study, citing life events, other commitments and a various job roles and responsibilities as factors that may have affected participation. Galantino, Baime, et al., also highlighted the fact that the enrolment of individuals in an administratively driven programme may not have obtained a representative participant sample willing to use the modality to manage stress in the health care environment.

Klatt, Buckworth, et al., (2009, p. 602), highlights an important consideration as far as the attrition rate of participants is concerned, pointing out that much of the research conducted on the benefits of MBSR has utilized participants who are highly motivated medical patients willing to make the time commitment necessary to satisfy the programme requirements. With these participants, programme adherence is approximately 85%.

> "Their own suffering and the possibility of being able to do something to improve their health are usually motivation enough for the patients in the stress clinic to invest this degree of personal commitment" (Kabat-Zinn, 2004, p.42).

The above information in this section, made this author consider ways in which to present the MBLC material that would be immediately relevant to and hold the attention of participants; in order for the participants to prioritise the home practice and see it as something that would be of benefit to the participants not only on an individual level, but also for the participants family, friends, colleagues and clients. This author also chose to schedule the MBLC at the beginning of the working day in the hope that this would allow participants to attend before becoming involved in the many work commitments of the day.

Klatt, Buckworth, et al., (2009, p.602-603), highlighted two aspects of MBSR that may be barriers to effective implementation in a work setting. Firstly the time commitment on a weekly and daily basis and secondly that yoga is often utilized in

MBSR, but limited workspace and the need to change clothes diminishes its usefulness as a stress management tool. In the MBLC, mindful movement is taught, but in a way that does not require a large amount of space or the need to change clothes, therefore, this was not considered to be an issue during this particular study.

Mackenzie, Poulin, et al., (2006), Schenstrom, Ronnberg, et al., (2006) Poulin, Mackenzie, et al., (2008) and Klatt, Buckworth, et al., (2009), attempted to address this issue in the study design with the delivery of a short-form or modified version of the traditional format of an 8-week MBI. Klatt, Buckworth, et al., recorded a relatively high rate of adherence to the programme (85% completed) and the most highly rated components of the programme were related to the time commitment of the intervention. Schenstrom, Ronnberg, et al., study experienced a 21% drop out and the retention rates in the Machenzie, Poulin, et al., and Poulin, Mackenzie, et al., studies were not clearly indicated, therefore, the benefits of offering a short-form version of an 8-week course remains inconclusive. In the earlier stages of this study design, this author did consider adapting the MBLC to short-form version for HCS for the reasons as cited above, however, this author felt it necessary to honour the integrity of the MBLC by not making any changes, but also to teach the course in its entirety to ascertain the feasibility of offering the full programme to HCS.

Using a standard 8-week format, Asuero and de la Banda, (2010), Krasner, Epstein, et al., (2009) and Ruths, De-Zoysa, et al., (2012), reported a good retention during their studies. Asuero and de la Banda, reported that the average class attendance was 92% and adherence to the different components of the programme was high. At the end of the intervention 93% continued to practice meditation (falling to 82% at 3 month follow up) and 72% practiced yoga or stretching regularly (increasing to 75% at follow up). Asuero, de la Banda et al., and colleagues listed some of the factors that may have contributed to the above high retention and adherence as: the instructors experience with the intervention, the course was professionally accredited, financial compensation for collaborating and participants satisfaction with the programme.

The question of what happens after a mindfulness programme ends and whether or not participants continue to practice and maintain or develop any positive changes over time is a critical one (Cohen-Katz, Wiley, et al., 2005, p.33). Cohen-Katz, Wiley, et al., believe that teaching the 8-week MBSR programme is a powerful intervention, but probably inadequate in making lasting changes over time in burnout and stress for HCS, unless accompanied by ongoing support. Krasner, Epstein, et al., (2009), attempted to rectify this issue to some extent by offering a 10-month "maintenance period" where participants from the earlier study were invited to attend monthly practice sessions. Cohen-Katz, Wiley, et al., (2005), also attempted to provide some form of post-intervention support by setting up graduate retreats, practice sessions and monthly peer-led support groups. Additional data was not collected from participants in the Krasner, Epstein, et al., or the Cohen-Katz, Wiley, et al., study in relation to the informal networks that were set up to support ongoing practice. This author agrees with Cohen-Katz, Wiley, et al., and Krasner, Epstein, et al., with regard to setting up some form of post-intervention support for participants of the MBLC.

Four studies conducted some form of post intervention follow up (Schenstrom, Ronnberg, et al., 2006, De-Zoysa, Ruths, et al., 2012, Rocco, Dempsey, et al., 2012, and Cohen-Katz, Wiley, et al., 2005). At 3-month follow up De-Zoysa, Ruths, et al., (2012), reported that none of the participants claimed to be following a regular formal meditation practice, although participants described using mindfulness in a more informal and ad-hoc way to enhance pleasant experiences and / or to deal with stressful situations. Rocco, Dempsey, et al., (2012), reported that at the end of the 15-month follow up to their study only two of the original 24 HCS that completed the course were still meditating regularly. The positive changes reported by participants in Schenstrom, Ronnberg, et al., study in relation to levels of mindfulness, perceived stress and subjective well-being all persisted at 3-month follow up. Cohen-Katz, Wiley, et al., study showed significant reductions in emotional exhaustion and depersonalization and that these changes were maintained at 3-month follow up.

2.2.4 Challenges Encountered by Participants

Despite the promising findings reported by the participants, a number of challenges were also mentioned. In Rocco, Dempsey, et al., (2012), participants reported encountering obstacles in relation to their practice. In the early part of the course participants complained of physical discomfort (pains in knees and / or back), then in the following weeks issues relating to the external pressures of time and interruptions from family and friends when trying to find a place to practice emerged. In De-Zoysa, Ruths, et al., (2012), most participants also spoke about the practical barriers that prevented them from maintaining practice and listed these as life events, the mental effort of maintaining practice (i.e., boredom and concentrated effort) and some participants felt that the efforts attributed to a regular practice were too gradual, which left them feeling frustrated.

In Irving, Park-Saltzman, et al., (2012), some participants reported experiencing emotional distress when different emotions or issues arose in their minds. Participants also emphasized the central nature of the awareness of perfection, self-criticism, their natural tendency to focus on others (68% of participants indicated that they hoped to be able to learn new skills that would enhance their clinical skills with clients) and the automaticity of the helping and fixing mode. Cohen-Katz, Wiley, et al., (2005), also listed challenges as reported by participants as restlessness, pain and dealing with difficult emotions.

2.2.5 Limitations, Recommendations and Conclusions

Certain studies used terms such as “based on” (Asuero and de la Banda, 2010), or “a modified version of” (Irving, Park-Saltzman, et al., 2012), programmes such as MBSR, however, it is not clear in most cases what modifications and / or adjustments may have been made to the programme in this regard. Future studies may benefit from either following the manualized version of the intervention used or clearly stating what modifications are made and in which context.

Although studies such as those conducted by Shapiro, Astin, et al., (2005), Klatt, Buckworth, et al., (2009), and Cohen-Katz, Wiley, et al., (2005), were randomized controlled studies, the remainder of quantitative studies would have benefited from a

more robust design in this regard. The absence of control groups, self-selection and non-randomisation limits the conclusiveness of findings (Chiesa and Serretti, 2008, p.598).

The majority of studies employed small sample sizes, which, therefore, limited the ability to detect small changes in the variety of measures used (Galantino, Baime, et al., 2005, p.260). All eight of the quantitative studies used self–report measures and as Irving, Park-Saltzman, et al., (2012), has pointed out, few studies have included adjunctive physiological measures, such as salivary cortisol. Future research could include multimodal assessment strategies such as physiological, neuro-hormonal, and cognitive measures (Irving, Dobkin, et al., 2009, p. 63). Schenstrom, Ronnberg, et al., (2006, p.150), also highlighted that the difficulty in finding measurements appropriate for the study population, as most measurements are designed for people with diseases and not healthy people. Schenstrom, Ronnberg, et al., also indicated that the one of the self-report measures used in their study (MAAS) had not been validated for the Swedish population at the time of the study. This author took this information into account when choosing the self-report measures to be used in this study.

In most cases it cannot be said what part of the intervention was effective, as mindfulness courses often comprise of multi-component interventions such as sitting meditation, yoga and the body-scan. Schenstrom, Ronnberg, et al., (2006), study is a clear example of where mindfulness and cognitive approaches are integrated elements of the same course. As Krasner, Epstein, et al., (2009), point out, the results do not establish that the improvements were just down to the intervention and could have been related to variables such as spending time together in a group setting. Irving, Park-Saltzman, et al., (2012), also refers to the impact that group support may have had on the variables measured. Each individual will have exercises that work better for them than others, therefore, even though this is an important issue it is always likely to change depending on individual preference. With this said, however, it is a valid point to in some way tease apart the various activities that are presented in mindfulness courses and study the effect that each one has. This information may be more readily found in the qualitative studies and some of the questions asked of participants could be directed to this area.

An area that this author feels would warrant more research, would be the type of mindful movement activities used. Traditionally gentle movement and or yoga type exercises have been used; mainly because of the inherent benefits and that the low resistance and low impact activities used can be adopted by most people safely. Berceli and Napoli, (2006), proposed a mindfulness-based trauma prevention programme for social workers, which included trauma-releasing exercises that this author believes warrant further research with other groups of HCS.

Asuero and de la Banda, (2010), gave brief mention to the positive impact that an experienced mindfulness facilitator can have on participants, however, few of the studies specifically addressed facilitator experience or the impact this may have had on the study. This factor will likely influence the participant's experience of the MBI dramatically. A pre-requisite to the majority of mindfulness based teacher training courses is the importance of the tutor having a regular sustained personal mindfulness practice. Three studies did mention in brief the experience that facilitators had, however, this information was also open to interpretation. An experienced and knowledgeable mindfulness facilitator is likely to be the one of the most important factors to the success of such a programme. As Irving, Park-Saltzman, et al., (2012), points out teachers should embody mindful qualities, be skilled in the delivery of the exercises and the explanation of material and be able to handle the challenges that arise.

The majority of studies consisted mainly of female participants, this would appear to be an obvious factor, considering the high female to male ratio within the health service professions, however, further research could include more male representatives. It may also be interesting to evaluate the male to female ratio on mindfulness courses in general outside of the research paradigm. In this author's experience, mindfulness training courses and retreats have significantly more females than males in attendance; this poses the question why is this the case?

The relationship between the outcomes measured and the quantity and quality of formal practice participants engage in on a daily basis throughout the duration of the MBI would appear to be an important variable to be studied further. As Irving, Dobkin, et al., (2009, p.63), point out, this issue of "dose" is not adequately addressed in the majority of studies. A means of measuring both the quantity and quality of formal and

informal practice may need to be refined, although two studies in this review (Schenstrom, Ronnberg, et al., 2006, and Ruths, De-Zoysa, et al., 2012), did attempt methods of tracking participant's home practice. This author will attempt to capture and record the amount of time participants engage in practice during this study. In order to ascertain the feasibility of analysing this data in more detail in future studies and to explore ways of measuring this variable, however, because of the scale of this study, this data will not be presented in the findings or discussion.

> "The more systematically and regularly you practice, the more the power of mindfulness will grow and the more it will work for you" (Kabat-Zinn, 2004, p. 20).

Cohen-Katz, Wiley, et al., (2005), stress the importance that any intervention addressed towards individual workers must be accompanied by parallel efforts to intervene at an organisational and environmental level. There is minimal mention of parallel interventions by the agency in studies reviewed. For this reason, this author chose to include information relating to the stressors and challenges that participants faced at work, which may be pertinent information for agencies to consider. This information will be disseminated to managers upon completion of the study.

