Alexander C. Duncan (AKA Karma Jiga)

500263830

30th September 2016

An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

Presented for an MSc in Teaching Mindfulness-Based Courses

School of Psychology, Bangor University.

Acknowledgements

I am grateful to the participants of this research and Dr. Dusana Dorjee for sharing their experience and wisdom. I'm thankful to Rebecca Crane for her invaluable advice and KV for his encouragement. To my fellow mindfulness teachers, secular and otherwise, my thanks for preparing 'the ground', of instilling inspiration, imparting information and to interdependence.

Profound gratitude to the 16th and 17th Karmapa's, the 18th Dulmo Choje Rinpoche, Choje Akong Tulku, Choje Lama Yeshe Losal Rinpoche and Maggie without whom this would not have been possible.

Finally, thanks to Dundee City Lord Provost Bob Duncan for the compassionate care he holds for the residents of Dundee and to Mike Welsh for his vision in providing the venue and his care and kindness towards those he serves.

In memory of my mother, Unity, and her boundless love.

Sarva mangalam!

May goodness prevail!

Declaration and Consent

Details of the Work

I hereby agree to deposit the following item in the digital repository maintained by Bangor University and/or in any other repository authorized for use by Bangor University.

Author Name:	Alexander Campbell Duncan (aka Karma Jiga)
Title:	**An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.**
Word Count	**9,986**
Supervisor/Department:	Dr Dusana Dorjee/ CMRP/School of Psychology
Funding body (if any):	N/A
Qualification/Degree obtained:	MSc in Teaching Mindfulness Based Courses

This item is a product of my own research endeavours and is covered by the agreement below in which the item is referred to as "the Work". It is identical in content to that deposited in the Library, subject to point 4 below.

Non-exclusive Rights

Rights granted to the digital repository through this agreement are entirely non-exclusive. I am free to publish the Work in its present version or future versions elsewhere.

I agree that Bangor University may electronically store, copy or translate the Work to any approved medium or format for the purpose of future preservation and accessibility. Bangor University is not under any obligation to reproduce or display the Work in the same formats or resolutions in which it was originally deposited.

Bangor University Digital Repository

I understand that work deposited in the digital repository will be accessible to a wide variety of people and institutions, including automated agents and search engines via the World Wide Web.

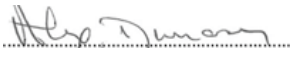
I understand that once the Work is deposited, the item and its metadata may be incorporated into public access catalogues or services, national databases of electronic theses and dissertations such as the British Library's EThOS or any service provided by the National Library of Wales.

I understand that the Work may be made available via the National Library of Wales Online Electronic Theses Service under the declared terms and conditions of use (http://www.llgc.org.uk/index.php?id=4676). I agree that as part of this service the National Library of Wales may electronically store, copy or convert the Work to any approved medium or format for the purpose of future preservation and accessibility. The National Library of Wales is

not under any obligation to reproduce or display the Work in the same formats or resolutions in which it was originally deposited.

Statement 1:

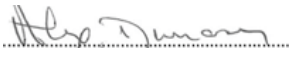
This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree unless as agreed by the University for approved dual awards.

Signed  (aka Karma Jiga) (candidate)

Date: 14 - 9 - 2016

Statement 2:

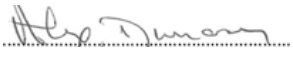
This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s). All other sources are acknowledged by footnotes and/or a bibliography.

Signed  (aka Karma Jiga) (candidate)

Date: 14 - 9 - 2016

Statement 3:

I hereby give consent for my thesis, if accepted, to be available for photocopying, for inter-library loan and for electronic storage (subject to any constraints as defined in statement 4), and for the title and summary to be made available to outside organisations.

Signed  (aka Karma Jiga)(candidate)

Date: 14 - 9 - 2016

NB: Candidates on whose behalf a bar on access has been approved by the Academic Registry should use the following version of Statement 3:

Statement 3 (bar):

I hereby give consent for my thesis, if accepted, to be available for photocopying, for inter-library loans and for electronic storage (subject to any constraints as defined in statement 4), after expiry of a bar on access.

Signed …… (candidate)

Date ……

Statement 4:

Choose one of the following options

a)	I agree to deposit an electronic copy of my thesis (the Work) in the Bangor University (BU) Institutional Digital Repository, the British Library ETHOS system, and/or in any other repository authorized for use by Bangor University and where necessary have gained the required permissions for the use of third party material.	√
b)	I agree to deposit an electronic copy of my thesis (the Work) in the Bangor University (BU) Institutional Digital Repository, the British Library ETHOS system, and/or in any other repository authorized for use by Bangor University when the approved bar on access has been lifted.	
c)	I agree to submit my thesis (the Work) electronically via Bangor University's e-submission system, however I opt-out of the electronic deposit to the Bangor University (BU) Institutional Digital Repository, the British Library ETHOS system, and/or in any other repository authorized for use by Bangor University, due to lack of permissions for use of third party material.	

Options B should only be used if a bar on access has been approved by the University.

In addition to the above I also agree to the following:

1. That I am the author or have the authority of the author(s) to make this agreement and do hereby give Bangor University the right to make available the Work in the way described above.

2. That the electronic copy of the Work deposited in the digital repository and covered by this agreement, is identical in content to the paper copy of the Work deposited in the Bangor University Library, subject to point 4 below.

3. That I have exercised reasonable care to ensure that the Work is original and, to the best of my knowledge, does not breach any laws – including those relating to defamation, libel and copyright.

4. That I have, in instances where the intellectual property of other authors or copyright holders is included in the Work, and where appropriate, gained explicit permission for the inclusion of that material in the Work, and in the electronic form of the Work as accessed through the open access digital repository, *or* that I have identified and removed that material for which adequate and appropriate permission has not been obtained and which will be inaccessible via the digital repository.

5. That Bangor University does not hold any obligation to take legal action on behalf of the Depositor, or other rights holders, in the event of a breach of intellectual property rights, or any other right, in the material deposited.

6. That I will indemnify and keep indemnified Bangor University and the National Library of Wales from and against any loss, liability, claim or damage, including without limitation any related legal fees and court costs (on a full indemnity bases), related to any breach by myself of any term of this agreement.

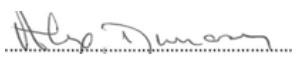
Signature: .  Date : 14 - 9 - 2016

Table of Contents

9 List of Figures

Abbreviations	**Meaning**
fMRI	Functional Magnetic Resonance Imaging
MAAS	Mindful Attention Awareness Scale
MBCT	Mindfulness Based Cognitive Therapy
MBI	Mindfulness Based Intervention
MBRP	Mindfulness Based Relapse Prevention
MBRP-W	Mindfulness Based Relapse Prevention-W
MBSR	Mindfulness Based Stress Reduction
NHS	National Health Service
OECD	Organisation for Economic Co-operation & Development
OAT's	Overarching Themes
PWB	Psychological Wellbeing
RPT's	Refined Primary Themes
PT's	Primary Themes
SED	Socioeconomic(ally) Disadvantage(ed)
SWB	Subjective Wellbeing
WHO	World Health Organization

Abstract

An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

Background: MBSR programmes can help participants cope with stress (Kabat-Zinn, 2004) and improve wellbeing (Carmody & Baer, 2008). Recent studies also indicate their potential in addressing the effects of poverty (Eames, Crane, Gold, Pratt, & Axford, 2015; Gucht, Takano, Broeck, & Raes, 2014; Hick & Furlotte, 2010).

Prolonged exposure to 'toxic stress' caused by financial hardship and social exclusion (Eisenberger, 2012) can result in increased risk of illness (Shonkoff & Garner, 2012), impaired cognitive function (Mani, Mullainathan, Shafir, & Zhao, 2013) and can directly impact biological ageing (Mitchell et al., 2014) and wellbeing (Pickett & Wilkinson, 2007).

Aim: To evaluate the effectiveness of MBSR for improving wellbeing in adults living with the psychosocial stress caused by poverty.

Method: 40 adults (>18) from regeneration areas (Cullum, 2014), earning less than the Living Wage (Davis, Hirsch, & Padley, 2014), were recruited into a mixed method, non-randomised wait list controlled study. The test group (N=20) participated in two MBSR courses and (N=20) non-participants formed the control group.

The relationship between developing mindful awareness and personal wellbeing was measured using qualitative (Bowling, 2011) and quantitative wellbeing indicators [The 15-item Mindful Attention Awareness Scale (Brown & Ryan, 2003); The 5-item World Health Organization Wellbeing Index (Bech, 2004)].

Results & Discussion: The effect of MBSR on the wellbeing of participants experiencing poverty was measured, and the practicalities of developing accessible mindfulness-based programmes for those living in areas of multiple deprivation (Scottish Government, 2012) are discussed.

An Investigation into the Efficacy of Mindfulness-Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

Mindfulness-based interventions

Mindfulness-Based Interventions (MBI's) combine Buddhist philosophy and mindfulness practices with modern scientific rigor and understanding (Chiesa & Malinowski, 2011). Here, MBI denotes Mindfulness-Based Stress Reduction (MBSR) (Kabat-Zinn, 1990) and Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2013). Both are structured, eight-week, group programmes (Kabat-Zinn, 1982) where participants learn to pay attention non-judgementally and develop an awareness of present moment experience (Kabat-Zinn, 1990). This study examines how mindfulness effects the wellbeing of adults suffering from the 'toxic stress' resulting from poverty (Eisenberger, 2012).

Stress

Stress describes a negative (distress) (Sapolsky, 2004) or positive (eustress) psychological condition (Jones, Bright, & Clow, 2001) that impacts mental and physical wellbeing. When negative, it can boost stress hormone levels (Pagliaccio et al., 2014), leading to harmful physiological or biological change (Murray & Lopez, 1997), which, Robertson et al (2012)

suggest may be caused by how stress is percieved. Nonetheless, disadvantage and segregation have been associated with altered brain structure and cognitive function (Davidson & McEwen, 2012) , mental illness (Galea, Uddin, and Koenen, 2011), substance abuse (Ahern, Galea, Hubbard, Midanik, & Syme, 2008) and suicide (Dupéré, Leventhal, & Lacourse, 2009). However, fMRI studies show MBI's may reverse some of these effects (Davidson & McEwen, 2012; Flook, Goldberg, Pinger, & Davidson, 2015).

Wellbeing

Thus, MBI's could aid 'societal progress' by improving people's subjective wellbeing (SWB), and consequently, their overall wellbeing (Organisation for Economic Co-operation and Development;OECD, see Figure.1).

Figure 1. Wellbeing and progress framework (OECD.org).

The OECD describes SWB as, the *positive and negative life evaluations and affective reaction* to experience (Diener, 2000) combined with Aristotle's (1985) Eudaimonic sense of *meaning and purpose in life,* which, can be measured in several ways (Steel, Schmidt and Shultz, 2008) (see Table 1, common measures of SWB).

It's deterioration, and the decline of relative income and social status are linked to increased income comparison (Clark & Oswald, 1996; Ferrer-i-Carbonell, 2005; Gunasekara, Carter, & Blakely, 2011; G. G. Kingdon & Knight, 2007; Luttmer, 2005; M. G. Marmot, 2003, 2004; R. Wilkinson, 2002). Whether manifesting 'materially' (keeping up with the Joneses) or through 'psychosocial stress' (Blázquez & Budría, 2013; Lhila & Simon, 2010; Sweet, 2011), it leads to material inequalities, social exclusion, disease susceptibility and indirect health effects from substance misuse and poor diet (Eibner & Evans, 2005; M. Marmot, 1994; M. G. Marmot, 2003; R G Wilkinson, 1997). Kaplan, Goldenberg and Galvin-Nadeau's (1993) early attempt to address this deterioration successfully employed a 'Global Wellbeing Measure' (Andrews & Withey 1976, p. 107), producing significant changes in wellbeing. However, Brown & Ryan's (2003) ground-breaking investigation into the role mindfulness played in 'Psychological Wellbeing' (PWB), expanded Diener & Emmons (1984) SWB construct (see Table 2) to include 'emotional-subjective wellbeing' (Brown & Ryan, 2003,

p. 828). This led to the development of the Mindful Attention Awareness Scale (MAAS) (Black, Sussman, Johnson, & Milam, 2012). Grossman et al's (2004) pioneering meta-analysis followed, finding significant clinical effectiveness in MBI's in 'mental health' variables and PWB within clinical populations as Kaplan et al (1993) had. However, caution was urged (Carmody and Baer, 2009) as variables other than mindfulness e.g., genetics, may affect wellbeing (Gross, Sutton, & Ketelaar, 1998; Gunthert, Cohen, & Armeli, 1999; Steel et al., 2008; Weiss, Bates, & Luciano, 2008; Zautra, Affleck, Tennen, Reich, & Davis, 2005). Chambers, Gullone, & Allen (2009) also suggested positive outcomes be considered co-emergent until the mindfulness/wellbeing relationship was better understood.

More recent findings suggest that MBI's, drug treatments, and behavioural therapies have similar effects (Goyal, 2014; Kuyken et al., 2016), despite Eberth & Sedlmeier's (2012) findings that MBI's positively affect cognitive and emotional processes, grey brain matter development, PWB and mood, through increasing serotonin levels (Singleton *et al.*, 2014). Attempts to address such anomalies found that MBI's were strong and consistent for cognitive and emotional reactivity, moderate for mindfulness and 'repetitive negative thinking' but, insufficient regarding self-compassion and psychological flexibility (Coffey, Hartman, & Fredrickson, 2010; Gu, Strauss, Bond, & Cavanagh, 2015). However, possible

connections between MBI's and improved psychological outcomes suggest they foster dispositional mindfulness and counteract the effect of neuroticism on SWB in working people and online communities (Wenzel, von Versen, Hirschmüller, & Kubiak, 2015).

Malpass et al., (2012) meantime, identified wellbeing as physical, mental and 'within illness', noting that mindfulness fostered positive attitudinal change towards physical pain and disability. Accordingly, Charmaz, (1983) had advised disengaging from labelling or identifying with a 'sick self', while (Doran, 2014), recommended a re-engaging with direct experience "as a step toward finding a sense of wellbeing" (p. 9), and, acceptance, to encourage a more "mental, emotional and spiritual way" of understanding wellbeing (Doran, 2014, P. 7).

Thus, research themes suggest that MBI's are fundamental in helping participants be more focused and aware in ways that promote their physical and mental wellbeing, while research findings indicate a direct link between wellbeing and mindfulness skills. Doran (2014), however, suggests cross-disciplinary studies to shed more light on the mechanisms through which mindfulness improves wellbeing (see Table 3). This resonates with Kingdon & Knight's (2006) psycho-social study relating low wellbeing to income poverty and physical and social functioning, using the criteria of '*subjective well-being poverty'*. Given the negative correlates and the positive effects

of MBI's on SED populations, mindfulness could prove to be a useful tool in reducing the inequalities of 'Health Poverty' (www.hpi.org.uk, 2004), while helping the poorest and most poorly reclaim control of their personal health determinants (healthpovertyaction.org, 2015; Public Health England, 2013).

Poverty

Reclaiming this control could help alleviate some aspects of 'the world's deadliest disease' (WHO, 1995), *poverty,* which the UN (United Nations, 1995) defines as,

- *Absolute Poverty:* insufficient resources to meet basic needs.
- *Overall or Relative poverty*: denied the material needs required to participate fully in accepted daily life.
- *Social Exclusion*; (Peace, 2001, p. 1),

and Margaret Thatcher once described as a personality disorder (Dowden, 1978)!

Assessed according to the 'poverty line', 'cost of living', or, less than 60% of normal household income after compulsory deductions (Chen & Ravallion, 2010; Palmer, 2015), living with less, is directly linked to debt and increased risk of poor physical and mental health (Richardson, Elliott, & Roberts, 2013).

Socioeconomic success, however, is determined by 'mobility', and 'upward mobility', by economic growth, which is ever-diminishing as a result of economic crises, stock market bubbles and student loan poverty. This affects earning power and the opportunities of the socioeconomically disadvantaged (Mcknight., 2015). These, when magnified institutionally via privileged access to education and connections, are skewed towards the rich and powerful, resulting in "opportunity hoarding" (Reeves & Howard, 2013, p. 3). Consequently, the talented underprivileged have fewer opportunities and the less talented wealthy remain within the wealthy high paid, negating the importance of natural ability (Kenealy, 2015) This, when entrenched, results in what Armstrong (Cabinet Office, 2006) calls the '2½ percent of every generation' stuck in a lifetime of disadvantage, harm and genetic change, which adversely affects brain development and long-term health (Rechavi et al., 2014; Shonkoff & Garner, 2012).

MBI's in SED communities

However, early reports of the health benefits of MBI's for the poor are anecdotal (Kabat-Zinn, 2004), with little definitive evidence i.e., n = 12 papers (see table 4). These papers are discussed below.

Mindfulness and healthcare.

Roth & Creaser's (1997) early study of an adapted MBSR programme for 144 black and minority SED patients with income-based fees

introduced 'in-session' adjustments to support cultural, social, learning/literacy needs (see table 4), encourage communication and assuage social anxiety. Despite sending reminders and recordings, "life circumstances beyond their control" (Roth & Creaser, 1997 p. 170) led to high dropout (see Table 5), but, for completer's, course acceptance was high (60%). Results indicated decreased medical/psychological symptoms and improved self-esteem, behavioural change and overall wellbeing. The absence of a control group and use of short-term measures were remedied when Roth and Robbins (2004) repeated the study with a control group and 12 month follow-up, revealing similar findings and a decrease in chronic care visits. Likewise, Abercrombie, Zamora, & Korn (2007) revealed that SED female cancer patients were less anxious and more likely to attend appointments and even applied mindfulness during gynaecological examinations! These suggest MBI's could positively affect clinic attendance rates.

Substance misuse and SED communities.

Substance misuse is linked to social structure, poverty, disadvantage and social class (Harrison & Gardiner, 1999), with substance of choice dependent on age, gender, skill and employment status (Murali, 2004). With this in mind, Vallejo & Amaro (2009) adapted Mindfulness-Based Relapse Prevention (MBRP) (Bowen, Chawla and Marlatt, 2011) to form

Mindfulness-Based Relapse Prevention for Women (MBRP-W) living in substance abuse centres. In addition to the initial challenge of structured living, the women suffered from trauma, mental illness, substance, sexual and physical abuse, imprisonment and child custody loss. Some were court referrals and others attended to regain child custody (see Table 5, Vallejo & Amaro, 2009; Amaro et al., 2014). Accordingly, simple language, short practices with 'trauma-sensitive guidance' and discussion around substance use stressors featured. Despite this, compliance was lower than similar studies (Bowen et al., 2009; Masuda, Price, & Latzman, 2012), with non-attendance mainly 'beyond participant control' (see Table 5). Nonetheless, completers (36%) exhibited reductions in addiction severity, alcohol intake, perceived stress and increased wellbeing/wellness at a 12-month follow-up. Although lacking randomisation or a control, and a reliance on follow-up self-report measures of substance use without testing, results indicate a role for mindfulness training in ameliorating factors of comorbidity for SED participants.