As pointed out in Krasner, Epstein, et al., (2009), and Cohen-Katz, Wiley, et al., (2005), it remains unclear how durable the changes attributed to participation in MBI's may be in the long-term. Future studies could aim to address this issue; however, ongoing mindfulness support networks could also be put in place to give participants continued support with mindfulness practice upon completion of MBI's.

Chapter 3: Rationale

This author currently works in the Health Service as a Drug and Alcohol Counsellor, who specialises in working with children and adolescents. The job can be extremely stressful at times and in addition to the difficulties experienced working with this client group; there are additional pressures such as increased administrative responsibilities, reduced funding and uncertainty around job security in this current climate. This author is based in a young person's centre and links in with a variety of other agencies in the statutory and non-statutory sectors, including but not limited to: Youth Workers, Criminal Justice Teams, Mental Health Services, Sexual Health Workers, Social Workers, Residential Care Staff and Volunteer Counsellors. This author, therefore, comes into contact with a variety of staff and volunteers who are also struggling with similar issues such as the ones mentioned above. For ease of identification, these staff will be referred to as health care staff (HCS).

This author considers self-care to be of paramount importance for everyone, but especially relevant to those members of staff who work in areas such as those listed above. Discussions have been had informally about the subject self-care, with a number of colleagues from different agencies over many years and it is clear from both this authors own experience and the accounts of colleagues, that the care of others (including family, friends, colleagues and clients) is often prioritised ahead of the care of the HCS.

3.1 Purpose

Because of the recent emergence of the MBLC (2011), to date, this author knows of no published studies that have introduced the MBLC as a model of self-care for a HCS. The Purpose of this prospective pilot study is, therefore, to introduce the MBLC to a mixed group of HCS and deliver it during the working day. The effectiveness of the MBLC will be measured by using variety of quantitative and qualitative methods to explore if and how participation in the MBLC was beneficial for HCS in relation to their own health and well-being. Pre and post-course validated self-report measures will be completed by participants in relation to the level of dispositional mindfulness, perceived stress and self-compassion. Qualitative data will be collected to explore the participants experience in more detail. A variety of different methods will be used to

achieve this aim, such as the Weekly Home Practice Evaluation Form, the group discussion format and a Post-Course Feedback Form. Challenges or negative side effects attributed to engagement in the MBLC will also be examined. As Irving, Park-Saltzman, et al., (2012, p.2) points out, collecting data in the group milieu provides a unique opportunity to create a forum through which health care professionals from various disciplines could discuss their experiences of the course collectively.

3.2 Aims and Objectives

Highlight the issue of compassion fatigue amongst HCS.

Investigate studies that have attempted to introduce MBI's into work settings for use with HCS.

Facilitate the delivery of the MBLC for HCS during work time.

Explore the effects of the intervention, by examining the pre and post-change scores across a range of self-report measurements.

Record the subjective experiences of the participant, during the intervention and upon completion of the course.

Present, analyse and discuss the data recorded and research findings.

Disseminate the research in this author's professional context and in the context of the study of mindfulness.

3.3 Research Questions

Are HCS experiencing any stress in their current roles?

Does participation in the MBLC benefit the participants in relation to their own health and well-being?

Are there any challenges or negative side effects attributed to participation in the MBLC?

Chapter 4: Research Approach and Methodology

The study of literature influenced this author's current personal stance on epistemology and the research paradigm that frames this study; as well as the actual study design, measures to be used and analytic approach adopted. The research approach and methodology will be presented in this section, as well as a description of the intervention used, the participants and a brief introduction to the facilitator (this author). In addition to this, the resources available, ethical issues, permissions and assessment of risk will also be presented in this chapter.

This study is a piece of survey research that in the main used a combination of questionnaire's, and recorded the pertinent issues that emerged from the discussion with participants during weekly meetings. According to Boynton and Greenhalgh, (2004, p. 1312), questionnaires offer an objective means of collecting information about people's knowledge, beliefs, attitudes and behaviour, however, Boynton also points out that questionnaire research can never be completely objective. "Researchers and participants are all human beings with psychological, emotional and social needs" (Boynton, 2004, p.1374). As Boynton also sees it, a questionnaire means something different to participants and researchers and this introduces potential biases into the recruitment and data collection process.

This author agrees with Boynton's viewpoint and is aware of the potential biases that exist in this particular study; ranging from (but not limited to) researcher bias, participant selection bias, a bias related to the intervention used in this study, the inherent bias related to the design of questionnaires and the selection of the information to be recorded from, for example, the group discussions. In order to account for this, in very basic terms, this author allowed meaning to emerge from the data, rather than have pre-determined categories and attempted to record and analyse the data as objectively as possible in order to give a balanced account of the research.

4.1 Personal Stance on Epistemology

Darlaston-Jones (2007, p.20-24), highlights the importance of utilising methods of enquiry that accept and value the role of the subjective in attempts to understand phenomena and to formulate research designs that allow different voices to emerge from the study. Darlaston-Jones, also mention the importance of the scrutinizing the role of the interviewer in the data gathering process and challenging how the interviewers biases and views may affect the data gathering process. At present this author's personal stance on epistemology leans more toward the Social Constructivism point of view. This has been influenced by the review of literature throughout this assignment, which points toward the importance of using qualitative methodologies to explore participant's experiences in more detail.

> "Social constructionism provides a different perspective with which to view the world that allows the unique differences of individuals to come into focus while at the same time permitting the essential sameness that unites beings to be identified" (Ainsworth, 2003 as cited in Darlaston-Jones, 2007, p.20).
>
> As Eisner (1992, p.12-14) eloquently states:
>
> What we say depends on what we seek, and what we seek depends on what we know how to say." "The facts never speak for themselves. What they say depends upon the questions we ask.

4.2 Research Paradigm

As cited in Kabat-Zinn (2003, p.153), Baer's (2003), commentary highlights some of the fundamental issues and challenges facing researchers in the design, delivery and evaluation of MBI's.

> "The challenge is to find a fit that honours the integrity of what may be different but complementary epistemologies" (Kabat-Zinn, 2003, p. 146).

As cited on the Alzheimer Europe website (2012, para. 20):

> The pragmatic approach to science involves using the method which appears best suited to the research problem and not getting caught up in philosophical debates about which is the best approach. Pragmatic researchers, therefore, grant themselves the freedom to use any of the methods, techniques and procedures typically associated with quantitative or qualitative research. They recognise that every method has its limitations and that the different approaches can be complementary.

The pragmatic paradigm places "the research problem" as central and applies all approaches to understanding the problem (Cresswell, 2003, p.11 as cited in Mackenzie and Knipe, 2006, p.4). Because of the mixed method approach used in this study, this author feels that the pragmatic paradigm best frames this particular piece of research.

4.3 Study Design

A comparison using a control group was originally planned, however, because of the time constraints and practicalities of carrying out such a study; a prospective pilot study with a mixed methods approach was chosen as the most suitable design in the first instance, in order to gather a range of data from the participants.

This study is a continuation of previous work carried out by this author, in the Compassion and Professional Enquiry Modules of the Studies in Mindfulness MSc in the 2nd year of study. In the Compassion Module, this author looked at the prevalence of compassion fatigue with members of staff in mental health services, such as counsellors, therapists and psychologists and how to combat CF by the utilization of compassion based interventions. In the Professional Enquiry Module, this author conducted a survey to evaluate the feasibility of introducing MBI's into a work setting to be used as a self-care programme for staff. The work conducted in both of these assignments then influenced the structure, purpose and design of the current study.

In addition to the assignments listed above, prior to this study this author conducted a small pilot study using the 8-week MBLC as an intervention and facilitated the course for four of this author's colleagues; to ascertain the feasibility of conducting further research in this area. This is consistent with the suggestion made by Boynton

(2004), of conducting a pilot study with participants who are representative of the definitive sample. All participants in this pilot study stated that the MBLC benefited them in some way and that it should be offered to all HCS as a programme that would benefit the health and well-being of colleagues. Several changes were then made to the quantitative and qualitative instruments to be used in this study; therefore, the data from this pilot was not included in the findings presented in this study.

4.4 Participants

Individuals in this study were a convenience sample recruited mainly from the Health Service, however, because this author had to work with a limited budget and was offering the course free to participants; alternative / suitable venues had to be sourced outside of the Health Service. Two suitable venues were found in partner agency premises and as a matter of courtesy the MBLC was also offered to a small number of staff from these agencies; in exchange for free use of the rooms throughout the duration of the course. This resulted in a mixed group of HCS being able to access the MBLC.

The study was posted on the weekly staff-web news within the Health Service and forwarded on to other members of staff from partner agencies by email. The promotional material (see Appendix 3) explained the nature of the research being carried out and invited HCS to attend an introductory session on mindfulness. The promotional material generated a large amount of interest in the study in a short space of time and within one week, the course had attracted enough interest to warrant the introductory sessions going ahead, as well as scheduling a second course to cope with the demand. At the introductory session, HCS were informed of the nature of the research project, mindfulness was defined and a broad outline was given of the MBLC and the research carried out on MBI in general; participants were then given the opportunity to ask any questions.

After the introductory sessions were over, this author received further requests from a variety of different HCS requesting to either participate in the MBLC as an individual or to deliver the course to groups of staff. Because of work restrictions and time limitations, these requests were recorded for future reference to build up an evidence base for further study; should permission be given to run the MBLC with other

groups of HCS at a later date. Based on these requests, the potential to conduct a longitudinal peace of research would appear promising.

Participants were allocated a place on one of the courses, dependant on the participant's availability to attend and, therefore, not randomly assigned to either group. One course was held in the City of Carlisle and the other, 20 miles South in the Town of Penrith. 14 staff attended the introductory session in Penrith, to find out more about the study and 12 participants signed up for the course at session one, two weeks later. The two remaining participants that chose not to begin the MBLC stated that scheduling issues made it impossible for them to attend on this occasion, but would like to attend at a later date. 19 participants attended the introductory session in Carlisle and signed up for the course at session one.

A total of 31 participants across both groups provided demographic information as follows: Age range 25 – 61 with a mean age of 42; 90% of whom were female and 10% male. The participants worked in a wide variety of job roles and identified themselves as: Nurses (n=11), Occupational Therapists (n=3), Assistant Psychologist (n=1), Clinical Psychologist (n=1), Doctor (n=1), Yoga Teacher / P.A (n=1), Care Worker (n=1), Manager (n=2), Team Leader (n=1), Walk Leader (n=1), Community Development Worker (n=1), Assistant Practitioner (n=2), Independent Living Worker (n=1), Volunteer Counsellor (n=1), Drug and Alcohol Worker (n=1), Disability Development Worker (n=1), Carer Support Worker (n=1).

4.5 Criteria for inclusion

HCS who are fluent in English (currently the teaching materials, manuals and audio practices are only in English) and over 18.

HCS agree to participate in the MBLC and to act as a participant in the research project.

Participant should have no current medical or mental health issues that would preclude them from participating in the MBLC. Further details of which can be found on the registration form (see Appendix 4).

4.6 Attendance

Consistent with Shapiro, Astin, et al., (2005), as cited in Aggs and Bambling (2012, p. 279), attending a minimum of six of the eight weekly scheduled sessions constituted the minimum training considered necessary to acquire the core knowledge and skills, and provided the minimum session number cut off for the quantitative data used in this study. To increase the opportunities for HCS to meet the training requirements, this author offered to meet with staff face to face or coach them over the telephone following any missed sessions. In the first half of this course this author conducted "catch up" sessions with 10% of the overall number of participants across both studies.

Both courses ran at the same time, in the same week, on separate days and HCS were offered the opportunity to move back and forth between groups to increase the opportunities for participants to attend a session on a weekly basis. This option was used frequently by participants across both courses and proved valuable in maintaining continuity and contact with the MBLC and the material covered.

4.7 Measures

Cohen-Katz, Wiley, et al., (2005, p.172), and Shapiro, Astin, et al., (2005, p.32), indicate the difficulty of achieving statistically significant data using small sample groups and by using quantitative methods alone, therefore, stressing the importance of the collection of qualitative data to effectively capture the positive changes reported by the participants. Cohen-Katz, Wiley, et al., therefore, placed equal emphasis on the analysis of qualitative data, which enhanced their understanding of the impact the MBSR had on the participants and helped determine directions for future research. This author agrees with both Cohen-Katz, Wiley, et al., and Shapiro, Astin, et al., in this regard and, therefore, adopted a mixed method approach to effectively capture a wide variety of data; that may otherwise not have been possible using either quantitative or qualitative data collection methods alone.

4.7.1 Quantitative Data Collection

Three self-report questionnaires that have achieved satisfactory structure, reliability, and validity were chosen (see Appendix 9, 10 and 11, for a copy of the questionnaires). Baseline and post-intervention measures were taken from each questionnaire and analysed. As cited in Ruths, De-Zoysa, et al., (2012, p. 3), participants completed self-report questionnaires on site to simplify delivery and to maximise questionnaire return. In order to control for the impact of mindfulness practice on questionnaire responses, baseline questionnaires were given out and completed at the beginning of the first session and again completed at the end of the last session of the 8-week programme. The purpose of using each questionnaire is as follows:

Mindful Attention Awareness Scale (MAAS).

The MAAS (Brown and Ryan, 2003), is a 15-item scale designed to assess a core characteristic of dispositional mindfulness, namely, open or receptive awareness of and attention to what is taking place in the present. Responses are indicated on a 6-point Likert-type scale, ranging from 1 (Almost Always) to 6 (Almost Never), with items such as "I do jobs or tasks automatically, without being aware of what I'm doing" and greater scores represent higher dispositional mindfulness. The MAAS was used in four of the studies summarised in the review of literature and Irving, Park-Satlzman, et al., (2012), reported that the MAAS was chosen as the most reliable and valid measure of mindfulness at the time of their study.

Self-Compassion Scale (SCS)

The SCS (Neff, 2003), is a 26-item scale, which assesses six different aspects of self-compassion (negative aspects are reverse coded): Self-Kindness, Self-Judgment, Common Humanity, Isolation, Mindfulness and Over-Identification. Responses are indicated on a 5-point Likert-type scale, ranging from 1 (Almost Never) to 5 (Almost Always). Items include "when times are really difficult, I tend to be tough on myself." This scale has been shown to be psychometrically sound (Neff, 2003).

According to Neff (2003, p.224), self-compassion entails three basic components: 1) extending kindness and understanding to oneself rather than harsh self-criticism and judgement; 2) seeing one's experiences as part of the larger human

experience rather than as separating and isolating; and 3) holding one's painful thoughts and feelings in balanced awareness rather than over-identifying with them. Neff's research indicates that self-compassion is significantly correlated with positive mental health outcomes such as less depression and anxiety and greater life satisfaction.

> "Truly having self-compassion for oneself entails desiring health and well-being for oneself, which means gently encouraging change where needed and rectifying harmful or unproductive patterns of behaviour" (Neff, p.225).

Neff's study (2003, p. 240-242), found that women had significantly lower levels of self-compassion than men, specifically in terms of self-judgement, isolation, mindfulness and over-identification. This suggests that the presence or absence of self-compassion might play an especially strong role in the mental well-being of women. This is especially relevant considering the over-representation of females within the health service professions, therefore, an important consideration is to ascertain whether or not participation in the MBLC shows an increase in self-compassion for participants and Neff's SCS will be utilised to achieve this aim.

Perceived Stress Scale (PSS)

Mindfulness based interventions have been shown to decrease perceived stress among participants (Krusche, Cyhlarova, et al., 2012); therefore, this would appear to be an important construct to measure. The PSS (Cohen, Kamarck and Melmerstein, 1983) is a 10-item scale, developed to measure the degree to which situations in one's life over the last month are appraised as unpredictable, uncontrollable and overwhelming. It posits that people appraise potentially threatening or challenging events in relation to their available coping resources. Responses are indicated on a 5-point Likert-type scale, ranging from 0 (Never) to 4 (Very Often). Items include "in the last month how often have you been angered because of things that were out of your control." A higher score indicates a greater degree of perceived stress (Carmody and Baer, 2008). The PSS is a global measure of perceived stress (Shapiro, Astin, et al., 2005, p.168).

In the first instance the study will investigate whether participation in the MBLC will be associated with an increase in dispositional mindfulness as measured by The Mindfulness Attention Awareness Scale (MAAS). Secondly, improvements in psychological functioning will be examined by the use of the Perceived Stress Scale (PSS). In the third instance any changes in self-compassion will be measured using Neff's (2003), Self-Compassion Scale (SCS).

4.7.2 Qualitative Data Collection

At the beginning of the first session, all participants completed a Personal Details Form (see Appendix 5) that included age, gender, occupation, years spent in current role. Questions were also asked relating to any challenges or stressors participants felt at work, how participants took care of themselves and what they hoped to benefit from the course. Participants also filled out a Weekly Home Practice Evaluation Form (see Appendix 6), completed a Post Course Feedback Form (see Appendix 8) and a Home Practice Going Forwards Form at course end (see Appendix 7).

During the weekly meetings, discussions were had between the participants in pairs, small groups or in the larger group with the facilitator. At the end of each session, this author made notes of any relevant information that arose in discussions and recorded this for future reference. Unsolicited information was offered by participants throughout the duration of the course, through telephone, email or face-to-face contact and this information was recorded in a notebook, if considered relevant.

4.8 Analytic Approach

4.8.1 Quantitative Data

Statistical analysis was carried out on each of the three self-report measures, with the mean, standard deviation and Cohen's d calculated to measure the effect size of the intervention. All calculations were carried out in Microsoft Excel and the Cohen's d was calculated by dividing the mean difference by the pooled standard deviation.

4.8.2 Qualitative Data

A thematic analysis was employed to illuminate consistent patterns and specific issues in the qualitative data sets. According to Braun and Clarke (2006), as cited in Rocco, Dempsey, et al., (2012, p.202), a thematic analysis is a method for identifying, analysing and reporting patterns of (themes) within data. It minimally organizes and describes the data set in detail and captures something important about the data (2006, p.79-82). Similar to the data analysis as described by Irving, Park-Saltzman, et al., (2012, p.122), who followed the framework presented by Krueger (1998); the following stages applied: a) the data sets were read in their entirety while searching for important general themes (open coding); b) looking for emerging themes question by question and through the data as a whole; c) developing coding categories and applying them to the data; d) creating tables or diagrams to illustrate the themes and inter-relatedness or processes; e) revisiting and reviewing sections of data which have been omitted and f) systematically reporting the results in relation to the research questions.

4.9 Intervention

The Mindfulness Association describe mindfulness as a skill we can develop over time, which can deepen our sense of well-being and fulfilment:

> "It involves paying attention to what is occurring in our present moment experience, with an attitude of openness and non-judgemental acceptance. It is about coming back to our senses, being in touch with ourselves, with others and our surroundings" Mindfulness Based Living Course 8-Week Course Manual (2011, p.5).

The MBLC is a weekly course developed by Rob Nairn and tutors of the Mindfulness Association. The MBLC course was offered to HCS and delivered during the participant's working day in a work-based setting. It is an 8-week course consisting of 8 classes, which are typically two hours long, preceded by an introductory class before the 8-week course begins and concluded by a follow up class after the 8-week course ends. A day of Mindfulness practice is also typically included between weeks six and seven, however, because of the availability of time, the group and the facilitator decided to combine the day of mindfulness with the follow up class and schedule this

after the course had ended. Participants will also be required to participate in 30-45 minutes of daily practice throughout the duration of the 8-week course, as well as recording their experiences in weekly home practice evaluation forms.

The weekly themes are as follows:

Introductory Session – What is Mindfulness and Why Practice It?

Week 1 – Start Where We Are

Week 2 – The Body as a Place to Stay Present

Week 3 – Introducing Mindfulness Support

Week 4 – Working with Distraction

Week 5 – Exploring the Undercurrent

Week 6 – Attitude of the Observer

Week 7 – Self-acceptance

Week 8 – A Mindfulness Based Life

Follow Up Day of Practice – The Rest of Your Life

Each class followed a similar format, whereupon participants were asked how their home practice had been going, additional techniques were introduced, explained and practiced. Participants were introduced to a variety of practices including sitting meditation, the body scan, mindful movement and mindful walking. In addition to these practices, participants were also introduced to shorter practices such as the 3-minute breathing space, the kindness practice and the self-compassion break and instructed to meet their experience with an openness, acceptance and curiosity.

A variety of concepts will also be presented to help participants make sense of the process they are going through. At each stage there were opportunities for participants to discuss any issues they were having or ask any questions relating to their mindfulness practice. Each participant received an MBLC manual with assigned readings to support the teaching sessions and audio recordings were provided for home use to compliment the material presented in the weekly meetings. In addition to the above practices, participants were encouraged to practice mindfulness more informally, such as attempting to bring their full attention to everyday activities, such as brushing their teeth or making a cup of tea.

The intervention was delivered from 09:30am until 11:30am on either a Wednesday (Penrith group) or a Thursday (Carlisle group). This author hypothesised that this time would give participants an opportunity to travel to the venue and to attend the MBLC prior to becoming involved in the many demands of the day faced at work.

4.10 Facilitator

The course will be delivered by this author, a practitioner of mindfulness and student of Rob Nairn's (an internationally sought after lecturer on mindfulness and tutor on the Studies in Mindfulness MSc) since 2004. This author meets all the necessary criteria for the Good Practice Guidance (GPG) for Teaching Mindfulness Based Courses as suggested by the U.K. Network of Mindfulness-Based Teacher Trainers (see http://mindfulnessteachersuk.org for further information regarding the GPG).This author was available by telephone or email to support participants between weekly sessions and informal interviews with the facilitator could be arranged at the participant's request.

4.11 Resources

Self-report questionnaires, the MBLC student and teacher manual, including the accompanying audio practices recorded on CD and handed to participants.

Work colleagues, participants on the MBLC, the Studies in Mindfulness MSc peer group. The Work Based Project (WBP) Supervisor, and Mindfulness Association and the University of Aberdeen Tutors.

The University of Aberdeen resources, relevant literature, research papers and websites:

4.12 Permission

Permission was received from this author's employer to proceed with this study.

Ethical approval was received from the University of Aberdeen and the Research Department within this author's employment.

Permission was received from the manager of each organisation approached by this author to participate in the study, both inside and outside the Health Service.

After permission was received from individual agencies, an email was then sent to the relevant manager in each organisation; who in turn forwarded the information on to prospective participants. The information explained the nature and purpose of the study, including an invitation to attend an introductory session on mindfulness. Introductory sessions on mindfulness were then carried out and any questions relating to participation in the study were answered. Participants then gained permission to attend the MBLC, prior to attending the first scheduled session of the MBLC. Participants filled out the registration form at the introductory session and other relevant documentation was then completed at the beginning of session one.

4.13 Ethical Issues

The study was approved by the University of Aberdeen and the Research Department within this author's own employment.

Informed consent of each participant was sought prior to inclusion in the study and participants were informed that they could discontinue participation in the study at any time.

The confidentiality of all members of staff who agreed to participate in this study was protected. Each participant assigned themselves a unique identification number to ensure anonymity when filling out relevant forms and questionnaires. Each week participants handed in weekly home practice forms by placing them in a tray at the back of the room. The forms were then collected by this author at the end of the session.