The elderly.

Szanton, Wenzel, Connolly, & Piferi (2011) meantime, designed a reflective, stationary, MBI to reduce the effects of SED on the elderly in residential care. Course adaptations by residents engaging in an MBSR programme (N = 13 ≥ 60 years) led to the formation of 'Eldershine', an MBI that taught mental and physical health management and social and emotional

skills development. A pilot study (Palta et al., 2012) with (N = 12) hypertension sufferers and an active control (a social support group, N=8) tested its efficacy. On conclusion, significant reductions in blood pressure were recorded and attendance > 80% suggested 'Eldershine' was both feasible and acceptable.

Moss et al's (2014) mixed method study (control N = 19, treatment N = 20) however, featuring treatment sub-group interviews, examined facets of mindfulness, self-compassion and psychological distress , noting significant wellbeing improvements for the treatment group. Consequently, both studies suggest that MBI's could improve the quality of life of SED elderly in residential care facilities.

Domestic Violence and Trauma.

Women in poverty suffer vulnerability to domestic abuse, and are in need of adapted MBI's such as Dutton et al (2013) (see Table 4), which was tested as an alternative to traditional mental health services for mixed race women from homeless shelters and community hospitals. It focused on informal practice and stress education without trauma discussion. Reparations were made for travel and childcare, which may account for the 70% completion rate. Completers reported increased awareness, non-reactivity, self-acceptance, care, compassion, empowerment, a reduction in overall stress and a sense of belonging due to 'group effect' (Imel, Baldwin,

Bonus, & Maccoon, 2008; Kocot & Goodman, 2003). However, although acceptable and feasible, no evaluation of changes in mental health service use were conducted.

Bermudez et al's (2013) longitudinal qualitative study (N = 10; 15 months), in contrast, suffered high drop-out (81%), perhaps due to participants struggling to deal with trauma. Despite this, through practicing mindfulness, completers confidence, effective emotion regulation, stressor management, self-compassion and serenity, grew into a desire to help those in comparable situations, as with the previous study. However, group homogeneity, inter-personal conflict, and a regulation of exposure to present moment experience to moderate the effects of trauma were acknowledged as key.

Parenting.

With many SED parents suffering from poor parenting skills, having children with disruptive behaviour patterns (Bloomquist & Schnell, 2002; Lundhal, Risser, & Lovejoy, 2006) and parenting programmes unsuitable for some, Eames et al. (2015) created the MBSR-based Mindfulness-Based Wellbeing for Parents (MBW-P) programme. MBW-P was designed for ‘at risk’, hard to reach mothers, to assess parental wellbeing and parenting-related stress in an NHS setting. It featured shorter ‘in session’ and ‘home practices’, incorporated mindful listening and communication, included

social interaction and introduced short instructions in parental bonding, compassionate parenting and the maintenance of personal wellbeing (Bowlby, 2008;Gilbert, 2010). Results were encouraging, despite a small sample size, high attrition (48%) and a lack of control or follow-up. However, a 56% reduction in stress and increased wellbeing for the most 'at risk' suggests SED parents may become easier to reach and engage with, and consequently, more likely to benefit from parenting programmes after MBW-P.

Social welfare.

A social welfare setting was chosen for Gucht et al's (2014) pilot study to address the effects of poverty through MBI's (see table 4).

The author (Appendix A, personal communication 1),

> "combined MBSR/MBCT curriculums, shorter sessions/core practices, more repetitive practice guidance and included loving kindness meditation (as) it was found more challenging for this population to focus attention on a single activity for longer periods of time and (we) therefore chose to work with shorter exercises and this worked well for them."
>
> *21. 09. 15*

> " For the psychoeducation part, we used examples based on the context those people are living in, like the stress you feel due to living with less money than you need, we also had some psychoeducation on communication – how to deal with difficult conversations, what do you feel in your body at such moments etc.
>
> Adjustments were made by a course leader (a certificated mindfulness trainer) and former social welfare centre worker with experience of dealing with people living in poverty".
>
> (Appendix A, personal communication 2; 23.09.15)

Despite adaptations, attrition was high (60%) and, as with Khoury et al (2013), effect sizes were small post-intervention and medium at follow-up. However, this study's importance lies in the discovery that MBI's reduce (negative) self-directed overgeneralisation and consequently, vulnerability to depression (Raes, Griffith, Van der Gucht, & Williams, 2014). Nevertheless, to strengthen reliability and reduce attrition, a control group, larger sample size, randomisation, payment and reparations for child care and travel reimbursement were recommended. Still, these findings indicate promise for this type of intervention in institutional settings.

Homelessness.

Hick & Furlotte (2010), in contrast, developed Radical Mindfulness Training (RMT) to improve wellbeing for the *severely* economically disadvantaged. Their mixed methods MBSR-based programme aimed to change participants' cognitive and affective judgments of self, others, institutions and societal structure. Although participants introduced course adaptations such as the "Nine instructions to overcome oppression", cash payments and funded travel and childcare (see Table 4), drop out was high (64%). Quantative results however revealed increased wellbeing, and qualitative themes suggested a reperceiving of difficulties and attitudes towards others, institutions and societal structure, which may account for the positive course evaluations. Despite being a small, uncontrolled study, results were encouraging and demonstrate the benefits of modifying MBI's appropriately.

In conclusion, the paucity and pioneering nature of the studies indicates the need for more robust study in this fledgling field. Nonetheless, these studies demonstrate MBI's effectiveness in increasing mindfulness and wellbeing and the feasibility and acceptability of adapting MBI's for SED participants. However, their true benefit will remain unclear without further research.

Socioeconomic disadvantage in Scotland

This study's aim is to further that research in Whitfield (see figure 2 below), Dundee, Scotland, which has almost three times the national average (30. 7%) of income and employment deprivation.

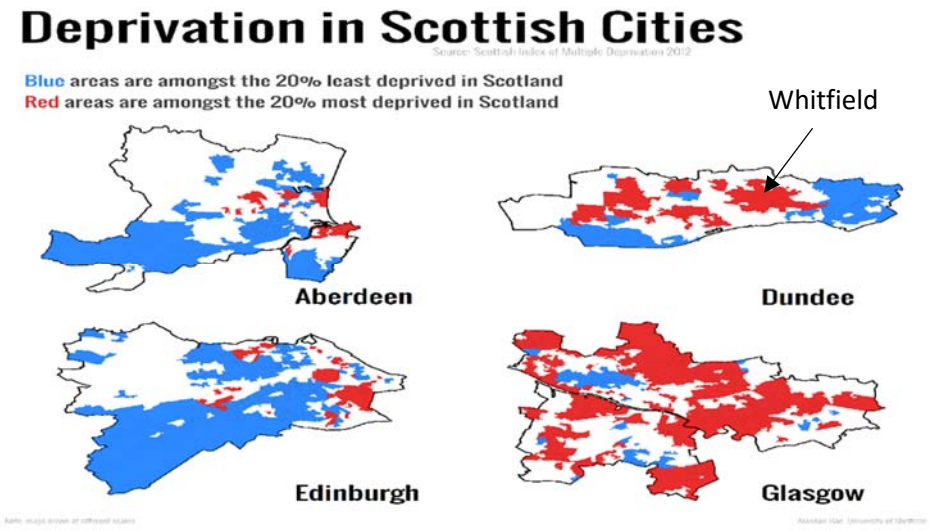


Figure 2. Areas of Deprivation; Scotland, adapted (Rae, 2015).

Ten percent claim welfare benefits, and 0.5 % of those, (the poorest), experience employment deprivation and are barely able to eat, afford fuel or even a funeral (Dundee Partnership, 2011; Kenway, Bushe, Tinson, & Born, 2015; Mcbride & Purcell, 2014; Scottish Government, 2012). To address such inequalities, 'Community Renewal/Regeneration Programmes' were introduced (Robertson, 2014), to create supportive, inclusive, sustainable environments which promote wellbeing (The Scottish Government, 2011 p. 9) and reverse the economic, physical and social decline (Scottish Local

Government and Regeneration Committee, 2014) of the most deprived areas (Kearns, Whitley, Bond, Egan, & Tannahill, 2012).

Finally…

It was David Cameron who ironically declared, "it's time we focused not just on GDP, but on GWB or general wellbeing" (Berry, 2014, p. 2). This after Stiglitz, Sen, & Fitoussi (2009) prompted the government to measure national wellbeing, and, the Parliamentary Group on Wellbeing Economics conclusion that, targeting public spending with wellbeing in mind could effectively improve people's lives, reduce demand on public services and deliver significant long-term government savings. However, the group's chairman, David Lammy MP voiced that, "austerity makes a focus on wellbeing more essential, not less" (Berry, 2014, p. 2), thus answering the need for this study (see Appendix B, local justification).

In summary, previous research, government guidelines and socio-economic statistics indicate a need for robust study into the role that mindfulness-based interventions could play in the development of wellbeing for the deprived within regeneration areas.

Study Aims

The aim of this study was to explore the feasibility/acceptability of an 8-week MBSR programme for participants suffering economic disadvantage and to explore its impact through a pilot evaluation as outlined below.

1. To assess the implementation of an MBSR programme within the context of a community setting located in a regeneration area,

1. 1 to develop efficient recruitment protocols.

1. 2 to gauge the acceptability of consent procedures.

1. 3 to investigate and address barriers to attendance.

1. 4 to assess the feasibility of collecting reliable and valid data.

1. 5 assess the appropriateness/suitability of the intervention used.

2. To investigate the mechanisms by which MBSR may help those in poverty,

2. 1 to explore participant's personal experience of the MBSR.

2. 2 to assess the impact on wellbeing of MBSR.

2. 3 Appraise participant's development of mindful awareness.

Hypotheses

In achieving the study's aims, I predicted that delivering a mindfulness-based intervention for groups of adults living in poverty would significantly improve their wellbeing. This assumption is based on the results of previous studies with this population, which have shown moderate effect sizes for shifts in facets of mindfulness and moderate effect size for changes in wellbeing (Eames et al., 2015).

Method

Participants

One hundred and seven adults from Dundee's most deprived areas were referred or self-referred to participate in an 8 week MBSR course. Two with severe mental health diagnoses were excluded, one attended a course but declined research participation and 104 consented (see Appendix C, informed consent form) to take part in the research. Seventy-two undertook orientation for one of two 8-week MBSR courses on a 'first come first served' basis and 32 were assigned to a waitlist control group (See Table 6 for sample sizes).

Thirty seven dropped out post-orientation (see table 7 below), and twenty seven withdrew within 3 sessions. Training group completers (n=20) attended the minimum effective dosage of 4 sessions (Eames et al., 2015) set for this project. Seven of those attended up to 5 sessions and 13 completed between 5 to 8 sessions.

Table 7.

Course attrition data.

	Cohort	drop out post-orientation	withdrawal within 3 sessions	Completers
Total	104			
MBSR participants	72	25	27	20
Waitlist control	32	12	0	20

Reasons for withdrawal were given by 21 participants, 6 gave none (Table 8).

Table 8.

Reasons for withdrawal.

Reason for withdrawal	Fear of violence	Unable to get up in time	Not the right time	Anxiety	Family issues
Number	1	1	3	1	4
Reason for withdrawal	Health issue	Other commitments	Carer responsibilities	Homeless	Benefit sanctions
Number	2	4	3	1	1

General Demographics.

There were (n=40) research group completers from an initial (n=107) applicants. Eight declined (3 control and 5 MBSR training group), when asked to provide age demographics. MBSR training group completers (n=15) ages ranged from ≥ 18 < 65 (50% male/female) and averaged 58 years. Control group completers (n=20) ages ranged from ≥ 18 < 60 (25% male; 75% female) and averaged 56 years. Seventy percent of the training and 45% of the control groups were single, with the remainder married (20%, 30%) or co-habiting (10%, 5% or preferred not to say). Data also revealed that participants experienced marginalisation's and multiple challenges (Mullaly, 2007) that led to feelings of exclusion from useful and meaningful participation in society (Young, 1990)(see table 9 below).

Table 9

Marginalisations

	carer	Learning Disability	Literacy issues	No information provided
Training group	1	2	2	/
Control (n=20)	/	1	2	/
control (n=20)				17

Twenty nine completers (n=20 training; n=9 control) provided mental and physical health information (see figure's 4 and 5 below) in the pre-course assessment carried out as part of the application procedure (see appendix D).

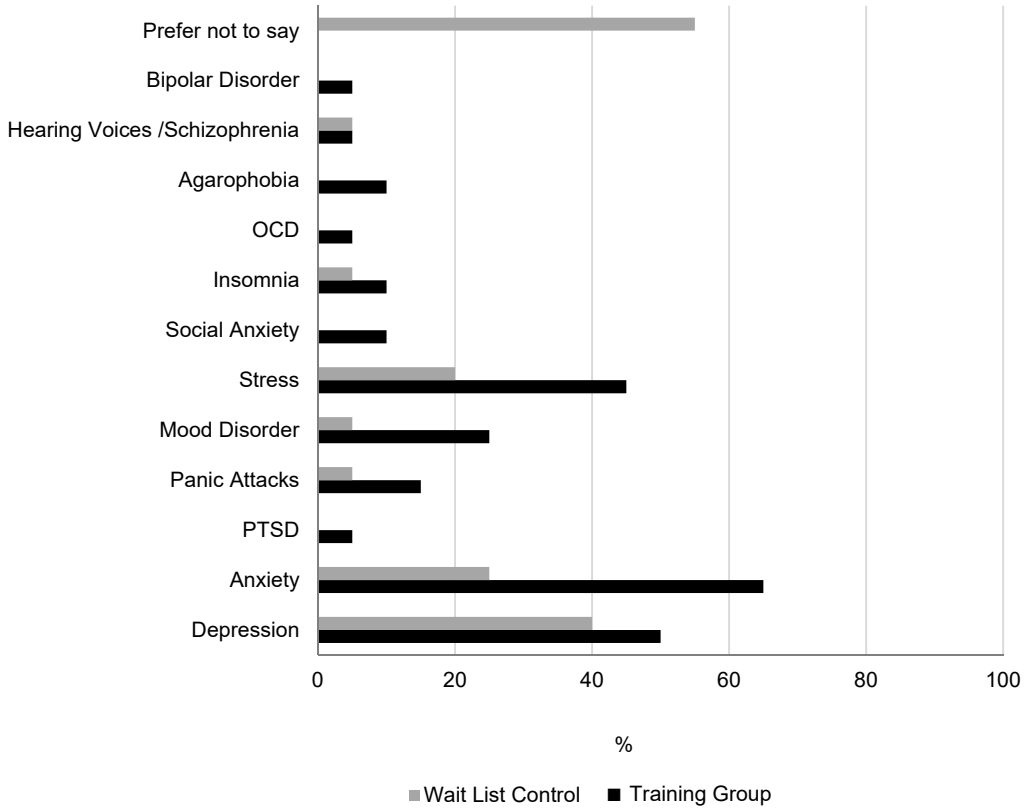


Figure 3. Mental health information from completers.

Although 55% of the control group omitted giving demographic information, data received revealed a variety of mental health issues for both groups e.g., anxiety, depression, stress and mood disorder, although the control group were less affected by each. Training group issues ranged from mobility, to cancer and obesity, with both reporting, physical/nerve pain and high cholesterol.

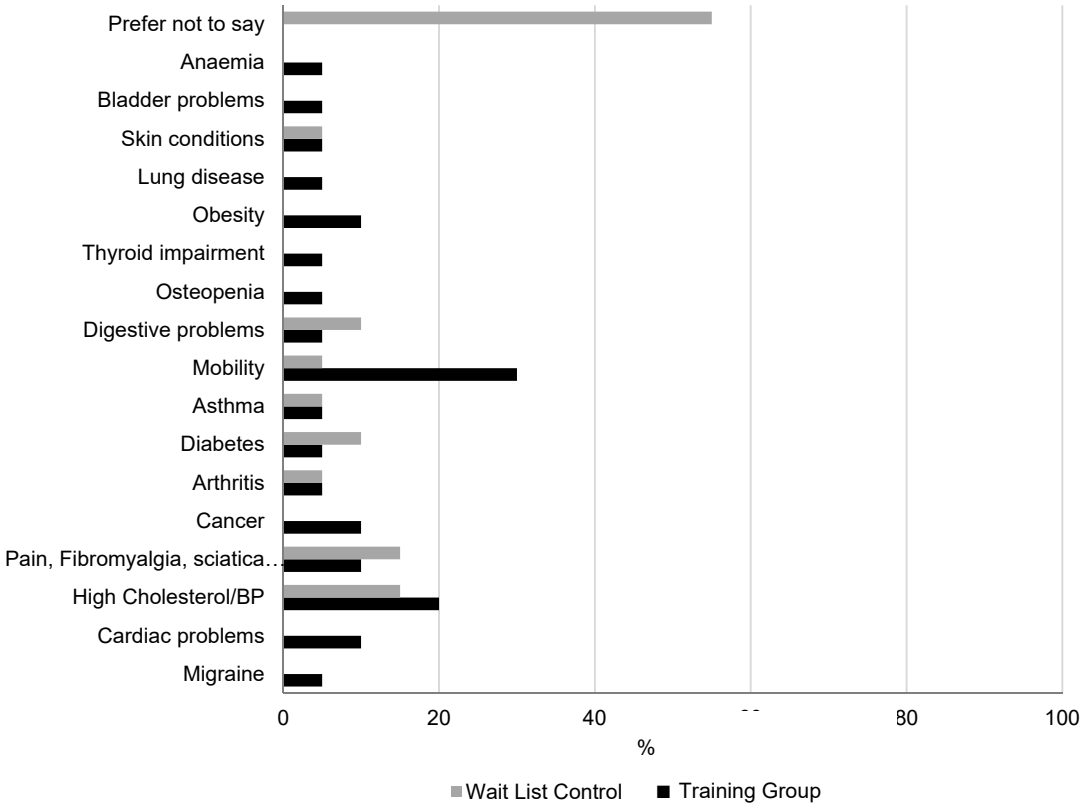


Figure 4. Physical health information from completers.

Socioeconomic factors were significant (see Figure 5 below), mainly family orientated for the control and relationships and low income for the training group, with unemployment and disability benefits significant for both.