The Participant Registration Form (see Appendix 4) highlighted certain circumstances or situations where participation in the MBLC may not be advisable at this time.

An explanation of the experiential nature of the course was discussed with the participants, including the ground rules for sharing, the role of inquiry in the process, confidentiality and the role of the facilitator.

4.14 Draft Permissions and Agreements

See Appendix 1, for a copy of the Signed Research Ethics Approval Form and Appendix 4, for a copy of the Participant Registration Form.

4.15 Assessment of Risks and Support Issues

Initial screening of participants was carried out by the MBLC facilitator (this author).

The venues where the MBLC were delivered were risk assessed for suitability by the facilitator.

Advice and support will be sought from this author's immediate supervisor within the Health Service or the participant's supervisor, should issues arise relating to risks to any participant (including the facilitator). Advice may also be sought from a tutor at the Mindfulness Association if any questions relating to practice or participation arise and the assigned supervisor from the University of Aberdeen will also be contacted should the need arise.

This author has regular supervision pertaining to mindfulness practice and teaching on a monthly basis.

Participants will be encouraged to access additional support from those identified in their support network should they require it.

Chapter 5: Findings

In this chapter, participant attendance will be shown across both groups as well as the reasons given by participants for non-attendance and drop outs. Findings for the quantitative data will be presented in text, table and figure form and a thematic analysis of the qualitative data will be presented in text and table form. Because of the scale of this study, findings related to the challenges and stressors that participants faced at work, the benefits and challenges related to participation in the MBLC and the post course support requested by the participants will be presented. Participants were also asked the question what did they learn from participation in the MBLC. These responses provided further evidence to support the MBLC; however, because of the scale of this study, only the participant quotes were included in the appendices (see Appendix 16) as a point of interest.

5.1 MBLC Attendance

A total of 31 HCS across two groups participated in this prospective uncontrolled pilot study (Carlisle n= 19 and Penrith, n=12). Three of the 31 participants dropped out between weeks four and five (two from Carlisle and one from Penrith), stating work and family commitments as reasons for not continuing with the programme. Consistent with Shapiro, Astin, et al., (2005), as cited in Aggs and Bambling (2012, p. 279), attending a minimum of six of the eight weekly scheduled sessions constituted the minimum training considered necessary to acquire the core knowledge and skills, and provided the minimum session number cut off for data used in this study. 26 of the 28 remaining participants (93%) completed a minimum of six of the eight weekly sessions (two participants completed five sessions, not including the introductory session or the follow up session / day of mindfulness).

Participants that missed sessions, cited personal or family illness, work related commitments or holidays as the main reason for not attending the session. Attendance throughout the course was fairly consistent, with on average 10% of the participants in each group missing the weekly sessions. The last two weeks of the 8-week course were scheduled during the Easter Holidays, which saw a considerable drop in attendance for the Carlisle group during this time.

19 of the 28 participants (68%) attended the follow up session / day of mindfulness. Additional data was not collected from participants at this time, as this author felt that this could have potentially interfered with the structure and purpose of session where participants were encouraged to remain in silence throughout the day.

5.2 Quantitative Data

25 of the 26 participants, who completed a minimum of six of the eight weekly sessions, returned the post-intervention self-report questionnaire sets and were included in the final analysis of the quantitative data. Results are presented in Figures 1-3 and Table 1 below.

Figure 1. Mindfulness Attention and Awareness Scale (MAAS) Pre and Post-Intervention Scores

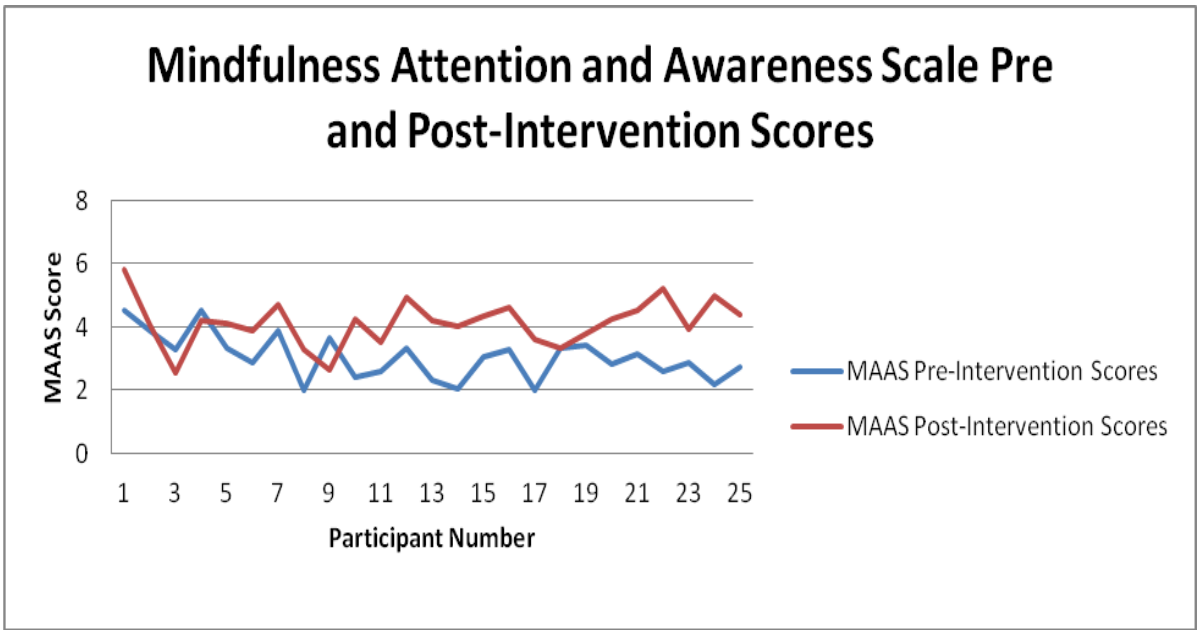

Figure 2. Self-Compassion Scale (SCS) Pre and Post-Intervention Scores

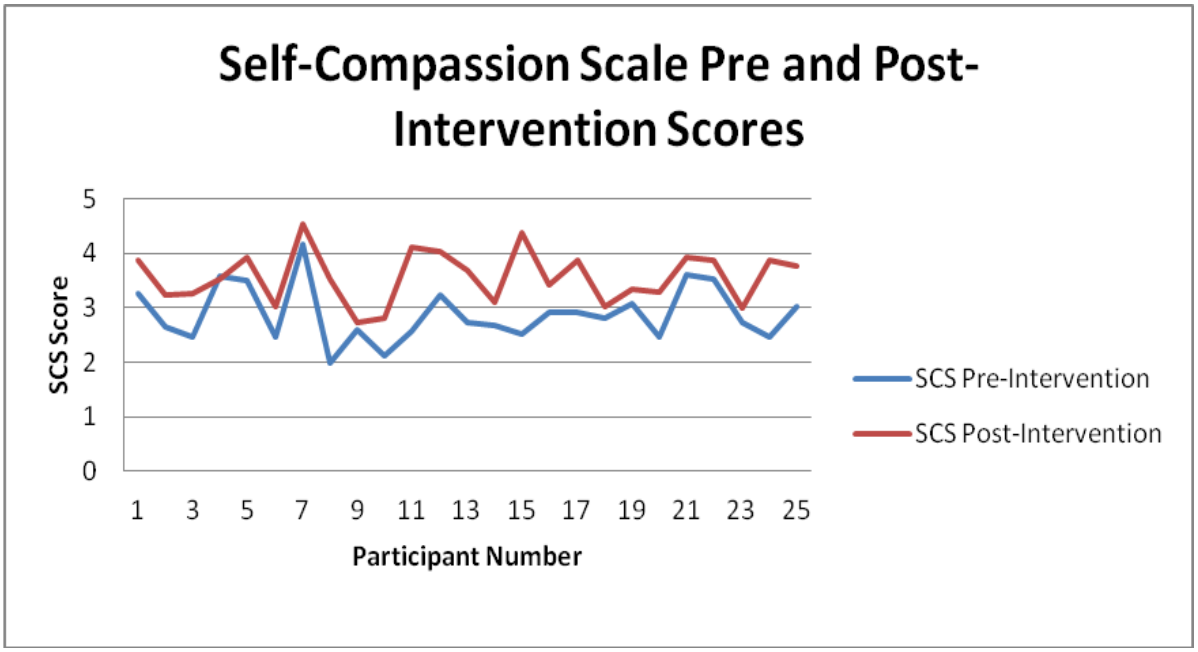

Figure 3. Perceived Stress Scale (PSS) Pre and Post-Intervention Scores

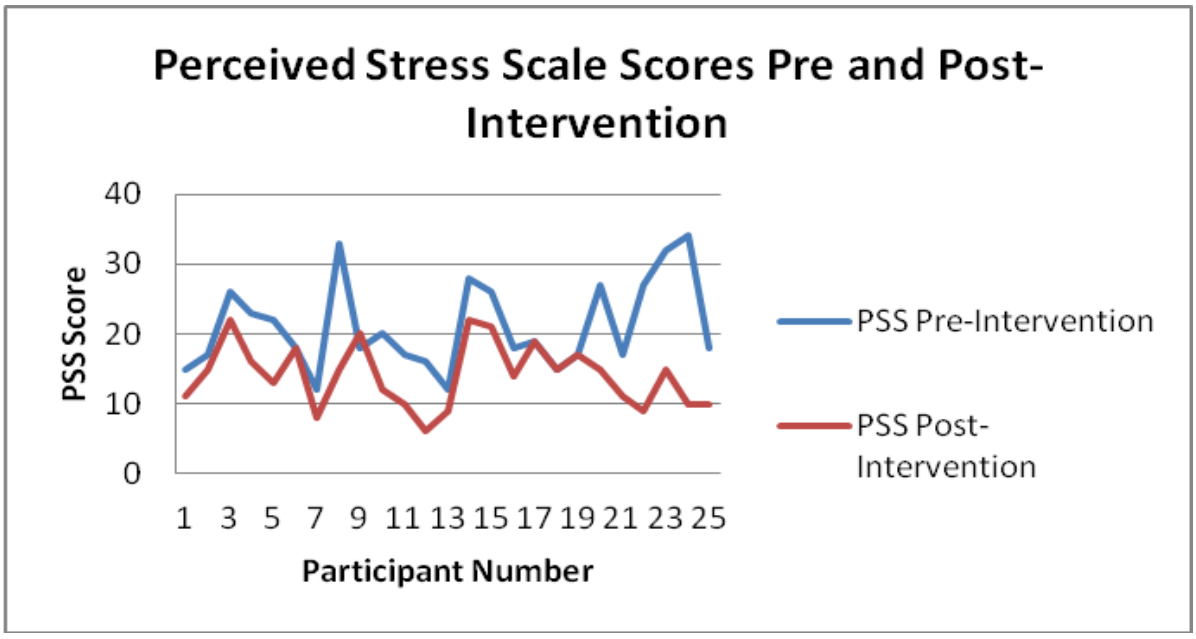

Table 1. Pre and Post-Intervention Scores for Dispositional Mindfulness, Self-Compassion and Perceived Stress

Measure	Pre test mean (n=25), week 1	Post test mean (n=25), week 8	Pre – post difference (% difference)	Cohen's d	(Effect size)
MAAS	3.04 (sd 0.71)	4.13 (sd 0.74)	1.08 (36%)	1.49	Large
SCS	2.88 (sd 0.51)	3.57 (sd 0.48)	0.68 (24%)	1.37	Large
PSS	21.18 (sd 6.37)	14.12 (sd 4.53)	6.96 (49%)	1.28	Large

Key: MAAS = Mindful Attention Awareness Scale; SCS = Self-Compassion Scale; PSS = Perceived Stress Scale; sd = Standard Deviation

5.3 Qualitative Data

All participants completed a pre-course questionnaire set at the beginning of session one, which included the following forms:

Personal Details Form (see Appendix 5), Self-Compassion Scale (SCS) (see Appendix 9), Mindful Attention Awareness Scale (MAAS) (see Appendix 10), Perceived Stress Scale (PSS) (see Appendix 11) and the Weekly Home Practice Evaluation Form (see Appendix 6). The Personal Details Form asked the participant general questions relating to age, gender, occupation and time spent in current role. Participants were also asked to describe any challenges or stressors they faced at work and because of the scale of this study, only information relating to age, gender and challenges and stressors at work were included in the findings. The following general themes emerged from the data in relation to the latter question:

Challenges and Stressors at Work

Working with difficult and challenging clients and / or their families received a significant number of responses (n=13), with one respondent highlighting the issue of negative counter transference in the therapeutic relationship. Workload issues also received a number of responses, with six participants highlighting the difficulty of carrying a highly complex caseload in relation to child protection and safeguarding issues. Increased administrative responsibilities were listed by a number of participants. With the volume of work and the pressure from management to take on more (n=5), the increased expectation to meet and increase targets (n=5) and the time spent on collection of data (n=4) as an ongoing concern, as well as the lack of administrative support (n=2). Getting the right home / life balance also emerged as a point of discussion in the group (n=5).