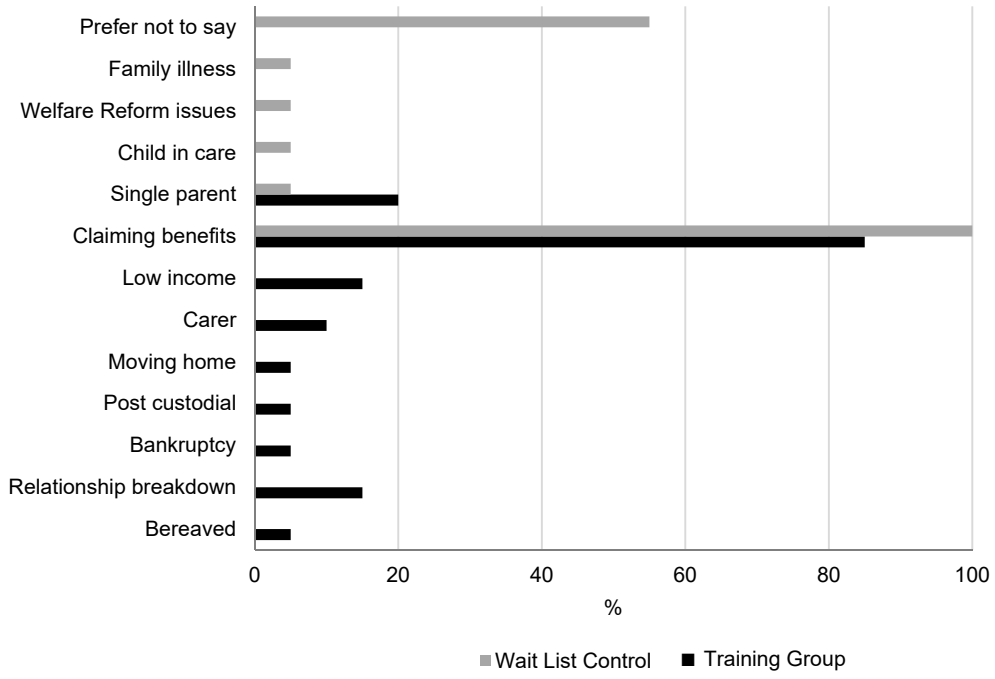


Figure 5. Socioeconomic factors.

Procedures

Recruitment.

Posters, flyers (see Appendix E) and application forms were disseminated through community support professionals via the course venue, local community facilities, groups, charities and a local charities website which supports those in hardship. Inclusion criteria comprised those living in regeneration areas in Dundee and receiving benefits or earning less than the Living Wage (Davis et al., 2014) with no significant life trauma in the previous six months. Applications were evaluated and primary assessments employed (see appendix F, assessment and orientation) in accordance with MBCT Implementation Resources for public MBCT/MBSR Courses and the University of Massachusetts, Centre For

Mindfulness, 'Screening Criteria for Exclusion from the Stress Reduction Program' (Kuyken, Crane, & Williams, 2012).

Ethics.

An information sheet (see Appendix G) provided participants with a pre-course summary of the research, what they would be doing, advised of their rights regarding the study, the guidelines it followed (Working Party on Ethical Guidelines for Psychological Research, 2010) and supplied contact details of the researcher's supervisors, University Ethics Officer and contacts for specialist care and support. Confidentiality and anonymity and it's time frames in relation to storage, reports, presentations and publications were also discussed. Participants were informed who to contact if further questions about the study arose before and after signing the informed consent. After training and data collection, a group debrief was held, contact information provided, preliminary information regarding the research outcomes disseminated and information provided for participants to continue their practice (see Appendix H).

Permission was granted to hold the study in a Dundee City Council integrated health and welfare facility, with full disabled access, facilities, security and logistical support by a Communities Officer (see Appendix I) and the Psychology Ethics and Research Committee of Bangor University granted ethical and governance approval for the study (see Appendix J). Data collection, recording and coding was carried out by a local charity

administrator to preserve anonymity and prevent the researcher/course leader from identifying participants. This coded (anonymised) data was then passed on to the researcher for analysis and the findings presented as they are found here.

Intervention.

Eligible participants were invited by telephone, e-mail and text message (see Appendix K) to attend a pre-course Assessment & Orientation session (2 hrs) to discuss course content, commitments, research and expectations (see Appendix L, session agenda). They were informed that mindfulness, using Blacker et al's (2009) MBSR programme of 8 weekly 2 hour group sessions, employing body/breath awareness while sitting, standing, lying and moving and a 3 step mini meditation containing the core practice elements used in MBI's (Williams et al., 2007) would be taught, to help reduce their stress.

To facilitate non-discriminatory participation, combat financial exclusion, reduce material inequalities (Curtis, Cave, & Coutts, 2002) and mitigate the effects of government 'neo material' policies of austerity (Lynch, Smith, Kaplan, & House, 2000), which violate international human rights (The Centre for Welfare Reform, 2016; U.N. Human Rights Report, 2014), everything was offered free. This included course manuals in digital and printed form and audio for those with special needs such as dyslexia,

learning difficulties or literacy issues, large text for those with visual impairment, recordings in CD and mp3 formats for laptops, tablets and smartphones and, ancillary equipment (blankets, yoga mats and cushions), which was provided by a local charity, the Nilupul Foundation, (www.nilupul.org).

To address the effects of marginalisation and exclusion (Kenway & Bushe, 2015), two 'in-session' support assistants' attended, and between sessions, participants were encouraged to seek support through 'course buddies' (Rockville, 1994) e.g., a fellow course/family member, friend or colleague, to discuss experiences, encourage home practice participation and course completion. Furthermore, texts and e mail reminders were sent, pre-session interaction (tea/conversation) encouraged, and, in-session, extended dialogue and inquiry into experiences fostered. To reduce psychosocial inequalities e.g., having a low threat threshold and its resultant physical, mental or verbal 'reactive stress' to the perceived threat of interpersonal communication (Adli, 2011), dyads, triads and small groups were also utilised, to build confidence, increase social integrity and develop a willingness to address and discuss feelings (Egan, Tannahill, Petticrew and Thomas, 2008). Further adaptations were made 'on the hoof' by the researcher/course leader, including slightly shorter practices with plain language instruction, a question by question guided run through of the measures used, to minimise the data distortion and bias associated with self-

report measures. A simplified visual presentation of the psychoeducational stress component was also added to aid the educationally challenged.

Data collection

The study followed a non-randomized waitlist controlled design, complemented by a qualitative subjective self-assessment of the meaning of wellbeing. Quantitative and qualitative data were collected in parallel between two time points from training (N=20) and control groups (N=20), at T1 (pre-course orientation) and T2 (last day of the course), at their separate venues, then assessed, compiled and checked for accuracy and completeness.

Measures.

All measures were contained in the participant questionnaire pack (see Appendix M). Quantitative measures included the WHO-5 Wellbeing Index and the Mindfulness Attention and Awareness Scale (MAAS), plus 2 simple wellbeing assessments and a qualitative open ended question, all 3 designed by the researcher.

Quantitative.

The Who-5 is a widely used self–report measure (Taggart & Stewart-brown, 2015; Topp, Østergaard, Søndergaard, & Bech, 2015), developed for the purpose of measuring positive mental health (Bech, Olsen, Kjoller, &

Rasmussen, 2003), consisting of a Likert-scaled 5 item questionnaire with scores ranging from 0 to 100. High scores signify better wellbeing and low scores indicate mental health problems (Henkel et al., 2003). Validities of *content* (0.77), *construct* ($r = -0.57$, $p < .01$) and *criterion relation* ($r = 0.49$, $p < 0.001$) are good or high and *internal consistency reliability* high (Cronbach's $\alpha = 0.89$) in Wu's, (2014) study into the wellbeing of chronic illness sufferers. In a study by Horan, McGowan, Doyle, & McAuliffe (2014) the relationship between wellbeing and socioeconomic status, diet and lifestyle during pregnancy showed an internal consistency of $\alpha = .90$.

The MAAS is a 15-item self-report scale assessing openness or receptive awareness of and attention to what is taking place in the present. It showed strong psychometric properties and has been validated with college, community and cancer patients, and is predictive of a variety of self-regulation and wellbeing constructs (Brown & Ryan, 2003). The measure takes 10 minutes or less to complete (Brown & Ryan, 2003) and has demonstrated high *internal reliability* (Cronbach's $\alpha = 0.89$) and good *gender reliability* (women $\alpha = 0.89$; men $\alpha = 0.87$) (MacKillop & Anderson, 2007). Conner & White's (2014) study which used this measure with parents of mixed socioeconomic background of children with autism spectrum disorder showed an internal consistency of $\alpha = .90$.

The Bowling (2011) based researcher-designed wellbeing assessments carried out pre- and post-course, comprised two common single-item survey questions in the form of a 5-point Likert self-rating scale of general wellbeing and mental wellbeing (from very bad to very good), as described and validated in a national survey of British adults. The first, related to general wellbeing enquiring, 'Overall would you say your wellbeing was?', then rated from very bad to very good, the second, related to mental wellbeing enquiring, 'Please rate your mental wellbeing, would you say your mental wellbeing was? , then similarly rated.

Qualitative.

Written responses to a single open-ended question designed by the researcher, sought participant's personal definition of wellbeing at two time points T1 and T2. They were asked, 'Please tell me, what the term wellbeing means to you?' and advised, 'You can mention as many things as you like, including mental or psychological and/or physical health issues, social relationships and activities and anything else you think of. There are no right or wrong answers'. There appears to be no precedent in any of the studies within this population or wider MBI research for this kind of research approach.

Data Analysis

Quantitative.

Quantitative data were analysed using SPSS version 22. Descriptive statistics were computed, analysed and outliers removed. Prior to statistical analysis, an independent *t* test determined any difference between groups at baseline and sample variance was tested. For statistical analysis, the MBSR course was the independent variable and the post-intervention means of the four measures, the dependent variable. When no baseline differences were detected, a two-way repeated measures analysis of variance ANOVA with factors (between and within groups) was employed to assess differences in self-rated positive mental health, wellbeing overall, mental wellbeing and dispositional mindfulness. If results showed a significant time by group interaction, follow up *t* tests would also be performed to pinpoint exactly where the differences in means occurred.

Qualitative.

Written responses to an open ended question were transcribed and analysed using thematic analysis (Braun & Clarke, 2006) pre- and post-training. Responses ranged from a series of *single words*, to *single and multiple phrases and single sentences*. These were grouped into meaningful *units of text* relevant to the research question pre- and post-training (see tables 10 and 11). Analysis of those units, using logical inference revealed primary themes (see tables 12 and 13). Further analysis revealed a group of

refined primary themes (RPT's) (see tables 14 and 15), which were further distilled to reveal overarching themes (OAT's), the basis for the results. These were then paired to map the transitions in wellbeing over time and to determine if the OAT's meaning could be encapsulated in 2 pre- and post-meta-themes. This process was iterative and correlated with the original responses and the research question at all stages.

Results

Quantitative

This study aimed to investigate the feasibility, acceptability and efficacy of an MBI in a community setting for adults suffering economic disadvantage and develop the research protocols required. Intervention feasibility and acceptability were assessed by participation (number of sessions attended) and tracked via attendance sheets. Forty three percent did not attend any of the sessions after Assessment and Orientation. Of the remainder, 40% attended 1-3 sessions, 14.9% attended 4-5 sessions, and 44.7% attended 6-8 sessions.

Completers (minimum dosage 4 sessions) longitudinal comparison data were analysed using IBMSPSS Statistics version 22 (IBM Corp, 2011) and statistical significance levels (two-tailed) set at $p < 0.05$. Effect sizes were recorded and reported as eta-squared for ANOVAs and Cohen's d for *t*-tests (Cohen, 1988). Independent samples *t* tests were applied for all measures to determine any differences between groups in wellbeing and trait mindfulness at base line. Where no baseline differences were found, 2 (group) × 2 (time) mixed-factorial ANOVAs were conducted to examine changes in wellbeing and trait mindfulness between the two groups (training and control), over two time points, pre- and post-training. Further investigation of significant interactions were carried out using *t*-tests.

To remedy the effects of Missing Data, data were recorded in SPSS using a separate table from each questionnaire then examined for anomalies. One set of faulty data with two pre-course outcome figures instead of one were removed from the WHO-5 (n=19) and missing data computed for the MAAS using *expectation maximisation* in SPSS. A Little's MCAR test, p = .95 confirmed the data were missing at random (n=20). There were no missing data for the Bowling (2011) based Likert's 1 and 2. Cronbach standardized intra-scale alpha reliability estimates (Cronbach, 1951) were calculated as .66 for the MAAS and .82 for the WHO. No extreme outliers (> 3 x interquartile range) were found in the data, however moderate outliers were identified (> 1.5 x interquartile range) and removed, one for the WHO-5 and three for the MAAS. Statistical analysis was run with inclusion and exclusion of outliers where appropriate. Descriptive statistics for each measure are presented below in Tables 16 and 17.

Table 16

Descriptive statistics with outliers

Measure	T1 (Pre)		T2 (Post)	
Training Group	Mean	Standard deviation	Mean	Standard deviation
WHO5 Subjective wellbeing	34.36	19.39	74.28	14.60
Likert 1 Overall wellbeing	2.73	1.04	3.95	0.97
Likert 2 Mental wellbeing	2.63	1.16	3.71	0.99
MAAS Trait mindfulness	3.24	0.56	3.27	0.70
Control Group				
WHO5 Subjective wellbeing	38.00	19.18	34.40	21.26
Likert 1 Overall wellbeing	2.95	0.82	2.95	0.94
Likert 2 Mental wellbeing	2.85	0.81	2.75	0.96
MAAS Trait mindfulness	3.11	0.81	3.16	0.84

Table 17

Descriptive statistics (with outliers removed)

Measure	T1 (Pre)		T2 (Post)	
Training Group	Mean	Standard deviation	Mean	Standard deviation
WHO5 Subjective wellbeing	35.60	19.15	74.29	11.99
Likert 1 Overall wellbeing	2.74	1.04	3.95	0.97
Likert 2 Mental wellbeing	2.63	1.16	3.71	0.99
MAAS Trait mindfulness	3.35	0.49	3.49	0.48
Control Group				
WHO5 Subjective wellbeing	38.00	19.18	34.40	21.26
Likert 1 Overall wellbeing	2.95	0.82	2.95	0.94
Likert 2 Mental wellbeing	2.85	0.81	2.75	0.97
MAAS Trait mindfulness	3.11	0.82	3.16	0.84

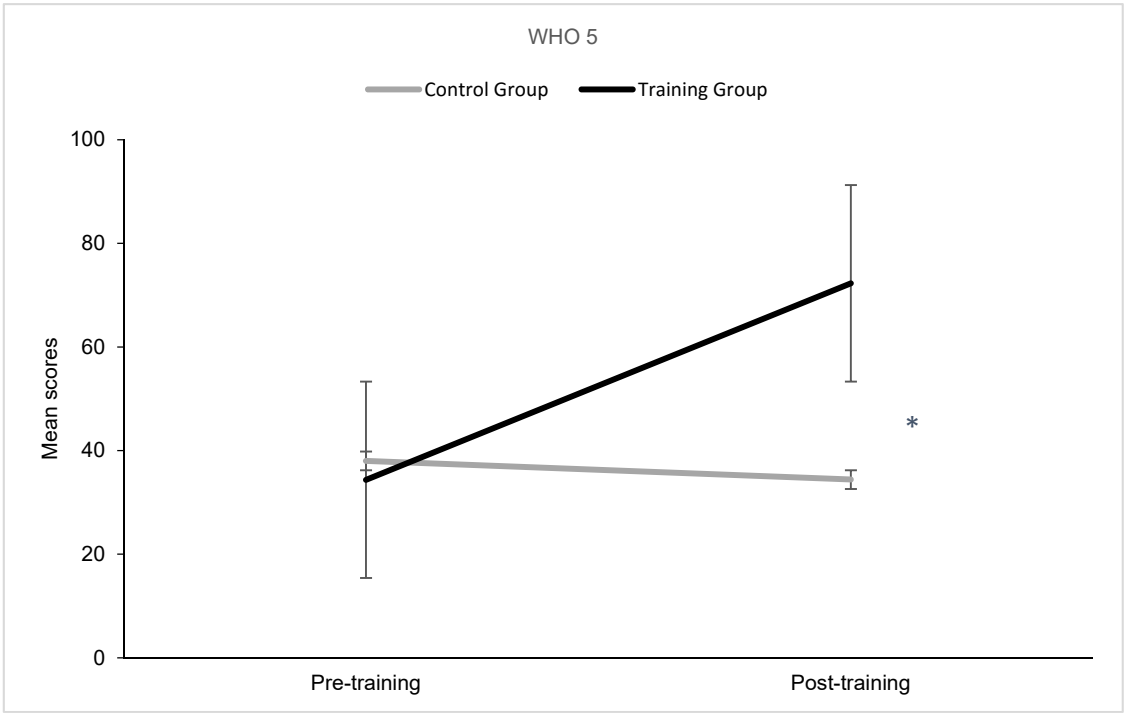
The results for wellbeing are presented first, followed by the findings for dispositional or trait mindfulness.

WHO – 5

With outliers

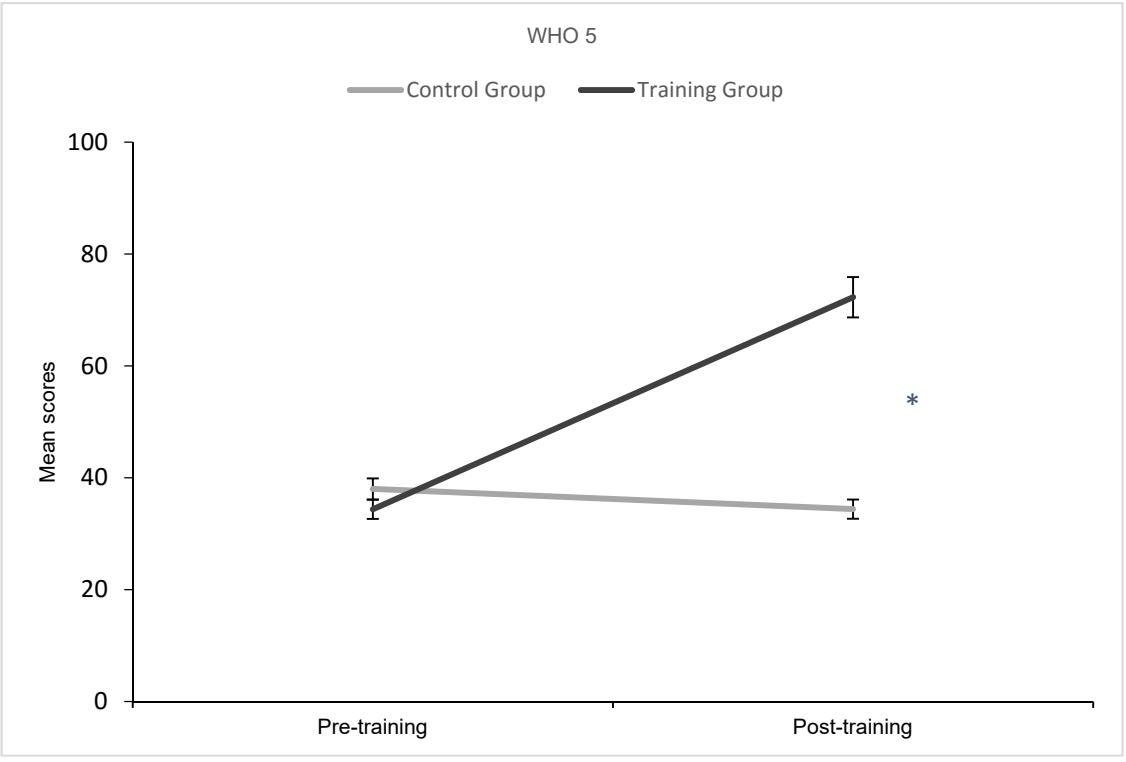
An initial independent samples *t*-test found no significant differences in the levels of subjective wellbeing between the training group (M = 34.36, SD = 19.39) and the control group (M = 38.00, SD = 19.18), $t(37) = 0.59$, $p = 0.56$, $d = .18$ at baseline. A 2 × 2 mixed-factorial ANOVA with factors of time [pre-training (T1) and end of training (T2)] and group (training and control) indicated that the subjective wellbeing measure showed a significant main effect of time $F(1, 37) = 40.20$, $p < .001$, $\eta^2 = 0.26$, with WHO-5 scores significantly increased over time. A significant main effect of group $F(1,37) = 11.46$, $p < .001$, $\eta^2 = 0.24$ indicated that the training group had significantly higher WHO-5 scores, and a significant interaction was found between time and group $F(1,37) = 40.20$, $p = .01$, $\eta^2 = 0.35$.

The significant time by group interaction were further analysed with a follow–up independent samples *t*-test that found significant differences in the levels of subjective wellbeing between groups post course, $t(37) = 6.453$, $p < .001$, $d = 2.07$. The training group (M = 34.36, SD = 19.39) had higher scores compared to the control group (M = 38.00, SD = 19.18), (see Figure's 6 and 7).



Error bars are standard error. * $p < .001$

Figure 6. WHO 5 (with outliers 1).



Error bars are 95% Confidence intervals. * $p < .001$

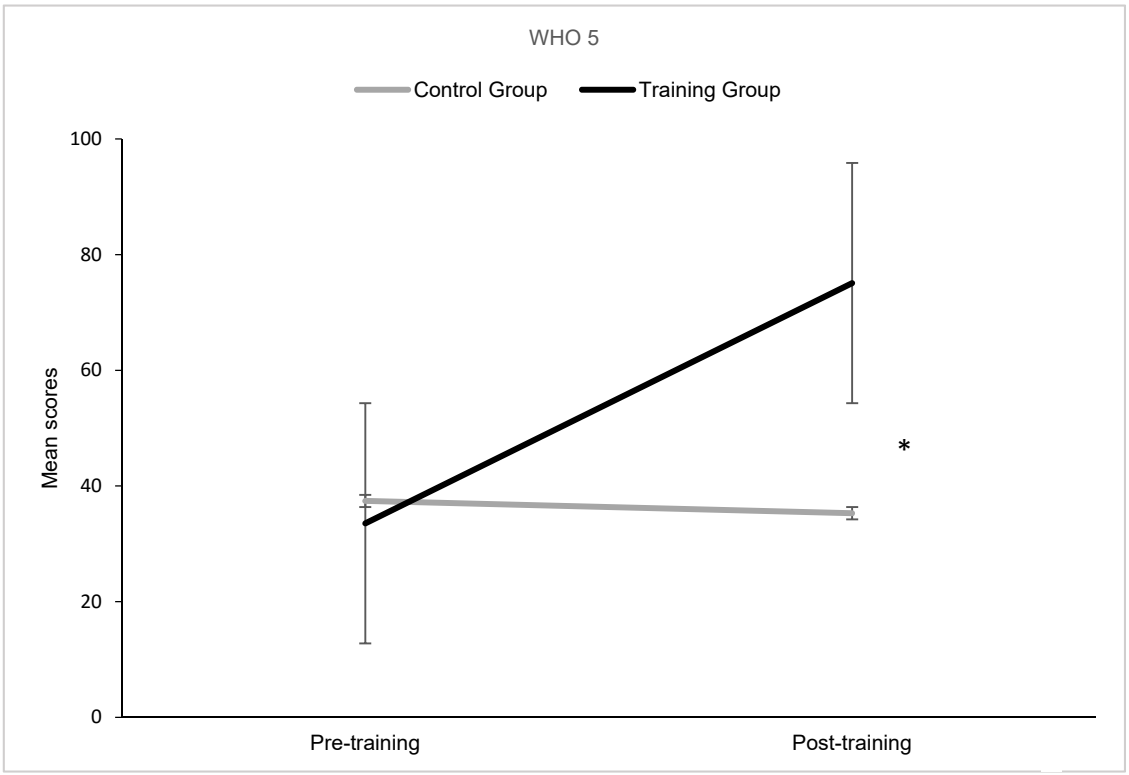
Figure 7. WHO 5 (with outliers 2)

WHO 5

With outliers removed.

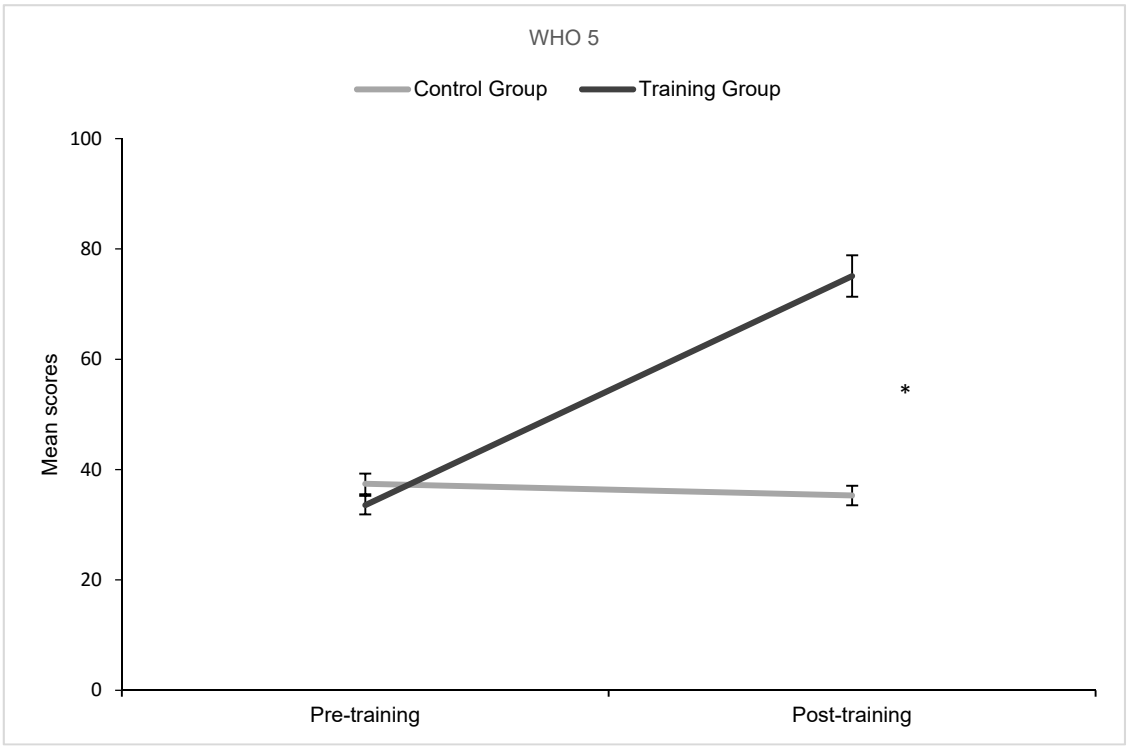
Again, an independent samples *t*-test found no significant differences in the levels of subjective wellbeing at the baseline between the training group (M = 35.60, SD = 19.15) and the control group (M = 38.00, SD = 19.18), $t(36) = .38$, $p = .70$, $d = .12$ with outliers removed. A 2 × 2 mixed ANOVA pertaining to time (pre-training (T1) and end of training (T2)), group (training and control), and interaction (time by group) was then carried out. It showed a significant main effect of time F = (1, 36) = 27.5, $p = .00$, $\eta^2 = 0.26$ with WHO scores significantly increased over time and a significant main effect of group F = (1, 36) = 14.418, $p = .00$, $\eta^2 = 0.28$ indicating that the training group had significantly higher WHO scores. A significant interaction between time and group, F = (1, 36) = 39.95, $p < .001$, $\eta^2 = 0.38$ was also noted.

The interactions were further analysed with a follow–up independent samples *t*-test that found significant differences in the levels of subjective wellbeing post-course between groups. The training group (M = 34.36, SD = 19.39) had higher scores than the control group (M = 38.00, SD = 19.18), $t(37) = 6.453$, $p < 001$, $d = 2.3$ (see figure's 8 and 9).



Error bars are standard error. * $p < .001$

Figure 8. WHO 5 (with outliers removed 1)



Error bars are 95% Confidence intervals * $p < .001$

Figure 9. WHO-5 (with outliers removed 2)

Bowling Likert 1; General wellbeing

This measure had no outliers.

An independent samples *t*-test using a short general wellbeing measure modelled on Bowling, (2011) found no significant differences in the levels of general wellbeing at the baseline between the training group (M = 2.74, SD = 1.04) and the control group (M = 2.95, SD = .82), $t(37) = .71$, $p = 0.48$, $d = .23$. A 2 × 2 ANOVA with factors of time [pre-training (T1) and end of training (T2)] and group (training and control) for this short measure showed a significant main effect of time $F(1,37) = 15.03$, $p < 001$, $\eta^2 = .22$, indicating higher scores for the training group, and a significant main effect of group $F(1,37) = 2.26$, $p = 0.00$, $\eta^2 = .06$, indicating higher scores for the training group and a significant interaction $F(1,37) = 15.026$, $p < .001$, $\eta^2 = .22$.

Further analysis of the significant time by group interaction using a follow–up independent samples *t*-test found significant differences in the levels of general wellbeing post course. The training group (M = 2.95, SD = .82), had higher scores than the control group (M = 2.74, SD = 1.04), $t(37) = 3.25$, $p = .002$, $d = 1.04$. (see figure's 10 and 11).

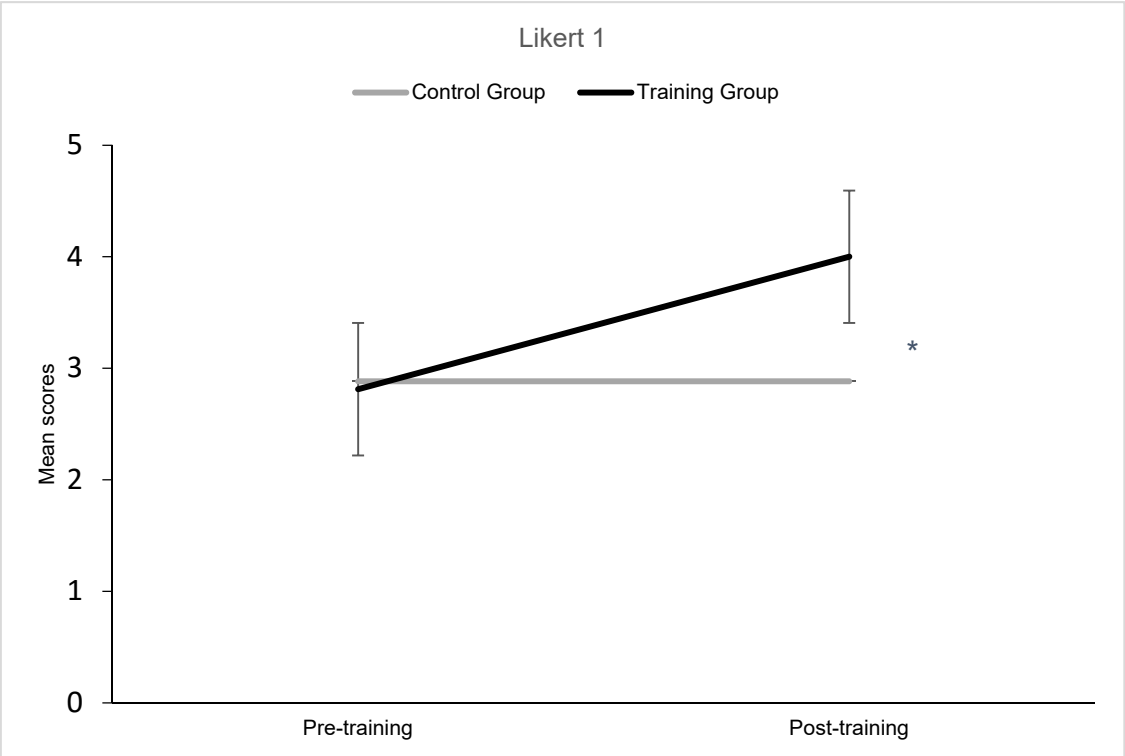


Figure 10. Likert 1 (no outliers recorded 1)

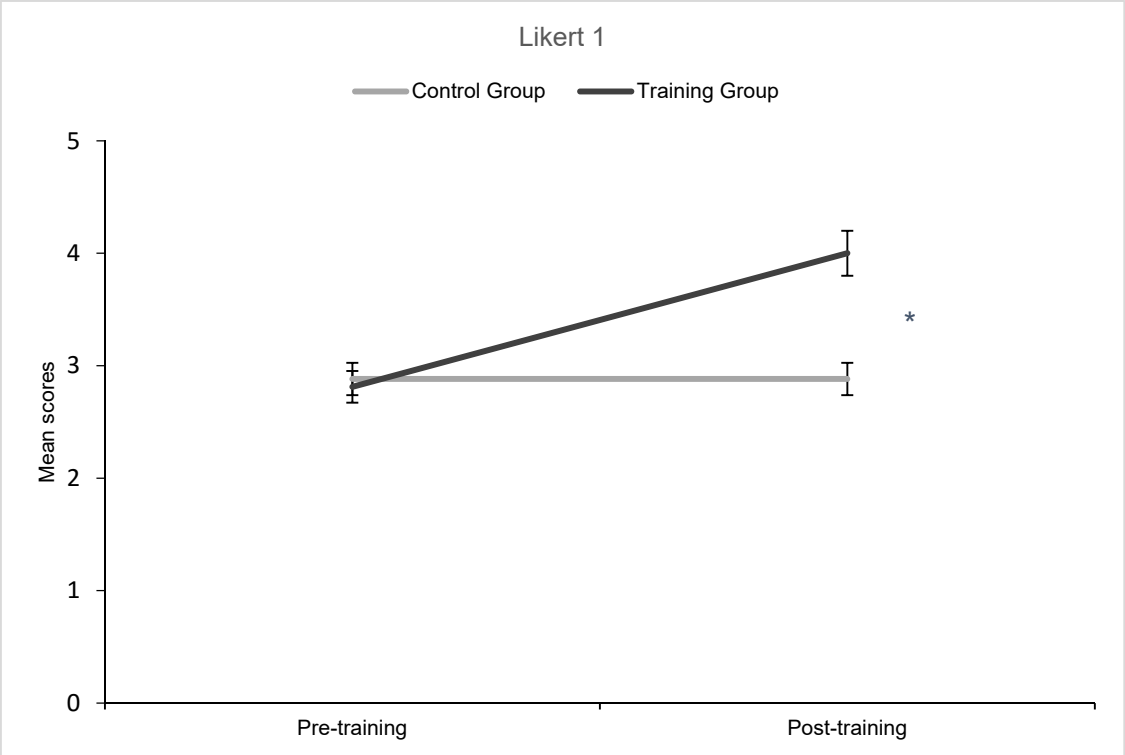


Figure 11. Likert 1 (no outliers recorded 2)

Bowling Likert 2; Mental Wellbeing

This measure had no outliers.

An independent samples *t*-test using a brief, single open-ended Bowling (2011) based mental wellbeing measure designed by the researcher, found no significant differences at the baseline between the training group (M = 2.63, SD = 1.16) and the control group (M = 2.85, SD = .81), t (37) = .68, p = 0.5, d = .21. A 2 × 2 mixed ANOVA using the brief mental wellbeing scale showed a significant main effect of time F(1,37) = 15.03, p = .01, η^2 = 0.14 for the training group and a significant main effect of group F(1,37) = 2.26, p < .001, η^2 = 0.05, with higher scores for the training group and a significant interaction between time and group, F(1,37) = 15.026, p = .001, η^2 = 0.21. A follow-up independent samples *t*-test found significant differences in the levels of mental wellbeing post course. The training group (M = 2.63, SD = 1.16) had significantly higher scores than the control group (M = 2.85, SD = .81), t(37) = .68, p = .5, d = .9 (see Figures 12 and 13).