Organisational systems in transition, disarray or crisis were statements made by five participants, relating to changes in the company structure, which in turn impacted on time management, moral and workload. Low staffing and a high turnover in staffing were also listed as concerns by three participants. The lack of funding (n=2), the distance to travel (n=1) and a confrontation with colleagues (n=3) were also listed as issues. Ethical issues were also mentioned as a concern by two members of staff.

Qualitative Data Collection During and Upon Completion of the MBLC

Qualitative data was collected from participants using a variety of methods, as follows:

Participants were encouraged to complete Weekly Home Practice Evaluation Forms and hand in these in on a weekly basis.122 documents were handed in by participants throughout the duration of the course and analysed.

During weekly sessions, any relevant information that emerged from the inquiry process was recorded in a notebook by this facilitator after the session had finished. Any contact from participants by email, face to face or over the telephone was also recorded if relevant to the study.

Upon completion of the MBLC, participants were also asked to complete a post-course questionnaire set, which included the following forms:

Self-Compassion Scale (SCS) (see Appendix 9); Mindful Attention Awareness Scale (MAAS) (see Appendix 10), Perceived Stress Scale (PSS) (see Appendix 11), Weekly Home Practice Evaluation Form (see Appendix 6), Home Practice Going Forwards Form (see Appendix 7) and the Post-Course Feedback Form (see Appendix 8). The latter two forms included a variety of questions relating to the participants experience of the MBLC.

25 post-course questionnaire sets were handed back in and initially all data sets were analysed independently to ascertain if there were any major differences in the themes between the two groups of participants. When this was found not to be the case, all data sets were then merged to provide a more detailed account of the experience of the participant. The data provided this author with a very rich and in-depth variety of information in relation to the subjective experience of the participant, which supported the earlier claims of Cohen-Katz, Wiley, et al., (2005, p.172) and Shapiro, Astin, et al., (2005, p.32), who advocated a mixed methods approach.

Similar to the presentation of findings and statements made by Irving, Park-Saltzman, et al., (2012) and Cohen-Katz, Wiley, et al., (2005), participant quotes have been included to exemplify themes and any potentially identifying information has been omitted to ensure participants anonymity. The final coding, with sample quotes from participants is shown in Tables 2, 3 and 4, found in Appendix 13, 14 and 15 respectively. Note: where the number of participants (n) is more than the participant number recorded in brackets, then the additional responses were given during weekly discussions and, therefore, not assigned a participant number. Thematic analysis of the data revealed a number of emerging themes as follows:

Challenges Related to Participation in the MBLC

Finding the time and space to practice, was the most common theme that emerged in the data (n=30), with 11 respondents struggling at times to establish a routine in relation to mindfulness practice, eight respondents claiming to be too busy and 12 respondents finding it difficult to make mindfulness practice a daily priority. Five respondents stated

that a change in routine (either going on holiday or having visitors) had derailed their mindfulness practice.

External pressures were a common challenge encountered by participants, with six participants finding it difficult to explain to family members that they needed time and space away from them to practice and five participants having to miss sessions because of family illness or other commitments. Work issues were the next theme that emerged as a challenge (n=12), with three respondents stating that they were made to feel that attending the training was less important than their work duties by their employer. Similarly, two other respondents stated that they were disappointed that their employer had requested that they miss one of the weekly sessions and make their work a priority instead. Two respondents recorded that they had lost their job during the MBLC and five others struggled with the uncertainty surrounding their current job security and status.

14 respondents mentioned experiencing difficulty with the negative and / or intrusive thoughts that came up in practice; including four respondents mentioning feeling guilty and / or selfish for allowing themselves the time to just sit quietly. Three respondents stated feeling resistance to certain mindfulness practices, for example the kindness for self exercise. Three respondents stated they had experienced some difficulty related to the posture during practice (either a sore neck or back). Six respondents mentioned being challenged by their own ill health.

A number of respondents experienced problems related to concentration, focus and or motivation. Five respondents claimed to have difficulty focusing during the longer practice periods and six respondents mentioned struggling to stay awake during practice. Four respondents stated finding it difficult to practice by themselves, preferring to be in the group. Six respondents struggled to motivate themselves to practice at certain times throughout the course. Two respondents stated that it was difficult to see the benefit of the practices at the beginning of the course and became impatient.

Benefits of the MBLC

Improved awareness was highlighted as an important factor by participants, with nine respondents mentioning feeling more in tune with the external world and five respondents claiming to feel more content and able to enjoy the simpler things in life. A number of respondents (n=14) claimed to be more self-aware in relation to thoughts, feelings, emotions and body sensations. A number of these participants commented on the benefits of engaging fully with present moment experience and the downside of running on auto-pilot. Additionally, four respondents claimed to be more aware of intrusive or negative thoughts, with a further eight respondents making statements about an improved ability for personal insight and reflection. Four respondents mentioned becoming more aware of reactions to external events or influences.

A number of respondents mentioned the impact that mindfulness had on their relationships with other people (clients, colleagues, friends and family). Six respondents stated feeling more present and / or authentically there for others; three respondents mentioned responding better to others and nine respondents mentioned feeling more accepting and tolerant of others. Learning mindfulness as part of a group was also valued by six respondents.

A number of respondents mentioned feeling more accepting of themselves, with four respondents noticing an increase in self-compassion; seven respondents claiming to feel kinder and easier on themselves and three respondents mentioning an increase in self-belief. Three respondents realised that the benefits of mindfulness were not purely a selfish pre-occupation.

A large number of respondents recorded health related benefits attributed to participation in the MBLC: Nine respondents mentioned the benefits of tuning into their own breathing and 11 respondents claimed that they were sleeping better and regularly used exercises such as the body scan to facilitate a restful nights sleep. Seven respondents stated becoming more able to let go of feelings such as stress, anxiety and agitation. 16 respondents mentioned generally feeling calmer and more relaxed. Respondents also mentioned feeling an improvement in overall well-being (n=7). A large number of respondents (n=15) had highlighted the benefits of taking time for

themselves while practicing and a further five respondents felt they had achieved a better work / life balance.

A large number of respondents (n=13) mentioned that they had improved their ability to manage and respond to difficult situations or challenges when utilising the skills they had learned in the MBLC, i.e., taking a step back, breathing and responding with clarity. With nine respondents stating feeling less distracted, more focused and more effective at work and in life in general.

Post Course Support

Participants stated the following in response to the question, what can be done to help support your continued practice of mindfulness:

Responses were mainly related to providing some form of post-group support network. 18 respondents mentioned further meetings on a weekly or monthly basis, with a further two respondents suggesting scheduling another full day of mindfulness and one respondent asking to visit other meditation centres for more formal practice and the opportunity to attend mindfulness retreats. Eight respondents asked for email support or the opportunity to receive regular updates and new information. Two respondents mentioned the importance of the organisations they worked for being made aware of mindfulness practices and its benefits and suggesting their managers attended future courses.

Chapter 6: Discussion

In this section, the findings as presented in the previous chapter will be critically analysed and discussed in the context of the literature review and pertinent issues will be highlighted as the discussion draws to a close. This paragraph presents a brief summary of the issues to be discussed as follows: At the beginning of this study HCS were struggling with a number of work-related challenges and this information may be of interest to the employer. The findings also indicated a high retention rate in this study, which may have been as a result of many variables. Self-reported perceived stress, self-compassion and mindfulness were measured at the beginning and end of the 8-week intervention and pre and post-change scores showed that significant improvements were obtained across all three measures. Qualitative data was also collected from participants and a thematic analysis of this data uncovered a variety of benefits as well as certain challenges that the participants faced. Participants also requested some form of post-course support to aid them in the further development of their mindfulness practice.

This pilot study investigated the feasibility and effectiveness of the MBLC when delivered to a mixed group of HCS during the working day. This study demonstrated that HCS are willing and able to participate in the MBLC; given the response rate from participants when advertising the course and the high retention rate (84%) during the study. This retention rate was similar to studies carried out by Schenstrom, Ronnberg, et al., (2006), (79%) and Klatt, Buckworth, et al., (2009), (85%) and almost identical to the programme adherence rate (85%) of the MBSR when delivered to "highly motivated patients" as noted by Klatt, Buckworth, et al., (2009, p.602). In the literature review, Kabat-Zinn (2004) and Klatt, Buckworth, et al., (2009), highlighted important issues regarding the motivation to participate in the MBI and the attrition rate of participants. In response to the concerns shared by Kabat-Zinn and Klatt, Buckworth, et al., this author chose to frame the intervention in such a way that made the material relevant to the participant's situation. For example, in the presentation of the material or during discussions with participants on a weekly basis, this author used examples of how certain exercises would be relevant to the health and well-being of participants or useful for engagement with the participant's client group. This delivery style appeared to work well in order to maintain participation and to encourage home practice.

There are many possible explanations for the high retention rate in this study, ranging from, but not limited to, the content of the MBLC, the facilitator's experience and subsequent delivery of the material, the timing of the intervention (early in the working day, as opposed to last thing) and the salience of group support. The retention rate provides promising evidence to suggest that the MBLC could be implemented as a viable programme during work time, given the length of the course, the weekly meetings and the emphasis on daily practice.

Participants across a range of professional disciplines mentioned experiencing a variety of work-related challenges; providing clear examples of how challenging and stressful this field of occupation can be. This information may be useful for organisations and managers to acknowledge in parallel efforts by the organisation to address the issues that HCS face and for this reason the data was included in this study.

Self-reported perceived stress, self-compassion and mindfulness were measured at the beginning and end of the 8-week intervention and pre and post-change scores showed that significant improvements were obtained across all three measures. The effect sizes in the quantitative data set in this study, were equal to and in some cases greater than those obtained in other studies using some of the same measures (Shapiro, Astin, et al., 2005; Schenstrom,, Ronnberg, et al. 2006; Klatt, Buckworth, et al., 2009; and Ruths, De-Zoysa, et al., 2012). For example, Shapiro, Brown, et al., (2007), also found significant pre-post course declines in perceived stress and significant increases self-compassion.