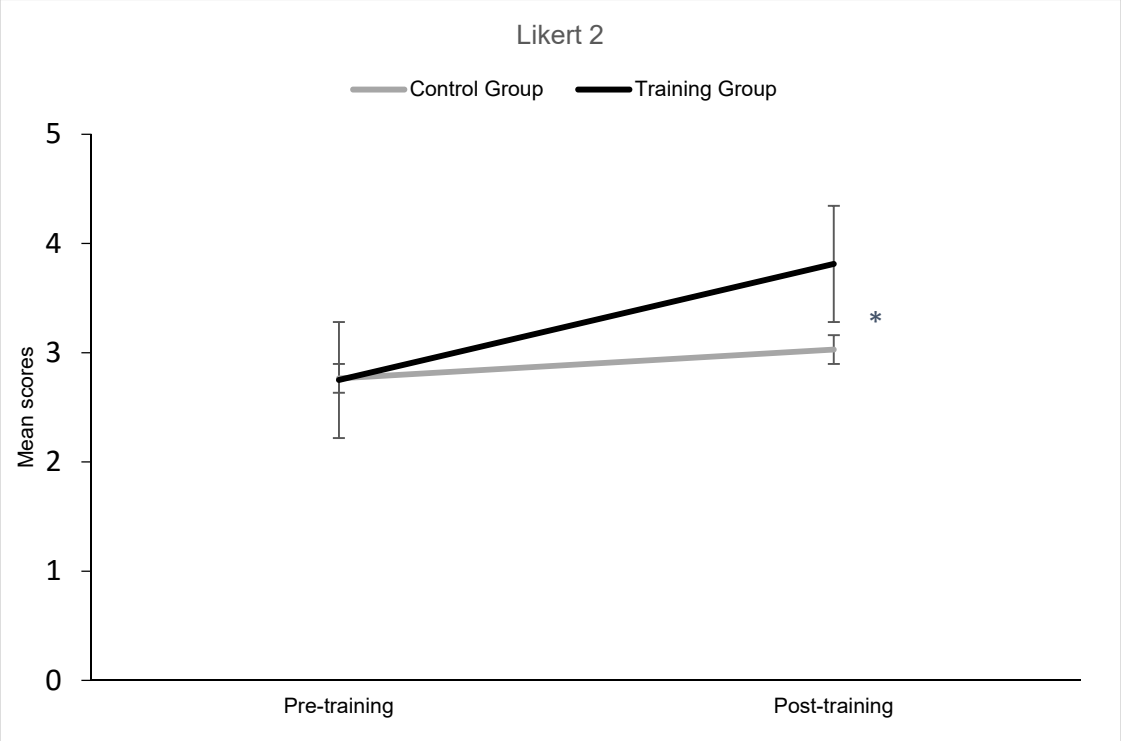


Figure 12. Likert 2 (no outliers recorded 1)

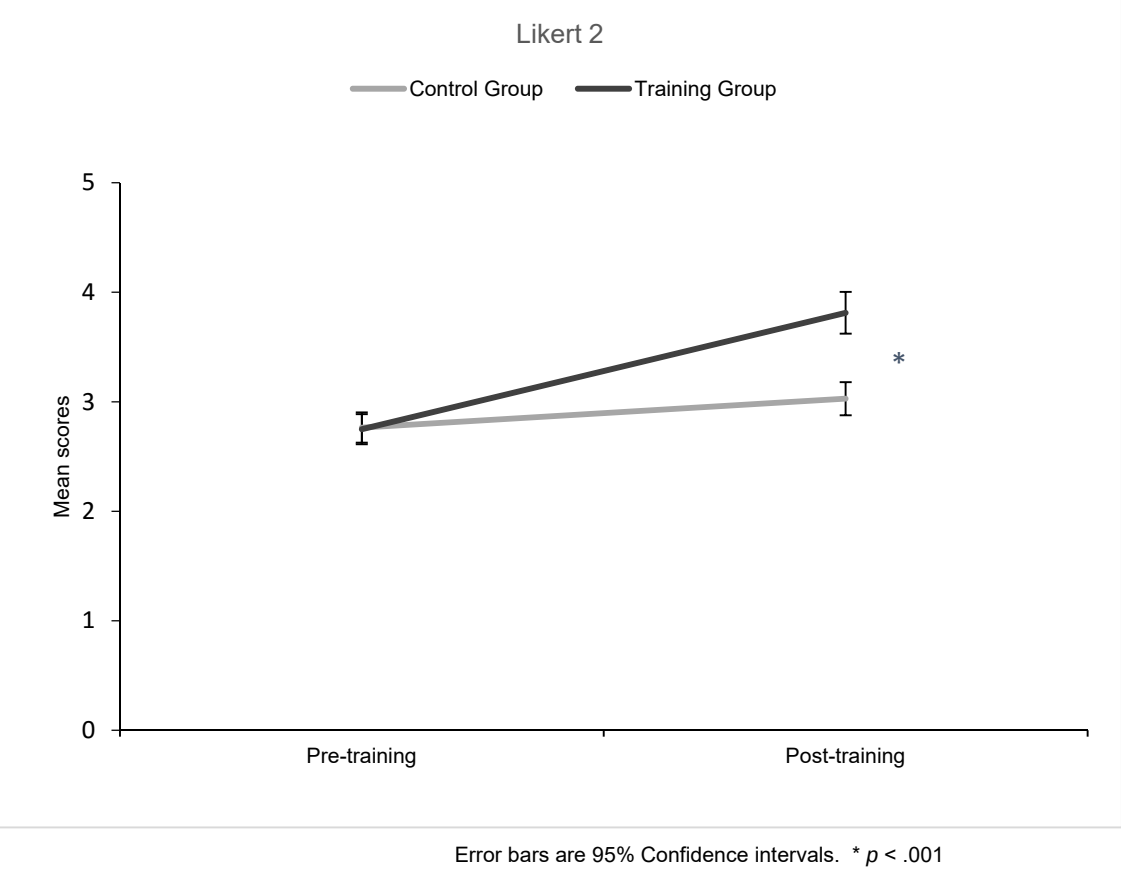


Figure 13. Likert 2 (no outliers recorded 2)

MAAS

With outliers

An independent samples *t*-test found no significant differences in the levels of dispositional or trait mindfulness at the baseline between the training group (M = 3.24, SD = .56) and the control group (M = 3.11, SD = .82), t (37) = .56, p = 0.58, d = .17. A 2 × 2 mixed ANOVA showed a non-significant main effect of time F(1,37) = .281, p = .59, η^2 = .007 a significant main effect of group (no change in dispositional mindfulness for training group) , F(1,37) = .257, p < .001, η^2 = .01 and a non-significant main effect of interaction F(1,37) = .022, p = .88, η^2 = .001 on dispositional mindfulness. As these results were not significant follow up tests were not employed.

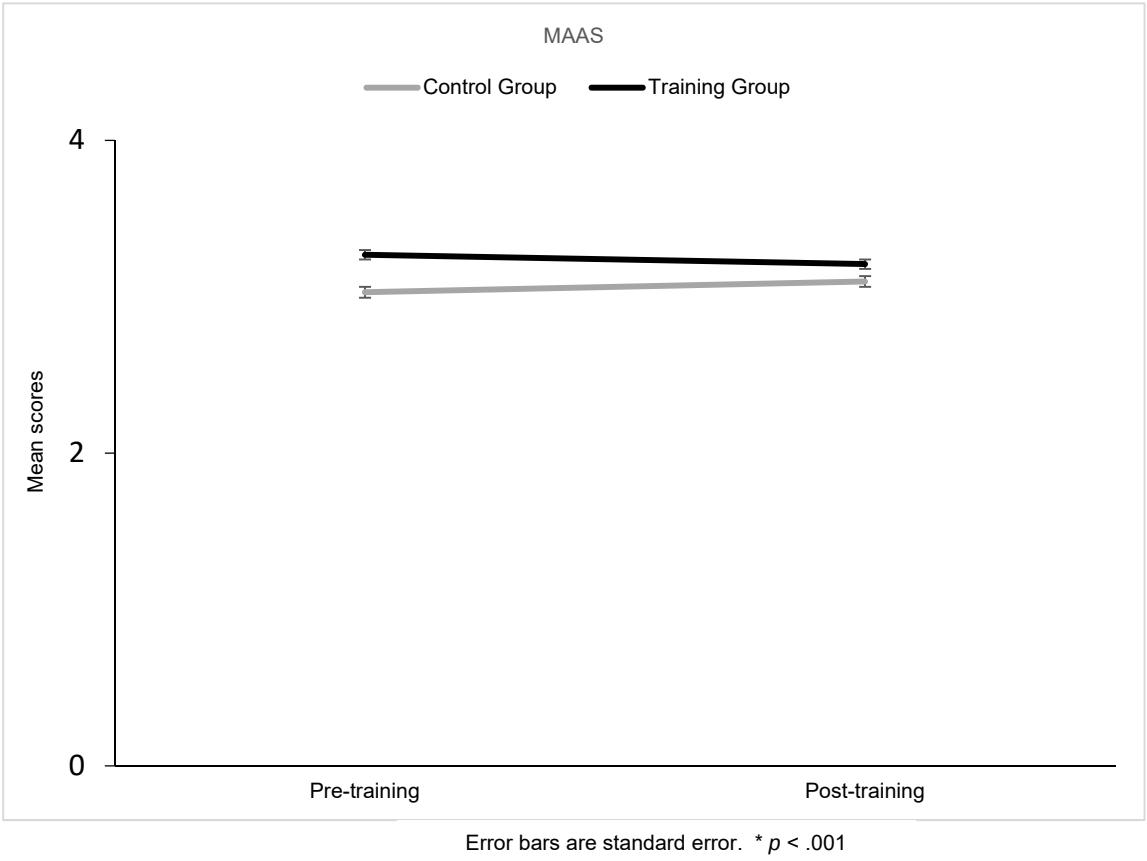


Figure 14. MAAS (with outliers 1)

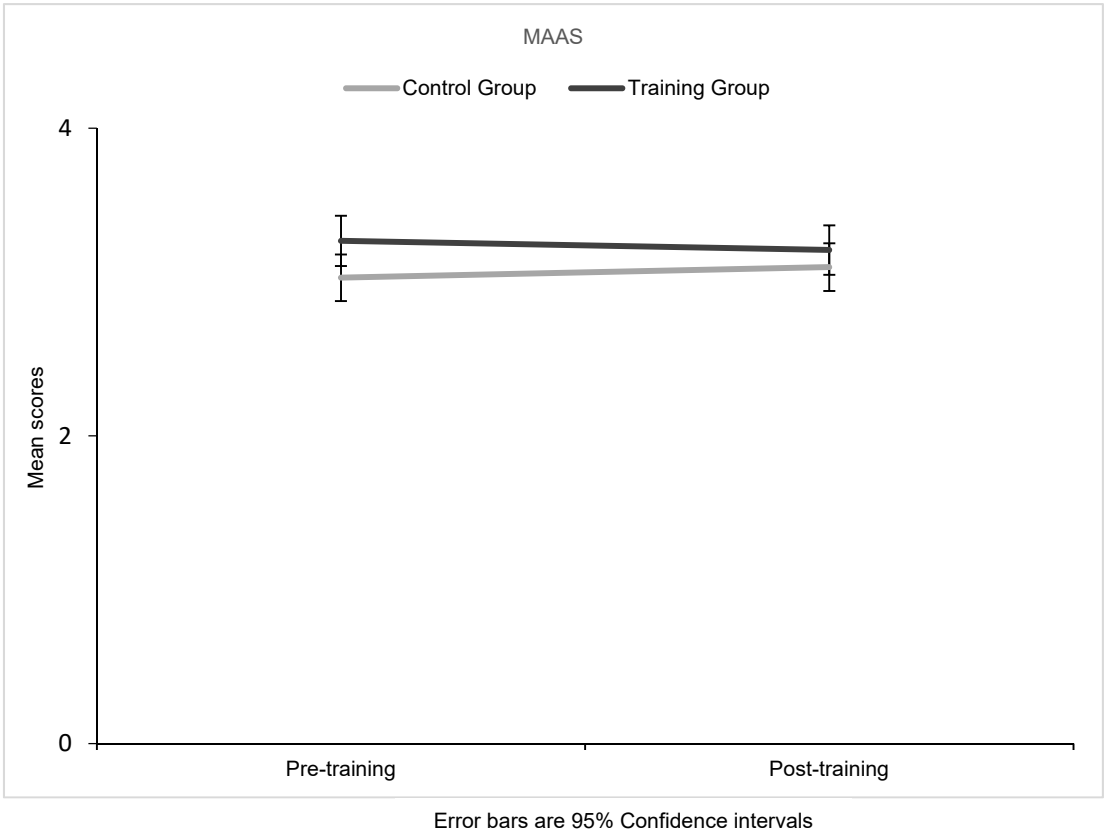


Figure 15. MAAS (with outliers 2)

MAAS

With outliers removed.

An independent samples *t*-test found no significant differences in the levels of dispositional or trait mindfulness at the baseline between the training group (M = 3.35, SD = 0.49) and the control group (M = 3.11, SD = 0.82), $t(34) = .30$, $p = .23$, $d = .35$. A 2 × 2 mixed ANOVA showed a non-significant main effect of time F = (1, 34) = 1.641, $p = .209$, $\eta^2 = .04$, a significant main effect of group (no change in dispositional mindfulness for training group) F = (1, 34) = 1.71, $p < .001$, $\eta^2 = .05$, and a non-significant main effect of time and group F = (1, 34) = .34, $p = .57$, $\eta^2 = .01$ with outliers removed, therefore no follow up tests were carried out.

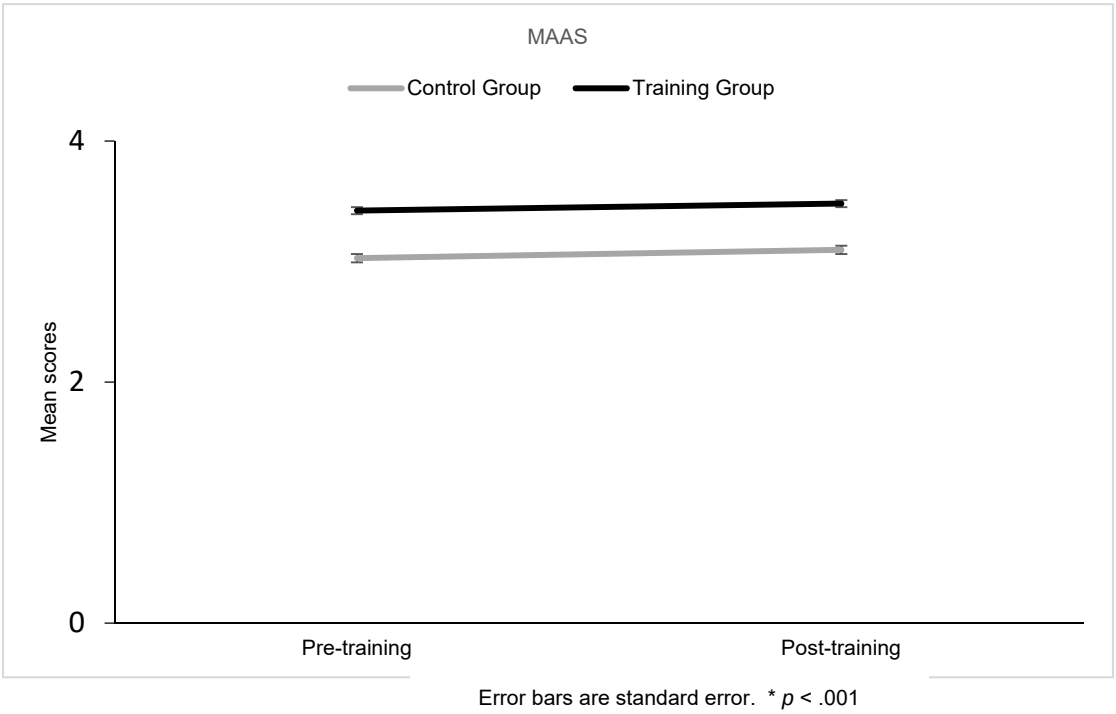


Figure 16. MAAS (with outliers removed 1)

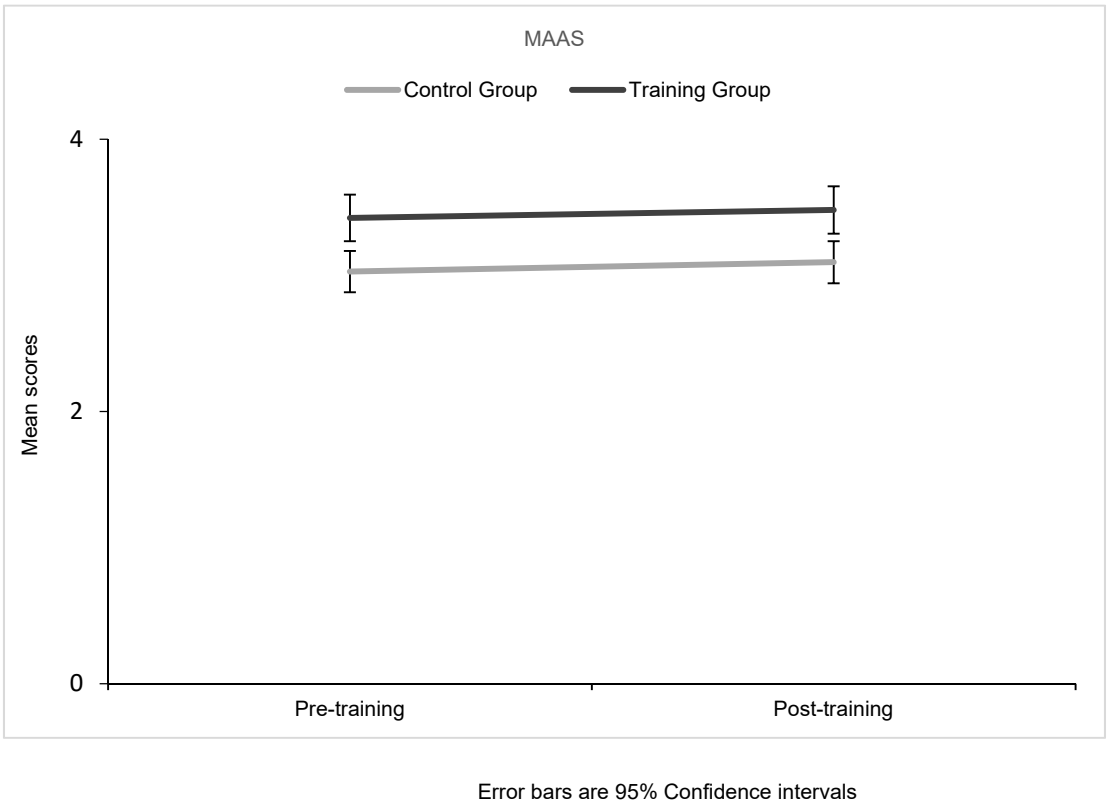


Figure 17. MAAS (with outliers removed 2)

Qualitative Results

Qualitative data was collected from written responses to a single open-ended question designed by the researcher, who sought to analyse participant's personal definition of wellbeing at two time points, pre- (T1) and post- (T2) intervention using thematic analysis (Braun & Clarke, 2006).

Initially, primary units of text (word, phrases, and sentences) were derived from original participant responses. Their analysis produced 18 primary themes (PT's) pre-training (see figure 18) and 21 post-training (see figure 19). Further analysis of PT's revealed 13 *refined primary themes* (RPT's) at each time point. From those, 6 pre- and 7 post-course *overarching themes* (OAT's) were deduced (see figures 18 and 19). The results of a thematic analysis of the data at both time points is presented next. To aid understanding and readability, each OAT is followed by the frequency of text references in parenthesis, each RPT presented in italics, and each quote followed by a participant's anonymised ID in parenthesis. All quotes are verbatim with any additions for grammatical purposes in parenthesis.

Pre-training themes

Managing difficulty (37)

Four RPT's were derived from the primary responses (see figure 18). Of those developing *emotional stability* (14) through "balanced responses"

(6) and "becoming emotionally independent" (32) were (seen as a priority. Not surprising then, the quest for *stress reduction and coping* techniques (11) to help deal with the "feeling I'm on the edge all the time" (57) and a wish to "manage my emotions better" (57) as, they induced *mental health* issues that prompted a need for "working with the extra drama and fear we add to difficult times" (31). This, participants surmised, would require cultivating a *present moment awareness,* "more thoughtful clarity when thinking" (37) and an ability of "viewing difficulties more as they are" (31).

Not feeling ill and physical health (20).

General and *physical health* (20) were also wellbeing factors, with "our normal state" (31) of wellbeing seen "in simple terms (as) feeling well" (6) and "functioning correctly" (31). Generally, wellbeing was associated with the need of "having a healthy body and mind" (10) and physically with a wish of "*not feeling ill* all the time" (32) and "being pain free" (11).

Feeling positive (20).

This was framed in terms of having a *positive attitude, happiness, hope, goal setting and relaxation*. The importance of a *positive attitude,* or "a healthy positive approach to all aspects of life" (47) was seen as an aid to experiencing a sense of wellbeing, as was "being *happy* when I get up in the morning" (18), "contentment" (11) and "peacefulness" (36). From the perspective of *hope,* however, wellbeing was related to mood change and

being “hopeful I can improve how I feel” whereas over time it was linked to *goal setting,* and a sense of “feeling personal progress” (31), mental and physical *relaxation* by “being in a state of peacefulness, relaxation and contentment within myself” (36).

Making connections (11).

Less emphasis, based on frequency, was placed on the need for *supportive relationships and social inclusion* for wellbeing. Nonetheless, the relationships sought were “good relationships” (10) “with people who are genuine” (36), where they were “feeling valued” and “feeling respected” (11), and “having a loving family and friends” (31). A sense of “being included” (11) and the need of “feeling connected to other people” (19) regardless of “social state” (54), was considered important for “social health” (73).

Taking action (11).

This evolved from 4 RPT’s (see figure 18). Community “activities” (10) or “getting out in to the community and doing things” (19) was felt to be important for wellbeing as was a need to be physically “active” (26) through “balanced exercise” (6) like “ swimming and keeping fit for my health and wellbeing” (56). Independence, or “not needing to rely on others for help and support” (32) meant a need for s*elf-care,* or “looking after yourself better (and) take(ing) time for myself” (57) and were seen as

integral to general wellbeing and self-esteem, or "being happy with myself" as influencing mental wellbeing. Food security or "having enough to eat" (11) was paramount for physical wellbeing, whereas, when this need was met, emphasis was placed on *diet* through "balanced eating and drinking" (6).

Having needs met (3).

This comprised 2 components, financial security and good environmental conditions, summarised as "the condition of an individual or group and how it is coped with, be it their mental health, social or economic state" (54) and in relation to quality of place as "feeling safe and secure" (11).

Derivation of the meta-theme.

These responses juxtapose how participants felt aspects of their wellbeing could be improved with the immediate difficulties experienced at the time of the training e.g. through physical exercise and contact, to financial and food security and safety respectively. This suggests those needs were not being met and a lack of resources to meet them. Thus collectively, these themes and responses seem to point to a meta-theme of, '*having a need for the necessary resources to manage difficulty and illness/health'*.

Post-training themes

Healthy Choices (34).

Of the 5 RPT's (see fig 19), perhaps unsurprisingly, having experienced the benefits of learning and practicing mindfulness, the most prolific for aiding wellbeing was *present moment awareness* and the qualities arising from it. This meant "being able to focus on the now" (22) through "paying attention to what is really going on" (31), and "living life as best as I can in any moment" (6). As a result, "mindfulness has helped me slow life down" (73), "to be patient (and) to have clarity" (69). A further benefit seems to be the attention given to *self-care*, and "developing resilience to mental and physical illness" (24) through "taking time to myself" (57) and, for *physical health*, by "taking regular exercise and maintaining a wholesome discipline" (11). Regarding the importance of *general health* "a balance, and mental and physical health with nourishing activities and relationships" (10) were cited, and in terms of nutrition "a balanced *diet* was seen as an essential component for "maintained good health" (11).

Confidence and Self-Esteem (21).

These proved crucial to increasing wellbeing. Their growth, concomitant with inner strength and flexibility, enabled an ability "to trust

in self and others, allows a confidence and contentment which means there is nothing to fear and a resilience to mental and physical illness develops" (24). "Nourishing activities and *relationships*" (10) and "an ability to communicate thoughts positively" (37) were also seen as supportive factors in wellbeing. A sense of value to others emerged, through a wish to "succeed in the working world and bringing the benefits back to my family" (32), stimulating a confidence to *set goals*, and "do the things I want to do" (61) that would instigate "a sense of achievement" (6).

Contentment (16).

It was summarised as *relaxation, happiness and spirituality.* Physical wellbeing through *relaxatio*n was seen as having "comfort" (37) and "being comfortable" (54) and psychologically as an absence of arousal, or "a sense of calm (and) tranquillity" (63) and "contentment" (24), that were conducive to being "happier in life" (73), or more deeply, as "feeling good in spirit" (37).

Managing difficulty (15).

This meant managing *mental health and emotional stability* and noticing how life experiences and maladjusted cognitive and behavioural processes affected wellbeing. Through the training, an awareness arose that "a positive wellbeing is characterised by a stress-free, healthy mind-set, (and) conversely (that) a negative wellbeing is characterised by a stressful,

unhealthy mind-set" (26) and, that an awareness of life experiences could affect behavioural change e.g. , through a "need to be 'less full on' with a girlfriend in an all or nothing attitude to my relationships which often ends up with me being badly hurt in a 'break up' and feeling depressed and suicidal" (36) and promoted mental change, in that it "helped me mentally, I was in a bad place before I came here" (19). It also proved preventive by helping in "avoiding self-destructive practices" (11) through "not allowing resentment and bitterness into your life (11).

Moving Forward (8).

These changes enabled participants to *move forward* through being more *positive* and "trusting that you always have options when life is tough" (31), with both *hope* and optimism e.g., " I can only say I feel born again, I have hope, faith and feel brighter for my future" (69).

Taking part (5).

Participants were now more open to and optimistic about *taking part* through "finding a new future where it is possible to take part in the world again" by seeking to "contribute effectively at home, at work and at play" (6).

Developing resilience (4).

This, it was now understood, could be cultivated by applying the training practices as an aid to *stress reduction* i.e., becoming "less anxious and stressed" (56) and in "*coping* with mental health problems" (36). These methods were now seen as creating a "safe haven" and greatly appreciated e.g., "I am so grateful for the help I have been given" (19).

Collectively, these post-training overarching themes could form a meta- theme of, *having the strength and self-confidence to make healthy choices and move forward in life.*

Observations of wellbeing transitions over time.

Thematic analysis is used in qualitative research to examine the themes and capture the intricacies of a single data sets meaning (Braun & Clarke, 2006). However, here, 2 data sets were produced, and the researcher has considered an additional pairing of each data sets OAT's and meta-themes to map wellbeing transitions over time (see figure 20).

Root transitions in perceptions of wellbeing over time appear to be a requirement of (a) 'having needs met' and problems in (b) managing difficulty. Primarily, in the transition from (a) needing resources to develop wellbeing, to, managing the resources that develop and maintain wellbeing and secondly, from (b) experiencing a lack of ability to cope with the

suffering arising from experiencing multiple difficulties, leading to a change in perception, attitude and, an ability to manage that suffering (see figure 21 below).

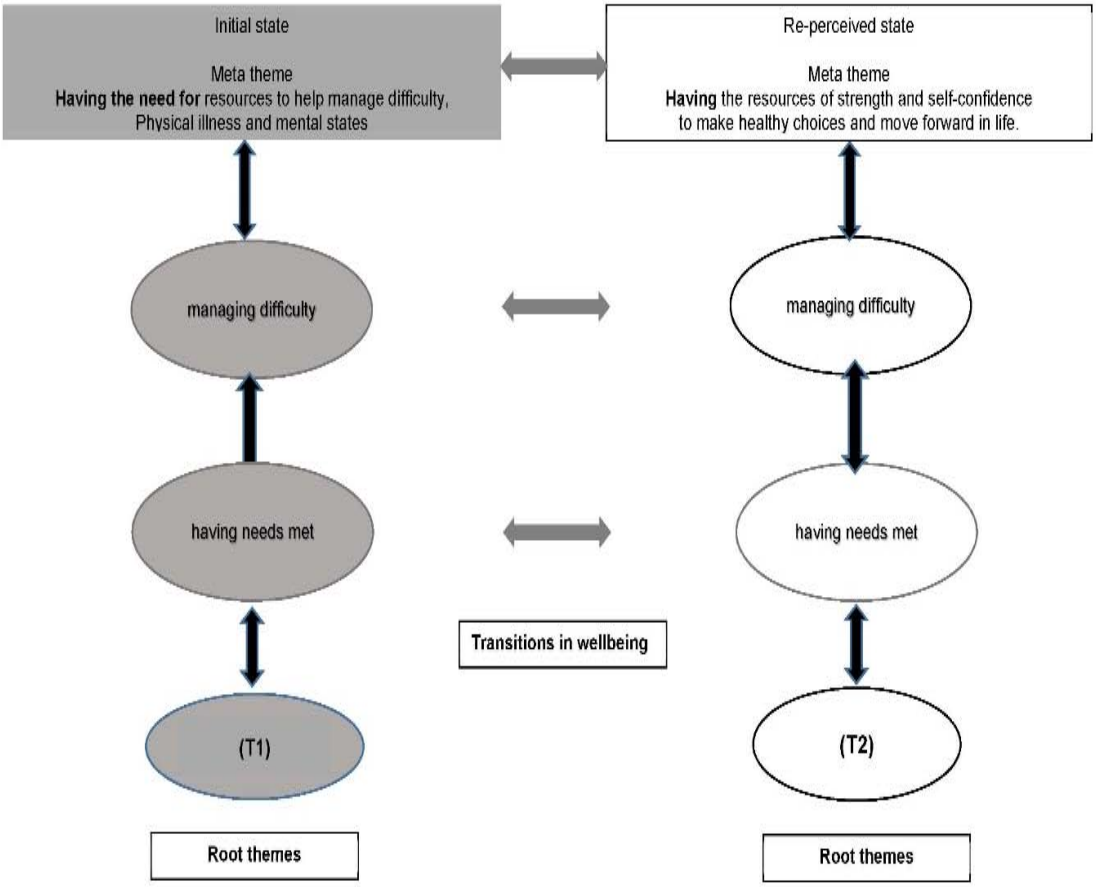


Figure 21. Dendogram of root themes, transitions in wellbeing and reperception

Three secondary transitions emerged, (i), from mental and physical un-wellbeing, to a sense of contentment and resilience, and (ii), from feeling the need to take action, to, having taken action, managing wellbeing and developing the confidence to move forward through making healthy choices, and finally, (iii) a transition from exclusion to inclusion, through the training's socialisation process (see figure 22 below).

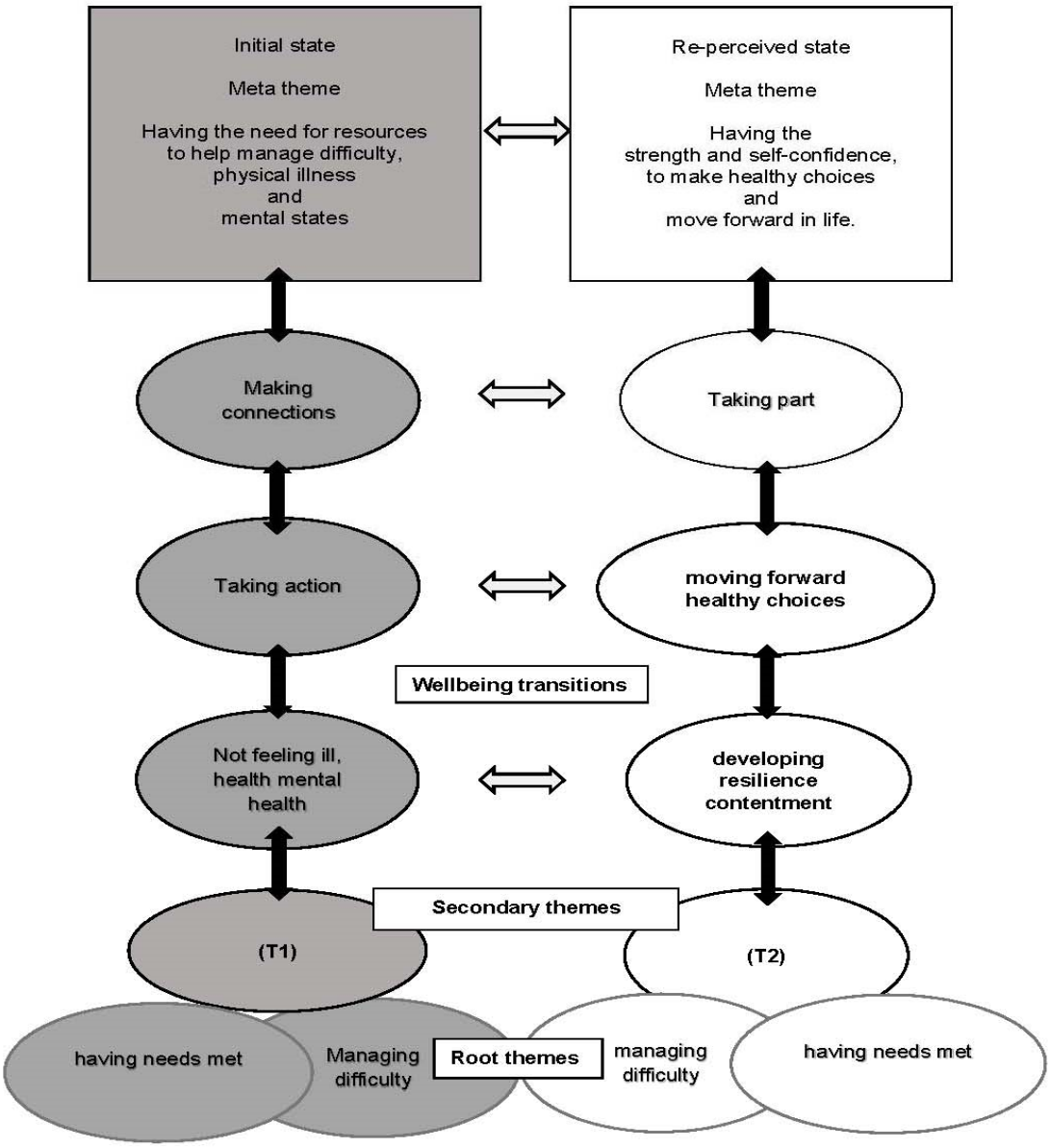


Figure 22. Dendogram; primary, secondary themes, transitions in wellbeing and re-perception.

Hence, the training seems to have prompted a re-perceiving of participants' internal and interpersonal world, indicating that they had grasped and applied the core principles of the training, which brought about a change in their wellbeing.

Discussion

Introduction

This study evaluated the feasibility and effectiveness of delivering an adapted MBI for groups of SED adults in a regeneration area to determine if this would significantly improve wellbeing and levels of dispositional mindfulness. The quantitative component revealed a significant improvement in wellbeing, as in other SED studies (see table 4), but *no significant difference* in levels of dispositional mindfulness, contrary to previous studies (deVibe, Bjørndal, Tipton, Hammerstrøm, & Kowalski, 2012). This indicates that MBI participation is more effective in increasing wellbeing than being in a waitlist control group, but has no significant effect regarding dispositional mindfulness. The qualitative component, in contrast, demonstrated a significant effect on both for the training group and none for the control. Accordingly, this study's data supports the hypothesis that holding an MBI in an area of deprivation/regeneration for SED adults is feasible, acceptable and improves wellbeing. However, it does not fully support the hypothesis that it improves levels of dispositional mindfulness.

Hypothesis 1: Participation and Wellbeing.

Mindfulness-based changes to subjective, general and mental wellbeing were assessed quantitatively over 9 weeks at 2 time points (pre (T1) and post (T2) using three self-report measures, the WHO-5 and 2

researcher-designed Bowling-based Likert assessments (2011). No significant differences in wellbeing were found between groups pre-training, but, a significant increase in wellbeing was found for the training group post-training. Thus the study supports Hypothesis 1 and, its aims and expectations were met, as with Eames et al's , (2015) wellbeing intervention (MBW-P) for SED parents. Despite accordance with previous studies (see table 4), caution is best advised as additional variables may be at play (Carmody & Baer, 2009). Nonetheless, the significant effect size found suggests a fairly strong relationship between participation in an MBI and improvements in wellbeing.

Hypothesis 2: Participation and Dispositional Mindfulness.

The relationship between mindfulness training and increases in dispositional mindfulness were assessed using the MAAS. Unexpectedly, no significant difference was found post-intervention for the training group, thus Hypothesis 2 and the study's aims and expectations were not supported, perhaps due to genetic predisposition or other factors (Brown & Creswell, 2015) such as construct validity.

Qualitative findings.

The qualitative findings were based on a pre-and post-training thematic analysis of written answers to an open wellbeing-related query designed by the researcher. Both answer-sets were analysed, to determine

incrementally refined degrees of themes, then OAT's analysed as pairs, to ascertain transitional pathways in wellbeing over time, which were then summarised as meta-themes.

Pre-training themes were negatively associated with physical and mental wellbeing and an ability to cope, while post-training themes were positively associated with changes to mindfulness skills, physical and mental wellbeing and confidence. This improved outlook supported increased self-care through better diet and exercise, generated affective balance by way of reduced self-destructive behaviours and resulted in increased social skills that fashioned better relationships. Consequently post-training themes support the hypothesis that mindfulness improves wellbeing.

Despite the results for the MAAS, post-training themes also supported Hypothesis 2, indicating an increase in dispositional mindfulness. Experiencing present moment awareness and peace of mind, affected a reduction in anxiety, increased positivity and injected vitality (Heaversedge & Halliwell, 2012) which, in common with other studies, was noted as lacking pre-training (Gucht et al., 2014).