The pre and post-change scores showed a reduction in dispositional mindfulness (MAAS) recorded by three participants. A reason for this may have been caused by respondents not reverse scoring the answers correctly. One respondent recorded a reduction in self-compassion and this could be attributed to a change in the way the respondent viewed themselves (in relation to their level of self-compassion) as their insight in this matter increased following the intervention; which may have also been a valid reason for the decrease in mindfulness. One respondent recorded an increase in perceived stress and three others recorded no change, which may have been a result of a variety of stressors encountered by the participant. The highest positive change scores recorded by respondents were 127% (MAAS), 77% (SCS) and 240% (PSS).

Qualitative data was also collected from participants and a thematic analysis of this data uncovered a variety of benefits for the participants, which included the following:

Participants reported becoming more self aware in relation to thoughts, feelings and body sensations; also noted by Cohen-Katz, Wiley, et al., (2005), and Rocco, Dempsey, et al., (2012), who mentioned heightened self-awareness amongst participants. This may have implications to the improvements in affective forecasting as mentioned by Glomb, Duffy, et al., (2011). Participants in the MBLC also stated feeling more in tune with present moment experience in relation to external surroundings and more able to enjoy the simpler things in life. Similarly, satisfaction with life was also noted by Mackenzie, Poulin, et al., (2006).

Participants stated feeling more relaxed and less stressed and anxious, also cited by Mackenzie, Poulin, et al., (2006); Schenstrom, Ronnberg, et al., (2006), and Ruths, De-Zoysa, et al., (2012). This may have been influenced by the focus on breath and breath control, which is an important tool / teaching point in MBI, which was also highlighted by Glomb, Duffy, et al., (2011), who identified an increased awareness and regulation of physiological systems in one of the core processes linking mindfulness to self-regulation. A large number of participants (n=11) in the MBLC, noted improvements in sleep, which is a common theme that has emerged in other studies (Klatt, Buckworth, et al., 2009), which may also have had a positive impact on stress levels.

An improvement in the relationship and communication with others (including clients) was also noted by participants in this study and also participants in the Krasner, Epstein, et al., (2009), study, who stated an increase in the empathic engagement and interaction with others, supporting the claims made by Glomb, Duffy, et al., (2011), on this matter. On a related note, Chaskalson (2011), suggested that engagement in mindfulness practices may promote less conflict in work settings; interestingly participants in this study mentioned an improved ability to manage and respond to difficult or challenging situations.

Participants in the MBLC mentioned improvements in the ability to manage and prioritise their own health and well-being, as well as achieving a better work / life balance. Rocco, Dempsey, et al., (2012), also noted that participants made healthier lifestyle choices in this respect. Participants in this study claimed to feel less distracted and more focused, also noted by Ruths, De-Zoysa, et al., (2012), which would appear to support Chaskalson's (2011), claim that greater productivity and more employee engagement may be a result of mindfulness practice. Participants in this study also mentioned the positive aspect of training together in a group, which was also mentioned by Irving, Park-Saltzman, et al., (2012), who highlighted the salience of group support.

Challenges were also associated with participation in the MBLC as follows:

Issues relating to finding the time to practice were a common theme that emerged in the data, also noted by Rocco, Dempsey, et al., (2012). Family pressures were also noted by Rocco, Dempsey, et al., also a common issue raised in this study. Work issues interfering with attendance in the MBLC were also noted by participants. Dealing with difficult or negative emotions that arose during practice was mentioned by participants in this study as well as in participants in Cohen-Katz, Wiley, et al., (2005), and Irving, Park-Saltzman, et al., (2012).

Feeling guilty or selfish for taking time out for self was a theme that emerged during weekly discussions at the beginning of the course, which was also mentioned by Irving, Park-Saltzman, et al., (2012). In the same context a natural tendency to focus on and help others rather than self also came up in general discussion. This issue is a common theme identified in those who work in the helping professions and an issue also cited by Irving, Park-Saltzman, et al.

A number of participants in this study stated that they would benefit from some form of post-course support such as the opportunity to attend regular practice groups and to receive email support and / or updates from this facilitator in order to continue with their mindfulness practice. In the review on literature, both Cohen-Katz, Wiley, et al., (2005), and Krasner, Epstein, et al., (2009), both commented on the need for some form of post-intervention support for participants. This author agrees with the above

requests and suggestions and at present this author is in discussion and negotiation with employers to develop MBI within the Health Service, which includes the running of further courses and supporting participants who have graduated from the MBI facilitated by this author.

The impact that mindfulness had on the HCS relationships with other people (clients, colleagues, friends and family) or how the HCS related to others was mentioned by a number of respondents. This raises the question of whether the positive effects of mindfulness could be translated into enhanced patient care. Similar views were put forward by Shapiro, Astin, et al., (2005, p. 172), and Schenstrom, Ronnberg, et al., (2006, p.150), on this matter.

In this particular study some participants were fully supported throughout the 8-week MBLC and given time out of their working day to attend the weekly meetings and other staff had to either take time off or make other arrangements to pay the time back. As Shapiro, Astin, et al., (2005), point out, future studies could explore ways to offer MBI's without adding additional time-commitment and strain to the already busy schedule of the HCS. This may indicate that certain employers may not understand the potential benefits of mindfulness or its implications for the health and well-being of staff.

Chapter 7: Limitations

Given the nature of this prospective pilot study, this study carries a number of limitations relative to sampling procedures, such as participant selection, study design and researcher bias. For example, it would have strengthened the study to have a larger sample size with a control group, with randomised participant allocation across groups. This present study was conducted with a self-selected sample and a small number of the participants were known to the facilitator or had previous experience of mindfulness. As Aggs and Bambling (2010, p.285), suggest, this may call into question the role of demand characteristics, and the likelihood that participants had a pre-existing positive attitude towards mindfulness, or indeed this facilitator. Although, as Aggs and Bambling also mention, sample validity can be argued based on the considerable heterogeneity of participants' professions and employment settings, and the uniformed average findings across measures, which could also be argued in this study.

As cited in Ruths, De-Zoysa, et al., (2012), Chiesa and Serretti (2009), also highlighted the need for longer term data beyond the 3-month follow up, to assess the sustainability of improvements. Future long-term studies using the MBLC as an intervention may provide further evidence to show whether or not the benefits of this study are durable and whether or not participants continue practicing over time. This author agrees that future studies could include a follow up at 6 and 12 months to examine this further. Despite these limitations the study did provide strong evidence to suggest that the MBLC was significantly beneficial for participants.

Chapter 8: Implications for Proposed Research and Plan for Dissemination of Findings

This author believes that the study has proved that the MBLC has successfully achieved its aims and objectives. It is hoped that there may be scope to expand the project further within the Health Service and beyond. Upon completion of this study, the results and findings were distributed to all involved and a copy was also sent to the Research Department within this author's own employment. Should this study merit further discussion, then the findings could be presented within this author's professional context as well as within the wider mindfulness community. The findings from this study will be used to guide and influence further research in this area and it is hoped that this author will be granted permission by the employer to continue with this line of research and development not only for staff but also for a variety of client groups.

Chapter 9: Reflections, Conclusions and Recommendations

In this section, the implications of this particular piece of research for this author, HCS and the MBLC will be reviewed. A list of recommendations will be given, drawing upon knowledge gained from the review of literature and also suggestions offered by this author based on the experience of carrying out this study.

This study contributes to the acquisition of knowledge about the use of the MBLC as an intervention to contribute to the health and well-being of HCS when delivered during the working day. The study of this group of HCS shows that the MBLC was beneficial to the health and well-being of its participants (although not without its challenges) and could be of possible benefit to other HCS if replicated. This suggests a need for continued research in this area with a more powerful study design.

The MBLC is a low cost intervention (especially if the mindfulness facilitator is a member of staff within the organisation), which could be carried out on-site with minimum disruption to service delivery. In order for MBI to be successfully launched, received and attended in health care settings, this author believes that the employer and the participant need to be persuaded that MBI are a valued addition to any health and well-being programme. This author believes that any MBI directed towards HCS should be relevant and useful to the participants, or else participants will be unlikely to put in the effort that daily participation in the programme requires.

A menu of MBI may warrant further development within this author's own employment. These could range from brief two hour workshops progressing through to one or two day courses, 8-week programmes and one year programmes. This would be underpinned by weekly practice meetings and annual retreats to support and further practice. This would then likely progress to the training and development of more mindfulness facilitators within the organisation, which would also involve the supervision of these facilitators.

The following action points may stimulate further discussion:

- The health and well-being of staff prioritised and not seen as an afterthought by employers or staff. MBI offered to HCS to aid in the promotion of health and well-being
- Time set aside in the working day for staff to participate in MBI's and run at different times and days to increase opportunities to attend. Staff given time away from their regular working day to attend the MBI training
- Suitable dedicated on-site facilities staffed by experienced mindfulness facilitators employed to provide MBI as their primary occupation. This space could also be used as an open practice room when not in use for training, where staff could take a break from their working day
- Post intervention support provided for participants, ranging from weekly practice groups, ongoing advice, information and training to annual retreats. A rolling programme of training for staff with a range of MBI on the menu of activities
- Long-term studies to be carried out and the data from these studies to be recorded to provide evidence base for ongoing research. Examples of future studies could include MBI for clients and / or asking the question do MBI translate to enhanced client care
- Further research conducted on mindful movement and / or trauma releasing exercises with targeted groups
- Parallel efforts by agencies to reduce stressors in the workplace
- Future studies could use a range of data collection methods
- Form working groups with other mindfulness facilitators in other localities
- Properly powered study designs, with more representative samples across larger groups
- The development of MBI for a variety of client groups

Chapter 10: Timetable

For a detailed breakdown of the planned timetable see Appendix 12.

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Appendix 1: A Copy of the Signed Research Ethics Approval Form

SCHOOL OF EDUCATION RESEARCH ETHICS APPROVAL FORM

On completion this form should be forwarded to the School Research Office (e-mail: soe-research@abdn.ac.uk) for further consideration.

PLEASE NOTE BEFORE COMPLETING THIS FORM:

1. Please do not submit a College Ethical Approval form if the research is with the NHS, or is NHS-linked. Dr Gail Holland (Research Governance Manager based at Foresterhill) can give advice on ethics applications for research that involves NHS patients, premises or staff. She should be contacted before an approach is made to the North of Scotland Research Ethics Service ((see NHS Grampian). Gail's contact details are (g.holland@abdn.ac.uk; Tel: 01224 437043)).
2. The College Research Ethics web pages can be found at: www.abdn.ac.uk/cass/research/researchethics
3. Information on data management, collecting personal data and data protection act requirements can be accessed via www.abdn.ac.uk/dataprotection
4. Information on Research Ethics can be accessed via the University's Research Ethics & Governance web pages at www.abdn.ac.uk/ppg/index.php?id=69&top=68

Code and Title of Course/ Project Title:	**The Effects of the Mindfulness Based Living Course on Health Care Staff**
Name of Primary Investigator or Course Coordinator	**Ian Rigg**
Project/Course Start Date:	**June, 2012**
Application Date:	**21/09/12**

Recruitment Procedures

If you answer yes to any of the questions below please provide further explanatory detail on an appended sheet of paper.

		Yes	No	N/A
1	Does your project involve human subjects (or their remains)? *	**Y**		
2	Are there any other ethical issues within the proposed research? (for example, potential conflicts of interest; the use of artefacts; environmental impact)*		**N**	
3	Does your project involve persons less than 18 years of age?		**N**	
4	Does your project involve people with learning or communication difficulties?		**N**	
5	Is your project likely to involve people involved in illegal activities?		**N**	
6	Does your project involve people belonging to a vulnerable group, other than those listed above?		**N**	
7	Does your project involve people who are, or are likely to become your clients or clients of the section in which you work?		**N**	

8	Does your project provide for people for whom English is not their first language?		**N**	
9	Does your project require access to personal information about participants from other parties (e.g. teachers, employers), databanks or files?		**N**	
10	Do you plan to conceal your own identity during the course of the research?		**N**	

* If the answers to Q1 and Q2 are 'No', please do not complete the rest of the questionnaire

Consent Procedures

For all questions below, please provide brief explanatory detail about consent procedures or lack thereof.