Pre and post OAT's formed the basis for defining transitional pathways in the perceptual change of wellbeing over time. Two OAT's permeated this evolutionary process, 'having needs met' and 'managing difficulty'. 'Having needs met' seems to indicate a transitioning from a

sense of hopelessness and feeling of, or being resource-less, to feeling more hopeful, positive and , having better coping skills. The second transitioned from perceiving poverty as unworkable and unmanageable, to reperceiving it as workable and manageable. Three secondary pathways also emerged, transitioning from (i) exclusion to inclusion, (ii) from an overall sense of un-wellbeing to contentment and resilience, and finally, (iii) from feeling a need to take action, to having the ability to take action. To paraphrase in meta-themes, this meant transitioning from '*having a need for the necessary resources to manage difficulty and illness/health'* to, *'having the strength and self-confidence to make healthy choices and move forward in life'*.

Thus, an increase in 'mental bandwidth' (Mullainathan & Shafir, 2013) facilitated a reperceiving of participants lived experience. Through gradually dissociating from their thoughts, emotions, and body sensations as they arose, and learning to simply be with them, instead of being defined by them (Hick & Furlotte, 2010), participants overcame their cognitive limitations (Mani et al., 2013) and, as a result, experienced increased wellbeing.

Implications of the Findings

Previous studies with SED populations indicate that mindfulness is associated with improvements in wellbeing and dispositional mindfulness (see table 4). As no significant difference was found in the 3 wellbeing

measures between the control and training groups at baseline and a significant increase noted post-training, this study, likewise, suggests a significant correlation between MBI training and wellbeing and also improvements in *affect balance* and *life satisfaction* (Diener, 2008). Similarly, the findings for the researcher-designed *mental* and *general wellbeing* queries echo both these findings and replicate the structure of Diener's (2008) 2 part SWB construct, implying construct validity and a coherence between measures that consolidate the findings. The MAAS results however, suggest that the 15 item version may be too complicated for SED adults, suggesting that the 6 item version, which fulfils a similar function (Van Dam, Earleywine, & Borders, 2010), and reduces respondent burden (Black et al., 2012), may have been more appropriate.

The qualitative analysis, however, implied that the acquisition of mindfulness skills affected an increase in wellbeing and mental bandwidth (Mullainathan & Shafir, 2013) that included positive coping skills and a move from 'day to day' reactive decision making, to longer term responsive planning, thus enabling a better management of the toxic stress of living with chronic low income. Moreover, these results suggest that the use of the researchers open ended query, its construction and 'freedom of expression', may be useful in garnering data that the quantative component could not e.g., the MAAS. Furthermore, employing this type of intervention could reduce

the present cost of poverty to the nation (Bramley, Hirsch, Littlewood, & Watkins, 2016), as evidenced by reported reductions in the use of medications, even after long term use/dependency, of reduced clinic visits due to feeling better health and of appointments being less stressful due to reductions in anxiety. Consequently burdens on healthcare could be reduced. Others spoke of healed relationships, coping better with family, children and social workers etc., accordingly the burden on social services, family and education services could be reduced. Yet others were coping better with their mental problems, be it bi-polar, depression, OCD, anxieties and phobias, hence the burden on mental health services could be lessened. These findings are in keeping with other SED studies (see Table 4). However, employing MBI's as part of a government wellbeing strategy could make the poor easier to reach and save governments money (Bramley et al., 2016). Accordingly, these results indicate that community-based MBI's are not only feasible, acceptable, cost effective and aid social cohesion but could become a useful and beneficial part of government wellbeing policies that could eventually permeate the mainstream.

Limitations and future directions

This study had some limitations. It lacked ethnic diversity and attrition was high despite financial reparations. Furthermore, only a small set of self-report measures were used. However, despite validity issues

(OECD., 2013), their Likert construction gave them added strength (Bertram, 2015). This should be taken into account when interpreting the findings.

Future studies with ethnically diverse sample sizes, extended follow-up, and more robust report measures that examine wellbeing-related biological and bio-behavioural outcomes, may help further test the reliability of this study's results, and inclusion of cross-lateral movement/exercises that affect brain integration may help counteract some of the cognitive effects of poverty (Jensen, 2008) . Nonetheless, this study, as it stands, adds to the extant literature, provides a platform for future research/development and evidences that community-based MBI's are viable.

Accomplishment of aims

This study accomplished its aims by developing efficient recruitment protocols, acceptable consent procedures, a suitable intervention and reliable data collection. It addressed participants *material*, *social and psychosocial inequalities* (Cormack, 2012; Curtis et al., 2002) through reparations and formatted interpersonal dialogue, resulting in a diminished sense of exclusion, anxiety, social comparison and improved social integrity (Adli, 2011; R. Wilkinson, 2000; Richard G Wilkinson & Pickett, 2015; Zimmerman & Bell, 2006). Furthermore, it reduced resentment apropos the institutional domination, subordination, subservience and loss of control

often felt by this population (Kearns et al., 2012). Hence, these results support previous outcomes (see table 4), and Kearns et al's 2012 findings that delivering interventions and regeneration programmes address the pathways of inequality and protects the health and wellbeing of individuals in disadvantaged communities.

Conclusion

Thus, this study shows that MBI's could play an important role in increasing the wellbeing of the poor in regeneration areas. It demonstrates that the resultant increase in 'mental bandwidth' (Bregman.Rutger, 2016) could yield more content and productive citizens (Mindfulness All-party Parliamentary Group, 2015), reduce the cost of poverty to the nation (see figure 23), and help bring about a "state of complete physical, mental, and social well-being, not merely the absence of disease" (World Health Organization, 1997, p. 3), for the most deprived in society.

References

Abercrombie, P., Zamora, A., & Korn, A. P. (2007). Lessons Learned Providing a Mindfulness-based Stress Reduction. *Holistic Nursing Practice*, *Volume 21*(1), 26–34. http://doi.org/00004650-200701000-00006 [pii]

Adli, M. (2011). *Urban Stress and Mental Health | Articles | LSE Cities*. London. Retrieved from http://lsecities.net/media/objects/articles/urban-stress-and-mental-health/en-gb/

Ahern, J., Galea, S., Hubbard, A., Midanik, L., & Syme, S. L. (2008). Original Contribution "' Culture of Drinking '" and Individual Problems with Alcohol Use, *167*(9), 1041–1049. http://doi.org/10.1093/aje/kwn022

Amaro, H., Spear, S. E., Vallejo, Z., Conron, K., & Black, D. S. (2014). Feasibility , acceptability , and preliminary outcomes of a mindfulness-based relapse prevention intervention for culturally-diverse , low-income women in substance use disorder treat. *Substance Use &Misuse*, *49*(5), 547–559. http://doi.org/10.3109/10826084.2013.852587

Amone-P'Olak, K., Ormel, J., Huisman, M., Verhulst, F. C., Oldehinkel, A. J., & Burger, H. (2009). Life Stressors as Mediators of the Relation Between Socioeconomic Position and Mental Health Problems in Early Adolescence: The TRAILS Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, *48*(10), 1031–1038. http://doi.org/10.1097/CHI.0b013e3181b39595

Andrews, F. M. ., & Withey, S. B. (1976). *Social Indicators of Well-Being. Americans Perceptions of Life Quality.* (1st ed.). New York: Plenum Press.

Aristotle. (1985). *Aristotle*. (T. Irwin, Ed.) (1st ed.). Indianapolis: Hackett Publishing Company. Retrieved from www.hackettpublishing.com

Bech, P. (2004). World Health Organization Wellbeing Index (WHO-5). *Quality of Life Newsletter.*, (32), 25–16.

Bech, P., Olsen, L. R., Kjoller, M., & Rasmussen, N. K. (2003). Measuring well-being rather than the absence of distress symptoms: a comparison of the SF-36 Mental Health subscale and the WHO-Five Well-Being Scale. *International Journal of Methods in Psychiatric Research*, *12*(2), 85–91. http://doi.org/10.1002/mpr.145

Bermudez, D., Benjamin, M. T., Porter, S. E., Saunders, P. A., Anne, N., Myers, L., & Dutton, M. A. (2013). A qualitative analysis of beginning mindfulness experiences for women with post-traumatic stress disorder and a history of intimate partner violence. *Complementary Therapies in Clinical Practice*, *19*(2), 104–108. http://doi.org/10.1016/j.ctcp.2013.02.004

Berry, C. (2014). *Wellbeing in four policy areas; Report by the All-Party Parliamentary Group on Wellbeing Economics*. London. Retrieved from www.neweconomics.org

Bertram, D. (2015). *Likert Scales are the Meaning of Life.* Belgrade. Retrieved from http://www.filebrew.com/data/cpsc-681-topic-report-dane-bertram.html

Black, D. S., Sussman, S., Johnson, C. A., & Milam, J. (2012). Psychometric assessment of the Mindful Attention Awareness Scale (MAAS) among Chinese adolescents. *Assessment*, *19*(1), 42–52. http://doi.org/10.1177/1073191111415365

Blacker, M., Meleo-meyer, F., Kabat-Zinn, J., & Santorelli, S. (2009). Mindfulness-Based Stress Reduction (MBSR) Curriculum Guide© 2009. MBSR 8week Course Curriculum, Massachusetts: Center for Mindfulness in Medicine, Health Care & Society Department of Medicine.

Blázquez, M., & Budría, S. (2013). *Does Income Deprivation Affect People's Mental Well-being ?* (No. 1312). Madrid.

Bloomquist, M., & Schnell, S. (2002). *Helping Children with Aggression and Conduct Problems* (1st ed.). New York, London: The Guilford Press. Retrieved from www.guilford.com

Bosma, H., Schrijvers, C., & Mackenbach, J. P. (1999). Socioeconomic inequalities in mortality and importance of perceived control: cohort study. *BMJ (Clinical Research Ed.)*, *319*(7223), 1469–1470. http://doi.org/10.1136/bmj.319.7223.1469

Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J., … Marlatt, A. (2009). Mindfulness-Based Relapse Prevention for Substance Use Disorders: A pilot efficacy trial. *Substance Abuse*, *30*(4), 295–305. http://doi.org/10.1080/08897070903250084.Mindfulness-Based

Bowen, S., Chawla, N., & Marlatt, G. A. (2011). *Mindfulness-Based Relapse prevention for addictive Behaviors, A Clinicians Gu i d e*. New York London: The Guilford Press. Retrieved from www.guilford.com

Bowlby, J. (1982). *Attachment and loss* (2nd ed., Vol. I). New York: Basic Books. Retrieved from http://www.abebe.org.br/wp-content/uploads/John-Bowlby-Attachment-Second-Edition-Attachment-and-Loss-Series-Vol-1-1983.pdf

Bowlby, J. (2008). *Attachment and Loss Vol 1: Attachment* (1st ed.). London: Pimlico.

Bowling, A. (2011). Do older and younger people differ in their reported well-being? A national survey of adults in Britain. *Family Practice*, *28*(2), 145–55. http://doi.org/10.1093/fampra/cmq082

Bramley, G., Hirsch, D., Littlewood, M., & Watkins, D. (2016). *Counting the cost of UK poverty*. York. Retrieved from https://www.jrf.org.uk/report/counting-cost-uk-poverty#jl_downloads_0

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. http://doi.org/10.1191/1478088706qp063oa

Braveman, P. A., Cubbin, C., Egerter, S., Chideya, S., Marchi, K. S., Metzler, M., & Posner, S. (2013). Socioeconomic Status in Health Research. *American Medical Association.*, *294*(22), 2879–2888.

Bregman.Rutger. (2016). Why do the poor make such poor decisions. Retrieved August 9, 2016, from 2016-08-09

Brown, K. W., & Creswell, J. D. (2015). *Handbook of Mindfulness:Thoery, Research, and Practice*. New York London: Guildford Press.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822–848. http://doi.org/10.1037/0022-3514.84.4.822

Cabinet Office. (2006). *Reaching Out : An Action Plan on Social Exclusion*. London. Retrieved from Web address: www.cabinetoffice.gov.uk

Carmody, J., & Baer, R. a. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine*, *31*(1), 23–33. http://doi.org/10.1007/s10865-007-9130-7

Carmody, J., & Baer, R. a. (2009). How long does a mindfulness-based stress reduction program need to be? A review of class contact hours and effect sizes for psychological distress. *Journal of Clinical Psychology*, *65*(6), 627–638. http://doi.org/10.1002/jclp.20555

Chambers, R., Gullone, E., & Allen, N. B. (2009). Mindful emotion regulation: An integrative review. *Clinical Psychology Review*, *29*(6), 560–572. http://doi.org/10.1016/j.cpr.2009.06.005

Charmaz, K. (1983). Loss of self: a fundamental form of suffering in the chronically ill. *Sociology of Health & Illness*, *5*(2), 168–195. http://doi.org/10.1111/1467-9566.ep10491512

Chen, S., & Ravallion, M. (2010). The Developing World is Poorer than We Thought, But No Less Successful in the Fight Against Poverty. *The Quarterly Journal of Economics*, *125*(4), 1577–1625. http://doi.org/10.1162/qjec.2010.125.4.1577

Chiesa, A., & Malinowski, P. (2011). Mindfulness-based approaches: Are they all the same? *Journal of Clinical Psychology*, *67*(4), 404–424. http://doi.org/10.1002/jclp.20776

Clark, A. E., & Oswald, A. J. (1996). Satisfaction and comparison income. *Journal of Public Economics*, *61*(3), 359–381. http://doi.org/10.1016/0047-2727(95)01564-7

Coffey, K. a., Hartman, M., & Fredrickson, B. L. (2010). Deconstructing Mindfulness and Constructing Mental Health: Understanding Mindfulness and its Mechanisms of Action. *Mindfulness*, *1*(4), 235–253. http://doi.org/10.1007/s12671-010-0033-2

Conner, C. M., & White, S. W. (2014). Stress in mothers of children with autism: Trait mindfulness as a protective factor. *Research in Autism Spectrum Disorders*, *8*(6), 617–624. http://doi.org/10.1016/j.rasd.2014.02.001

Cormack, D. (2012). *The role of the group in mindfulness-based interventions*. Canterbury Christ Church University.

Cullum, D. (2014). *Delivery of Regeneration in Scotland* (Vol. 4). Edinburgh: APS Scottish Parliament Publications. Retrieved from www.scottish.parliament.uk

Curtis, S., Cave, B., & Coutts, A. (2002). Is urban regeneration good for health? Perceptions and theories of the health impacts of urban change. *Environment and Planning C: Government and Policy*, *20*(4), 517–534. http://doi.org/10.1068/c02r

Davidson, R. J., & McEwen, B. S. (2012). Social influences on neuroplasticity: stress and interventions to promote well-being. *Nature Neuroscience*, *15*(5), 689–695. http://doi.org/10.1038/nn.3093

Davis, A., Hirsch, D., & Padley, M. (2014). *A Minimum Income standard for the UK in 2014*. York. Retrieved from www.jrf.org.uk

deVibe, M., Bjørndal, A., Tipton, E., Hammerstrøm, K., & Kowalski, K. (2012). *Mindfulness Based Stress Reduction (MBSR) for improving health, quality of life, and social functioning in adults*. *Campbell Systematic Reviews*.

Diener, E. (2000). Subjective well-being. The science of happiness and a proposal for a national index. *The American Psychologist*, *55*(1), 34–43. http://doi.org/10.1037/0003-066X.55.1.34

Diener, E. (2008). *Happiness: unlocking the mysteries of psychological wealth.* (online). Malden, Oxford.: Blackwell Publishing. Retrieved from http://onlinelibrary.wiley.com/book/10.1002/9781444305159

Diener, E., & Emmons, R. a. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology*, *47*(5), 1105–1117. http://doi.org/10.1037/0022-3514.47.5.1105

Doran, N. J. (2014). Experiencing Wellness Within Illness: Exploring a Mindfulness-Based Approach to Chronic Back Pain. *Qualitative Health Research*, *24*(6), 749–760. http://doi.org/10.1177/1049732314529662

Dowden, R. (1978, December). The Thatcher philosophy. *Catholic Herald*, 1–9. Retrieved from http://www.margaretthatcher.org/document/103793

Dundee Partnership. (2011). *For Fairness in Dundee A Strategy for Challenging Poverty and Promoting Inclusion in Dundee*. Dundee. Retrieved from www.dundeepartnership.co.uk

Dupéré, V., Leventhal, T., & Lacourse, É. (2009). Neighborhood poverty and suicidal thoughts and attempts in late adolescence. *Psychological Medicine*, *39*(8), 1295–1306. http://doi.org/10.1017/S003329170800456X

Dutton, M. A., Bermudez, D., Matás, A., Majid, H., & Myers, N. L. (2013). Mindfulness-Based Stress Reduction for Low-Income, Predominantly African American Women With PTSD and a History of Intimate Partner Violence. *Cognitive and Behavioral Practice*, *20*(1), 23–32. http://doi.org/10.1016/j.cbpra.2011.08.003

Eames, C., Crane, R. S., Gold, E., Pratt, S., & Axford, N. (2015). Mindfulness-based wellbeing for socio-economically disadvantaged parents: a pre-post pilot study. *Journal of Children's Services*, *10*(1), 17–28. Journal Article. http://doi.org/DOI 10.1108/JCS-09-2014-0040

Eberth, J., & Sedlmeier, P. (2012). The Effects of Mindfulness Meditation: A Meta-Analysis. *Mindfulness*, *3*(3), 174–189. http://doi.org/10.1007/s12671-012-0101-x

Eibner, C., & Evans, W. N. (2005). Relative Deprivation , Poor Health Habits , and Mortality. *The Journal of Human Resources*, *40*(2003), 591–620. http://doi.org/10.3368/jhr.XL.3.591

Eisenberger, N. I. (2012). The pain of social disconnection: examining the shared neural underpinnings of physical and social pain. *Nature Reviews. Neuroscience*, *13*(6), 421–34. http://doi.org/10.1038/nrn3231

Ferrer-i-Carbonell, A. (2005). Income and well-being: An empirical analysis of the comparison income effect. *Journal of Public Economics*, *89*(5–6), 997–1019. http://doi.org/10.1016/j.jpubeco.2004.06.003

Fitch, C., Simpson, A., Collard, S., & Teasdale, M. (2007). Mental health and debt : challenges for knowledge , practice and identity. *Journal of Psychiatric and Mental Health Nursing*, (14), 128–133.