		Yes	**No**	**N/A**
11	Do you have set procedures that you intend to use for obtaining informed consent from all participants, including parental consent for children?	**Y**		
12	Will you tell participants that their participation is voluntary?	**Y**		
13	Will you obtain written consent for participation?	**Y**		
14	If the research is observational, will you ask participants for their consent to be observed?	**Y**		
15	Will you tell participants that they may withdraw from the research at any time and for any reason?	**Y**		
16	Will you give potential participants a significant period of time to consider participation?	**Y**		

Possible Harm to Participants

		Yes	**No**	**N/A**
17	Is there any realistic risk of any participants experiencing either physical or psychological discomfort or distress?	**Y**		
18	Is there any realistic risk of any participants experiencing a detriment to their interests as a result of participation?		**N**	

Data Protection

		Yes	**No**	**N/A**
19	Will any non-anonymised and/or personalised data be generated and/or stored?		**N**	
20	Will you have access to documents containing sensitive data about living individuals that is not publicly available elsewhere?		**N**	
	If 'Yes', will you gain the consent of the individuals concerned?			**N/A**

Please attach the following to this form:

- **A full proposal of the relevant research project/course elements.**
- **A brief paragraph entitled 'Ethical Issues' highlighting the ethical considerations for the proposal and how any ethical issues are to be addressed. Particular attention should be paid to areas ticked 'Yes' in the form and an account provided of procedures or training to be employed to ensure appropriate ethical practice.**
- **Participant information form and consent form (where appropriate).**

Appendix 2: Ethical Issues Supporting Information

The following information relates directly to questions posed on the Research Ethics Approval Form (see Appendix 1), which may require further explanation:

In relation to question 1: (Recruitment procedures). The participants invited to take part in this study are broadly listed as Health Care Staff.

In relation to questions 11-16: (Consent procedures). Informed consent will be obtained, participation will be voluntary and individuals can withdraw at any time. Participants will be given a minimum of 2 weeks to consider participation in the MBLC.

In relation to question 17: (Possible harm to participants). The experiential nature of the MBLC encourages participants to become more aware of their own bodies and minds and in doing so may bring participants face to face with aspects of themselves that they may, at times, find distressing or difficult to accept. Participants are encouraged to develop an attitude of self-acceptance, kindness and compassion for themselves and a gradual dis-identification with the content of the experience. Participants will also be supported throughout the duration of the course by an experienced mindfulness facilitator.

Appendix 3: Introductory Email to Participants.

The 8-Week Mindfulness Based Living Course for Health Care Staff

There is a substantial body of research that highlights the fact that health care professionals who work with clients who are suffering from distress and or trauma are prone to experiencing stress in a variety of ways. In light of these findings, there has been a growing interest in the use of mindfulness-based interventions to reduce stress, increase self-compassion and promote the health and well-being of health care staff in their place of work.

Mindfulness is an innate capacity of the mind to be aware of the present moment in a non-judgemental way. It promotes a way of being that helps us to take better care of ourselves and lead healthier lives. It also enables us to access inner resources for coping effectively with stress, difficulty and illness.

The Mindfulness Based Living Course (MBLC) will be offered to a variety of health care staff within a work-based setting, to explore its effectiveness as a self-care strategy. The MBLC is an eight week course consisting of eight classes, which are typically up to two hours long, preceded by an introductory class before the eight week course begins and concluded by follow up class after the eight week course ends.

The course will be facilitated by Ian Rigg, an experienced mindfulness practitioner and facilitator. Ian has been training in mindfulness since 2003 and is currently enrolled as a student on the Studies in Mindfulness MSc, with the University of Aberdeen. Ian is now in his final year of study on the course and is currently studying the effectiveness of the MBLC for health care staff in their place of work, as part of his final year dissertation. Ian is offering to facilitate the course for his colleagues, free of charge, and has been given permission to carry out this piece of research within the Trust.

Location: Sure Start, The Regent, Old London Road, Penrith, CA11 8ET

Introductory Session: 09:30-11:00am: February 6th.

Course Dates: Wednesday 09:30-11:30am: February 20th, 27th, March 6th, 13th, 20th, 27th and April 3rd, 10th. Follow up session on May 1st.

A day of mindfulness can also be included (normally between weeks 6 and 7 from 10am-4pm); however, this can be discussed with participants once the course begins and scheduled if appropriate.

Places are limited to 15 participants per course and will be allocated on a first come first served basis. To book your place or discuss further call Ian on 07736 923994 or email Ian.rigg@cumbria.nhs.uk or sign up at an introductory session if places are still available.

Appendix 4: Participant Registration Form

Welcome to the 8-week Mindfulness-Based Living Course which will start in February, 2013. If you would like to enrol on the course then please read the following guidance about the training, fill in the form below and hand it back in at the introductory session or email it to the course facilitator Ian Rigg at ian.rigg@cumbria.nhs.uk all information will be treated confidentially.

Purpose: The purpose is to help individuals develop an in-depth personal experience of Mindfulness and Compassion and to support them to develop a sustained personal practice to apply in everyday life. It is not a training to teach others.

Name:

Address:

Phone: Email:

To aid the home practices, you will receive a Mindfulness Manual and a set of guided audio practices to listen to, which accompany the manual.

Please note that that this Mindfulness course is educational and not intended to be a treatment for mental health problems. If you have recently received or are currently receiving treatment from a psychiatrist, psychotherapist or counsellor for an ongoing mental health problem, we strongly advise that you obtain approval from your mental health professional before proceeding further with this course at this time. Also, if you have recently or are currently going through a traumatic life event such as a separation from a long term partner, the death of a close family member or friend or redundancy this may not be the right time for you to continue with this course. This very much depends on your current psychological health and the support networks that you have around you, such as friends, family and mental health professionals. For anyone withdrawing from the training for these reasons, the option is available to you to take up the course in the future. Your participation in this course is voluntary and you can withdraw at any time.

If you are currently taking medication for a mental health problem, then we recommend that you do not change your medication, other than in close collaboration with your medication prescriber. The decision to perform any of the physical exercises remains your own, so please follow your own careful judgement to decide if they are beneficial for you to do or not.

If any of these circumstances apply to you, then if you have not done so already, please contact the facilitator before the course begins to discuss your situation and the support networks you have in place and to explore how you can best be supported during the course.

Please tick this box to indicate that you have read and understood this statement ☐

Please tick this box to indicate that you understand the guidelines for participation ☐

Name…….....Signature…….Date…….

Appendix 5: Personal Details Form

8-WEEK MBLC PRE-COURSE QUESTIONNAIRES: YOUR UNIQUE ID* ☐

Personal Details Form:

Age..... Gender.....

Occupation (please include any voluntary roles if needed)

.....

How long have you worked in your current role?.....

Are there any challenges and stressors that you face related to your work? If so, please describe:.....

.....

.....

.....

.....

How do you relax and take care of yourself?

.....

.....

.....

.....

.....

What do you hope to gain from participating in this course?

.....

.....

.....

Do you agree that the data collected in this study can be recorded and used for research purposes, providing that the participant's identity is protected and remains anonymous? Please tick yes ☐ or no ☐

YOUR UNIQUE ID = last 4 digits of your own or another memorable phone number. Please remember this as you will be required to add it to the same set of questionnaires post -course.

Appendix 6: Weekly Home Practice Evaluation Form

8-WEEK MBLC QUESTIONNAIRES: YOUR UNIQUE ID* ☐

Weekly Home Practice Evaluation Form

This week I engaged in the following formal practices (please list how often you did each practice, for how long and at what time):
i.e., Settling, Grounding, Resting, Support with Sound (SGRS) 3 times, averaging 20 minutes per practice at 7:30am.
This week I engaged in the following short on-the-spot practices:
i.e., 3-Minute Breathing Space (3MBS) 3 times each day over 5 days.

In relationship to your mindfulness practice, please answer the following questions:

This week I am challenged by?.....

This week I have benefited from?.....

This week I have learned?.....

YOUR UNIQUE ID = last 4 digits of your own or another memorable phone number. Please remember this as you will be required to add it to the same set of questionnaires post -course.

Appendix 7: Home Practice Going Forwards Form

8-WEEK MBLC POST-COURSE QUESTIONNAIRE: YOUR UNIQUE ID* [ ]

Home Practice Going Forwards Form

What are the main things I have learned on this course?

.....
.....
.....
.....
.....
.....

How will I implement what I have learned into my daily life?

.....
.....
.....
.....

What are the main reasons for continuing to practice mindfulness after this course ends?

.....
.....
.....

Realistically how many minutes per day do I want to commit to my daily formal

mindfulness practice?.....

Which of the formal practices covered on this course would I like to do on a regular basis? (e.g. sitting practice, body scan, mindful movement, loving kindness practice)

.....
.....

Which of the daily life practices covered on this course would I like to do on a regular basis? (e.g. 3-minute breathing space, self-compassion break, daily life activities)

.....
.....

What will I say to myself if I experience a resistance to continuing to practice mindfulness?

.....
.....

Appendix 8: Post Course Feedback Form

8-WEEK MBLC POST-COURSE QUESTIONNAIRES: YOUR UNIQUE ID* [ ]

Post-Course Feedback Form.

Your feedback is important for research purposes and the future development of mindfulness for health care staff, please write more if needed.

Did participation in the MBLC benefit you in any way and if so how?

.....
.....
.....

Were there any difficulties or challenges in practicing and participating in the MBLC and if so how did you overcome them?

.....
.....
.....

Was the content and delivery of the MBLC clear and well presented?

.....
.....
.....

Is there any way the MBLC could be improved and if so how?

.....
.....
.....

What does it mean to be mindful, specifically in your work?

.....
.....
.....

Would you recommend this course to others and if so why?

.....
.....
.....

What can be done to help support your continued practice of mindfulness?

.....

Appendix 9: Self-Report Questionnaire 1. Self-Compassion Scale (SCS)

8-WEEK MBLC PRE-COURSE QUESTIONNAIRES: YOUR UNIQUE ID*

Questionnaire 1: Self-Compassion Scale

How I typically act towards myself in difficult times.… please read each statement carefully before answering; using the scale given below indicate, to the right of each item, how often you behave in the stated manner:

Almost Never Almost Always
1 2 3 4 5

1	I'm disapproving and judgmental about my own flaws and inadequacies	
2	when I'm feeling down I tend to obsess and fixate on everything that's wrong	
3	when things go badly for me, I see the difficulties as part of life that everyone goes through	
4	when I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world	
5	I try to be loving towards myself when I'm feeling emotional pain	
6	when I fail at something important to me I become consumed by feelings of inadequacy	
7	when I'm down, I remind myself that there are lots of other people in the world feeling like I am	
8	when times are really difficult, I tend to be tough on myself	
9	when something upsets me I try to keep my emotions in balance	
10	when I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people	
11	I'm intolerant and impatient towards those aspects of my personality I don't like	
12	when I'm going through a very hard time, I give myself the caring and tenderness I need	
13	when I'm feeling down, I tend to feel like most other people are probably happier than I am	
14	when something painful happens I try to take a balanced view of the situation	
15	I try to see my failings as part of the human condition	
16	when I see aspects of myself that I don't like, I get down on myself	
17	when I fail at something important to me I try to keep things in perspective	
18	when I'm really struggling, I tend to feel like other people must be having an easier time of it	
19	I'm kind to myself when I'm experiencing suffering	
20	when something upsets me I get carried away with my feelings	
21	I can be a bit cold-hearted towards myself when I'm experiencing suffering	
22	when I'm feeling down I try to approach my feelings with curiosity and openness	
23	I'm tolerant of my own flaws and inadequacies	
24	when something painful happens I tend to blow the incident out of proportion	
25	when I fail at something that's important to me, I tend to feel alone in my failure	
26	I try to be understanding and patient towards those aspects of my personality I don't like	

Appendix 10: Self-Report Questionnaire 2. Mindful Attention and Awareness Scale

8-WEEK MBLC PRE-COURSE QUESTIONNAIRES: YOUR UNIQUE ID* [ ]

Questionnaire 2: Day to Day Experiences (MAAS)

Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate by circling, how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I could be experiencing some emotion and not be conscious of it until sometime later.	1 2 3 4 5 6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1 2 3 4 5 6
I find it difficult to stay focused on what's happening in the present.	1 2 3 4 5 6
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	1 2 3 4 5 6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1 2 3 4 5 6
I forget a person's name almost as soon as I've been told it for the first time.	1 2 3 4 5 6
It seems I am "running on automatic," without much awareness of what I'm doing.	1 2 3 4 5 6
I rush through activities without being really attentive to them.	1 2 3 4 5 6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.	1 2 3 4 5 6
I do jobs or tasks automatically, without being aware of what I'm doing.	1 2 3 4 5 6
I find myself listening to someone with one ear, doing something else at the same time.	1 2 3 4 5 6
I drive places on "automatic pilot" and then wonder why I went there.	1 2 3 4 5 6
I find myself preoccupied with the future or the past.	1 2 3 4 5 6
I find myself doing things without paying attention.	1 2 3 4 5 6
I snack without being aware that I'm eating.	1 2 3 4 5 6

Appendix 11: Self-Report Questionnaire 3. Perceived Stress Scale (PSS)

8-**WEEK MBLC PRE-COURSE QUESTIONNAIRES: YOUR UNIQUE ID*** ☐

Questionnaire 3: Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

1	In the last month how often have you been upset by something that happened unexpectedly?	0	1	2	3	4
2	In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3	In the last month, how often have you felt nervous and "stressed?"	0	1	2	3	4
4	In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5	In the last month how often have you felt that things were going your way?	0	1	2	3	4
6	In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7	In the last month, how often have you been able to control the irritations in your life?	0	1	2	3	4
8	In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9	In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10	In the last month, how often have you felt that difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

Appendix 12: Timetable

August, 2012

1) Obtain permission from this author's employer to facilitate the MBLC, by submitting a draft research proposal and discussing the nature of the study with managers.

2) Begin the literature review.

September, 2012

3) Submit the Work Based Project (WBP) Full Proposal document to the assigned WBP supervisor. Make any changes as necessary after feedback is obtained.

4) Finish the 2nd draft of the literature review.

5) Send out preliminary information regarding the MBLC to prospective participants and discuss this further with their managers if needed.

6) Carry out a pilot study of the MBLC with this author's team of four colleagues and complete this by the end of October.

October, 2012

7) Create files and folders (both electronic and paper) of all the materials necessary to facilitate the MBLC.

November, 2012

Break. Month-long mindfulness retreat in South Africa.

December, 2012

8) Gather resources necessary to facilitate the MBLC course, i.e., print of manuals and questionnaires (plus supporting documents), copy audio practices to disc to accompany the course.

February - May, 2013

9) Begin facilitating the MBLC course. Estimated number of courses = 2 x 15 participants.

April - July, 2013

Collate data and write up results.

July - August, 2013

Write up, proof read and hand in WBP.

September, 2013 onwards

Disseminate findings and propose further research in this area with the MBLC and / or other MBI.

Appendix 13: MBLC Coding. Challenges and Stressors at Work

Categories	Subcategories. Participant Number (N)	Exemplar Quotes
Clients	Working with difficult and challenging clients and or their families N= 13 (2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 18, 28, 30) Counter transference N= 1 (14)	"Intense work with vulnerable young people and families." "Transference and counter transference can be stressful."
Workload	Safeguarding or child protection issues N= 6 (5, 10, 12, 16, 21, 22) Increased administrative responsibilities N=14 (1, 5, 7, 8, 12, 13, 15, 16, 17, 20, 21) Getting the right home / work balance N= 5 (9, 22)	"I deal with complicated families, causing stress to myself when working out the best actions." "Pressure around meeting targets versus caring for clients." "Workload leading to problems with time management."
Organisational Issues	Organisational systems in transition or difficulty N= 5 (7, 8, 13, 15, 28) Lack of funding N= 2 (1, 7) Ethical issues N= 2 (13)	"Insecurity." "Uncertainty of funding." "Job role is changing in a way that conflicts with training, ethics and what evidence base suggests is helpful."
Staffing	Lack of administrative support N= 2 (16, 28) Low staffing and or high staffing turnover N= 3 (10, 12, 28)	"Increased workload due to changes in staffing."
Life Stressors	Distance to travel N= 1 (20) Confrontation with colleagues N=3 (9, 22, 23)	"Colleagues conflict of interest."

Appendix 14: MBLC Coding. Benefits Associated With Participation in the MBLC

Categories	Subcategories. Participant Number (N)	Exemplar Quotes
Improved Awareness	External More in tune with the external world / surroundings N= 14 (1, 3, 5, 8, 10, 12, 15, 27)	"It makes me more aware of my surroundings."
	Internal More self-aware (thoughts, feelings, emotions and body sensations) N=14 (1, 3, 9, 11, 13, 17, 18, 19, 25, 29)	"Allowed me to notice what is going on for me, so that I can make choices about what I want to do next."
	More aware of negative or intrusive thoughts N=4 (1, 4, 11, 15)	"Helped me accept my negative and positive emotions."
	More aware of reaction to external influences N=4 (10, 11, 19, 24)	"I have space to consider how to respond to situations."
	Improved insight and reflection N=8 (4, 6, 14, 17, 18, 19, 24, 25)	"Allows you to be more reflective in your practice."
Relationships With Others	Improved Communication N=9 (1, 10, 11, 12, 18)	"I believe the MBLC would improve care by allowing practitioners to be authentically there for their clients."
	Acceptance and Tolerance N= 9 (5, 6, 8, 9, 14, 16, 17, 18, 24)	"More aware of people's feelings", "more accepting and tolerant of others", "kinder to others", "more attentive, responsive and present".
	Salience of Group Support N=6 (2, 3, 4, 11, 17, 20)	"I learn from listening to other people."
Relationship With Self	More compassion and / or kindness towards self N=11 (1, 6, 12, 14, 15, 17, 19, 20)	"Given clarity and compassion for myself."
	More Self Belief N=3 (1, 6, 11)	"This course has changed me for the better. Thank you."

Appendix 14: MBLC Coding. Benefits Associated With Participation in the MBLC (Continued)

Categories	Subcategories. Participant Number (N)	Exemplar Quotes
Health Related Benefits	Breathing better N=9 (1, 4, 6, 8, 15, 18, 24) Improvements in Sleep N=11 (4, 5, 8, 10, 11, 12, 16, 17, 19, 28, 29) Able to let go of stress, anxiety and agitation easier N=7 (10, 11, 14, 15, 23, 24, 27) Calmer and more relaxed N=16 (1, 2, 6, 7, 8, 11, 16, 19, 23, 28, 30) Improved sense of well-being and / or self-care N=7 (1, 2, 6, 9, 11, 12, 14) Established a better home / work balance N= 5 (9, 10, 12, 13, 20) Taking time out for self N=15 (6, 7, 8, 9, 14, 16, 17, 23, 24, 25, 27, 28, 29, 30, 31)	"It's taught me how to breathe right." "I now sleep more peacefully." "I am already finding that my ability to let go of stress and anxiety is improving." "I have learned how cluttered my mind was and how this meant I was stressed and to some degree I had stopped listening properly. "The benefits of taking care of myself are not purely selfish." "I have also gained perspective on many issues and re-prioritised things." "Benefited from allowing the time to rest and be quiet."
Response to Challenges	Improved ability to manage and respond to difficult or challenging situations N=13 (1, 5, 7, 8, 12, 20)	"I generally feel happier, even when life throws difficult situations my way.
More Focused	Less distracted, more focused and more effective in and out of work N=9 (1, 11, 14, 15, 19, 31)	"Being clearer and calmer in my mind allows me to be more organised and productive.

Appendix 15: MBLC Coding. Challenges Associated With Participation in the MBLC

Categories	Subcategories	Exemplar Quotes
Time Constraints	Establishing a routine N=16 (3, 7,12, 13, 15, 19, 20, 25) Prioritising the practice time N=12 (1, 2, 7, 9, 12, 16, 17, 18, 19, 25, 28) Being too busy N=8 (1, 2, 7, 11, 15, 17, 23, 31)	"When there is a change of routine mindfulness goes out the window." "Struggled with finding time to relax and have time to myself."
Emotions / Thoughts	Dealing with difficult emotions and or thoughts that arise during practice N=14 (2, 3, 4, 6, 8, 9, 17, 19, 23, 28, 29) Resistance to a particular practice N= 3 (6, 9, 19)	"Sometimes difficulties with the thoughts that arose." "I found the kindness exercise difficult."
Focus, Concentration and Motivation	Dealing with distraction N= 5 (14, 24) Motivation N= 6 (1, 6, 9, 13, 18, 24) Sleepiness N= 6 (1, 2, 11, 23, 28, 31) Practicing alone N= 4 Patience N= 2 (25)	"At the beginning I found it difficult to settle." "Trouble motivating myself to sit and do practice." "I kept falling asleep during the body scan." "I find meditation difficult to practice alone." "Difficulty seeing the benefits in the early stages."
External Pressures	Work issues N=12 (10, 11, 14, 15, 16, 27, 29) Family pressures / other commitments N=11 (5, 15, 16, 19, 20, 23, 24, 27, 29)	"My work schedule and team resources did not enable me to attend all the sessions." "Family felt I was having time away from them."
Physical Pain	Posture during practice N=3 (1, 4, 19) Ill health N=6 (3, 10, 17, 20, 23, 26)	"Difficulty with posture." "Long-term health issue."

Appendix 16: Exemplar Quotes from Participants

Respondents stated the following in response to the question, what are the main things I have learned on this course:

“To be kind to myself without feeling selfish.”

“A warm openness from my heart.”

“To become more restful in busy times.”

“I made connections about beliefs I hold of myself and where these beliefs have come from and how I continue to let them lead me through how I react in certain environments.”

“I can cope better if I take the time to be mindful.”

“That taking time out reduced some of my anxieties.”

“A sense of feeling more in tune with myself.”

“Being mindful makes me more aware of the beautiful things around me.!

“My mind and behaviour are linked to how much time I give myself to sit and calm.”

“That I need to make more time for me.”

“I am not fully present in my daily tasks.”

“To change my responses to unpleasant experiences.”

“How to relax and ground myself.”

“To accept things as they are.”

“To settle my mind and the awareness of anxiety related to future thinking.”

“Getting into the posture and focusing on breathing feels like coming home.”

“It’s ok to sit and do nothing occasionally.”

“To continue to make time and space for me.”

“Mindfulness practice helps well-being.”

“To trust in myself and others more.”

“To breathe from my stomach more.”

“It feels good to take time for yourself.”

Appendix 16: Exemplar Quotes from Participants

"That it is difficult to put myself as a priority."

"To slow down, put my needs first and listen to my body."

"The importance of setting time aside for things that I value."

"Mindfulness practice can be challenging."

"That mindfulness practice can be done anywhere and anytime."

"How to settle the mind and focus on the breath."

"That I rarely sit still."

"Being kinder to myself."

"The importance of routine."

"That if I practice mindfulness I feel more settled and less anxious."

"To relax more."