Flook, L., Goldberg, S. B., Pinger, L., & Davidson, R. J. (2015). Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based Kindness Curriculum. *Developmental Psychology*, *51*(1), 44–51. http://doi.org/10.1037/a0038256

Galea, S., Uddin, M., & Koenen, K. (2011). The urban environment and mental disorders: Epigenetic links. *Epigenetics*, *6*(4), 400–404. http://doi.org/10.4161/epi.6.4.14944

Gilbert, P. (2010). An Introduction to the Theory and practice of Compassion focussed therapy and Compassionate Mind Training for shame based difficulties. Workbook, The Compassionate Mind Foundation. Retrieved from http://www.compassionatemind.co.uk/downloads/training_materials/1.Workbook_2010.pdf

Goyal, M., Singh, S., Sibinga, E., Gould, N., Rowland-Seymour, A., Sharma, R., … Haythornthwaite, J. (2014). Meditation Programs for Psychological Stress and Well-being: A Systematic Review and Meta-analysis. http://doi.org/10.1016/j.biotechadv.2011.08.021.Secreted

Gross, J. J., Sutton, S. K., & Ketelaar, T. (1998). Relations between affect and personality: Support for the affect-level and affective-reactivity views. *Personality and Social Psychology Bulletin*, *24*(3), 279–288. http://doi.org/10.1177/0146167298243005

Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits. A meta-analysis. *Journal of Psychosomatic Research*, *57*(1), 35–43. http://doi.org/10.1016/S0022-3999(03)00573-7

Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of mediation studies. *Clinical Psychology Review*, *37*, 1–12. http://doi.org/10.1016/j.cpr.2015.01.006

Gucht, K. Van Der, Takano, K., Broeck, N. Van, & Raes, F. (2014). A Mindfulness-Based Intervention for Economically Disadvantaged People : Effects on Symptoms of Stress , Anxiety , and Depression and on Cognitive Reactivity and Overgeneralization. *Mindfulness*, 11. http://doi.org/10.1007/s12671-014-0353-8

Gunasekara, F. I., Carter, K., & Blakely, T. (2011). Change in income and change in self-rated health: Systematic review of studies using repeated measures to control for confounding bias. *Social Science & Medicine*, *72*(2), 193–201. http://doi.org/10.1016/j.socscimed.2010.10.029

Gunthert, K. C., Cohen, L. H., & Armeli, S. (1999). The role of neuroticism in daily stress and coping. *Journal of Personality and Social Psychology*, *77*(5), 1087–1100. http://doi.org/10.1037/0022-3514.77.5.1087

Harrison, L., & Gardiner, E. (1999). Do the rich really die young? Alcohol-related mortality and social class in Great Britain, 1988-94. *Addiction (Abingdon, England)*, *94*(12), 1871–80. http://doi.org/http://dx.doi.org/10.1080/09652149932352

Healthpovertyaction.org. (2015). The Determinants of Health. Retrieved December 28, 2015, from http://www.healthpovertyaction.org/info-and-resources/the-determinants-of-health/

Heaversedge, J., & Halliwell, E. (2012). *The Mindful Manifesto*. London: Hay House UK Ltd. Retrieved from www.hayhouse.co.uk

Henkel, V., Mergl, R., Kohnen, R., Maier, W., Möller, H., & Hegerl, U. (2003). Identifying depression in primary care: a comparison of different methods in a prospective cohort study. *Bmj*, *326*(7382), 200–201. http://doi.org/10.1136/bmj.326.7382.200

Hick, S. F., & Furlotte, C. (2010). An Exploratory Study of Radical Mindfulness Training with Severely Economically Disadvantaged People: Findings of a Canadian Study. *Australian Social Work*, *63*(3), 281–298. http://doi.org/10.1080/0312407X.2010.496865

Horan, M. K., McGowan, C. a, Doyle, O., & McAuliffe, F. M. (2014). Well-being in pregnancy: an examination of the effect of socioeconomic, dietary and lifestyle factors including impact of a low glycaemic index dietary intervention. *European Journal of Clinical Nutrition*, *68*(1), 19–24. http://doi.org/10.1038/ejcn.2013.212

Imel, Z., Baldwin, S., Bonus, K., & Maccoon, D. (2008). Beyond the individual: group effects in mindfulness-based stress reduction. *Psychotherapy Research : Journal of the Society for Psychotherapy Research*, *18*(6), 735–742. http://doi.org/10.1080/10503300802326038

Jensen, E. (2008). *Brain-based learning: the new paradigm of teaching*. (A. Editors:, A. E. Editorial, E. Assistallls:, Stallts:, P. Editor:, Editor:, … J. Duffy, Eds.) (2nd ed.). Thousand Oaks, California: Corwin Press. Retrieved from www.corwinpress.com

Jones, F., Bright, J., & Clow, A. (2001). *Stress:Myth, Theory, and Research.* Malaysia: Pearson. Retrieved from www.pearsoned.co.uk

Kabat-Zinn, J. (1982). An outpatient program in behavioural medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry*, *4*, 33–47.

Kabat-Zinn, J. (1990). *Kabat-Zinn J, 1990, Full catastrophe living: using the wisdom of your body and mind to face stress,pain and illness: the program of the stress reduction clinic at the University of Massachusetts Medical Center.* New York, N.Y.: Delacorte Press. Retrieved from papers2://publication/uuid/C96E53FC-0DE9-4A29-9B49-A28B3DD4E493

Kabat-Zinn, J. (2004). *Full Catastrophe Living. How to cope with stress, pain and illness using minfulness meditation*. New York: Bantam Dell.

Kaplan, K. H., Goldenberg, D. L., & Galvin-Nadeau, M. (1993). The impact of a meditation-based stress reduction program on fibromyalgia. *General Hospital Psychiatry*, *15*(5), 284–289. http://doi.org/10.1016/0163-8343(93)90020-O

Kearns, a., Whitley, E., Bond, L., Egan, M., & Tannahill, C. (2012). The psychosocial pathway to mental wellbeing at a local level: investigating the effects of perceived relative position in a deprived area context. *Journal of Epidemiology Community Health*, (67), 87–94. http://doi.org/10.1136/jech-2011-200415

Kenealy, D. (2015). *Elitist Scotland ?* Edinburgh. Retrieved from www.gov.uk/smcpc

Kenway, P., & Bushe, S. (2015). *Monitoring poverty and social exclusion in Scotland 2015*. York. Retrieved from www.jrf.org.uk

Kenway, P., Bushe, S., Tinson, A., & Born, T. B. (2015). *Monitoring poverty and social exclusion in Scotland 2015*. York. Retrieved from www.jrf.org.uk

Kingdon, G. G., & Knight, J. (2007). Community, comparisons and subjective well-being in a divided society. *Journal of Economic Behavior and Organization*, *64*(1), 69–90. http://doi.org/10.1016/j.jebo.2007.03.004

Kingdon, G., & Knight, J. (2006). Subjective well-being poverty versus income poverty and capabilities poverty. *Journal of Development Studies*, *42*(7), 1199–1224. http://doi.org/10.1080/00220380600884167

Kocot, T., & Goodman, L. (2003). The Roles of Coping and Social Support in Battered Women's Mental Health. *Violence Against Women*, *9*(3), 323–346. http://doi.org/10.1177/1077801202250075

Kuyken, W., C.Warren, F., Taylor, R. S., Whalley, B., Crane, C., Bondolfi, G., … Dalgleish, T. (2016). Efficacy of Mindfulness-Based Cognitive Therapy in Prevention of Depressive Relapse An Individual Patient Data Meta-analysis From Randomized Trials. http://doi.org/10.1001/jamapsychiatry.2016.0076

Kuyken, W., Crane, R. S., & Williams, J. M. G. (2012). Mindfulness-Based Cognitive Therapy (MBCT) Implementation Resources. Implementation resource for teachers, Exeter, Bangor and Oxford: Exeter, Bangor and Oxford Universities.

Lhila, A., & Simon, K. I. (2010). Relative deprivation and child health in the USA. *Social Science and Medicine*, *71*(4), 777–785. http://doi.org/10.1016/j.socscimed.2010.03.058

Lundhal, B., Risser, H., & Lovejoy, M. (2006). A meta-analysis of parent training: Moderators and follow-up effects. *Clinical Psychology Review*, *26*(1), 86–104. http://doi.org/10.1016/j.cpr.2005.07.004

Luttmer, E. F. . P. . (2005). Neighbors as Negatives : Relative Earnings and Well-Being. *The Quarterly Journal of Economics, 120*(3), 963–1002. Retrieved from http://www.jstor.org/stable/25098760

Lynch, J. W., Smith, G. D., Kaplan, G. a, & House, J. S. (2000). Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions. *BMJ (Clinical Research Ed.)*, *320*(7243), 1200–1204. http://doi.org/10.1136/bmj.320.7243.1200

MacKillop, J., & Anderson, E. J. (2007). Further psychometric validation of the mindful attention awareness scale (MAAS). *Journal of Psychopathology and Behavioral Assessment*, *29*(4), 289–293. http://doi.org/10.1007/s10862-007-9045-1

Malpass, A., Carel, H., Ridd, M., Shaw, A., Kessler, D., Sharp, D., … Wallond, J. (2012). Transforming the perceptual situation: A meta-ethnography of qualitative work reporting patients' experiences of mindfulness-based approaches. *Mindfulness*, *3*(1), 60–75. http://doi.org/10.1007/s12671-011-0081-2

Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science (New York, N.Y.)*, *341*(6149), 976–80. http://doi.org/10.1126/science.1238041

Marmot, M. (1994). Social Differentials in Health within and between Populations. *Daedalus*, *123*(4), 197–216. Retrieved from http://www.jstor.org/stable/10.2307/20027276

Marmot, M. G. (2003). Understanding social inequalities in health. *Perspectives in Biology and Medicine*, *46*(3 Suppl), S9–S23. http://doi.org/10.1353/pbm.2003.0056

Marmot, M. G. (2004). *How Your Social Standing Directly Affects Your Health and Life Expectancy*. London: Bloomsbury.

Masuda, A., Price, M., & Latzman, R. D. (2012). Mindfulness Moderates the Relationship Between Disordered Eating Cognitions and Disordered Eating Behaviors in a Non- Clinical College Sample. *J Psychopathology Behav Assess*, *34*(1), 107–115. http://doi.org/10.1007/s10862-011-9252-7.

Mcbride, K., & Purcell, S. (2014). *Food, Fuel, Finance. Tackling the poverty premium*. Manchester. Retrieved from www.church-poverty.org.uk.

Mcknight, A. (2015). *Downward mobility, opportunity hoarding and the "glass floor"* (No. 1) (Vol. 1). London. Retrieved from www.gov.uk/smcpc

Mindfulness All-party Parliamentary Group. (2015). *Mindful nation uk*. London. Retrieved from www.themindfulnessinitiative.org.uk

Mitchell, C., Hobcraft, J., McLanahan, S. S., Siegel, S. R., Berg, A., Brooks-Gunn, J., … Notterman, D. (2014). Social disadvantage, genetic sensitivity, and children's telomere length. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(16), 5944–9. http://doi.org/10.1073/pnas.1404293111

Moss, a. S., Reibel, D. K., Greeson, J. M., Thapar, A., Bubb, R., Salmon, J., & Newberg, a. B. (2014). An Adapted Mindfulness-Based Stress Reduction Program for Elders in a Continuing Care Retirement Community: Quantitative and Qualitative Results From a Pilot Randomized Controlled Trial. *Journal of Applied Gerontology*, *34*(4), 518–538. http://doi.org/10.1177/0733464814559411

Mullainathan, S., & Shafir, E. (2013). *Scarcity : why having too little means so much* (First Edit). New York: Times Books.

Mullaly, R. P. (2007). *The New Structural Social Work*. *PhD Proposal*. Toronto: Oxford University Press.

Murali, V. (2004). Poverty, social inequality and mental health. *Advances in Psychiatric Treatment*, *10*(3), 216–224. http://doi.org/10.1192/apt.10.3.216

Murray, C. J. L., & Lopez, A. D. (1997). Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study. *Lancet*, *349*(9064), 1498–1504. http://doi.org/10.1016/S0140-6736(96)07492-2

OECD.org. (2009). Measuring Well-being and Progress : Well-being Research and on-going work. Retrieved December 4, 2015, from http://www.oecd.org/statistics/measuring-well-being-and-progress.htm

Organisation for Economic Co-operation and Development (OECD). (2013). *OECD Guidelines on Measuring Subjective Well-being*. Paris: OECD Publishing. http://doi.org/10.1787/9789264191655-en

Pagliaccio, D., Luby, J. L., Bogdan, R., Agrawal, A., Gaffrey, M. S., Belden, A. C., … Barch, D. M. (2014). Stress-System Genes and Life Stress Predict Cortisol Levels and Amygdala and Hippocampal Volumes in Children. *Neuropsychopharmacology*, *39*(5), 1245–1253. http://doi.org/10.1038/npp.2013.327

Palmer, G. (2015). Key facts - The Poverty Site. Retrieved December 4, 2015, from http://www.poverty.org.uk

Palta, P., Page, G., Piferi, R. L., Gill, J. M., Hayat, M. J., Connolly, a. B., & Szanton, S. L. (2012). Evaluation of a mindfulness-based intervention program to decrease blood pressure in low-income African-American older adults. *Journal of Urban Health*, *89*(2), 308–316. http://doi.org/10.1007/s11524-011-9654-6

Peace, R. (2001). Social Exclusion: A Concept in Need of Definition? *Social Policy Journal of New Zealond*, (16), 17–36.

Pickett, K. E., & Wilkinson, R. G. (2007). Child wellbeing and income inequality in rich societies: ecological cross sectional study. *BMJ (Clinical Research Ed.)*, *335*(7629), 1080. http://doi.org/10.1136/bmj.39377.580162.55

Public Health England. (2013). Introduction to the PHE Health and Wellbeing Directorate Our mission Our approach. Retrieved January 9, 2016, from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/175658/Health_and_wellbeing_webpagev_Final27Mar.pdf

Rae, A. (2015). scottish cities deprivation map. Retrieved January 9, 2016, from http://www.gonnaemapit.com/p/deprivation.html

Raes, F., Griffith, J. W., Van der Gucht, K., & Williams, J. M. G. (2014). School-Based Prevention and Reduction of Depression in Adolescents: a Cluster-Randomized Controlled Trial of a Mindfulness Group Program. *Mindfulness*, *5*(5), 477–486. http://doi.org/10.1007/s12671-013-0202-1

Rechavi, O., Houri-Ze'Evi, L., Anava, S., Goh, W. S. S., Kerk, S. Y., Hannon, G. J., & Hobert, O. (2014). Starvation-induced transgenerational inheritance of small RNAs in C. elegans. *Cell*, *158*(2), 277–287. http://doi.org/10.1016/j.cell.2014.06.020

Reeves, R. V. ., & Howard, K. (2013). The Glass Floor: Paper, Massachusets: Brookings Institue. Retrieved from www.brookings.edu

Richardson, T., Elliott, P., & Roberts, R. (2013). The relationship between personal unsecured debt and mental and physical health : A systematic review and meta-analysis. *Clinical Psychology Review*, *33*(8), 1148–1162. http://doi.org/10.1016/j.cpr.2013.08.009

Robertson, D. (2014). *Regeneration and poverty in Scotland: Evidence and policy review*. Stirling. Retrieved from http://www.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/jrf-regeneration-poverty-scotland.pdf

Robertson, S. M., Stanley, M. A., Cully, J. A., & Naik, A. D. (2012). Positive Emotional Health and Diabetes Care: Concepts, Measurement, and Clinical Implications. *Psychosomatics*, *53*(1), 1–12. http://doi.org/10.1016/j.psym.2011.09.008

Rockville, M. D. (1994). The buddy system. In *Disaster response and recovery: A handbook for mental health professionals* (p. 2). Atlanta: Center for Mental Health Services.

Roth, B., & Creaser, T. (1997). Mindfulness meditation-based stress reduction: experience with a bilingual inner-city program. *The Nurse Practitioner*, *22*(3), 150–175.

Roth, B., & Robbins D. (2004). Mindfulness-Based Stress Reduction and Health-Related Quality of Life: Findings from a bilingual Inner-City Population. *Psychosomatic Medicine*, *66*(1), 113–123. http://doi.org/10.1097/01.PSY.0000097337.00754.09

Ruglass, L. M., Miele, G. M., Hien, D. A., Campbell, A., Hu, M.-C., Caldeira, N., … Nunes, E. V. (2012). Helping Alliance, Retention, and Treatment Outcomes: A Secondary Analysis From the NIDA Clinical Trials Network Women and Trauma Study. *Sust Use Misuse*, *47*(6), 695–707. http://doi.org/10.3109/10826084.2012.659789

Sapolsky, R. M. (2004). Social status and health in humans and other animals. *Annual Review of Anthropology*, *33*(2004), 393–418. http://doi.org/10.1146/annurev.anthro.33.070203.144000

Scottish Government. (2011). *Achieving a Sustainable Future: Regeneration Strategy*. Edinburgh: Scottish Government by APS Group Scotland. Retrieved from http://www.scotland.gov.uk/Resource/Doc/364595/0123891.pdf

Scottish Government. (2012). *Scottish Index of Multiple Deprivation 2012*. Edinburgh: Scottish Government.

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2013). *Mindfulness-Based Cognitive Therapy for Depression* (2nd ed.). New York London: The Guilford Press.

Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, *129*(1), e232-46. http://doi.org/10.1542/peds.2011-2663

Singleton, O., Hölzel, B. K., Vangel, M., Brach, N., Carmody, J., & Lazar, S. W. (2014). Change in Brainstem Gray Matter Concentration Following a Mindfulness-Based Intervention is Correlated with Improvement in Psychological Well-Being. *Frontiers in Human Neuroscience*, *8*(February), 33. http://doi.org/10.3389/fnhum.2014.00033

Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, *134*(1), 138–161. http://doi.org/10.1037/0033-2909.134.1.138

Stiglitz, J. E., Sen, A., & Fitoussi, J.-P. (2009). *Report by the commission on the measurement of economic performance and social progress.* Paris. Retrieved from www.stiglitz-sen-fitoussi.fr

Sutarto, A. P., Wahab, M. N. A., & Zin, N. M. (2012). Resonant breathing biofeedback training for stress reduction among manufacturing operators. *International Journal of Occupational Safety and Ergonomics*, *18*(4), 549–561. http://doi.org/10.1080/10803548.2012.11076959

Sweet, E. (2011). Symbolic capital, consumption, and health inequality. *American Journal of Public Health*, *101*(2), 260–264. http://doi.org/10.2105/AJPH.2010.193896

Szanton, S. L., Wenzel, J., Connolly, A. B., & Piferi, R. L. (2011). Examining mindfulness-based stress reduction: perceptions from minority older adults residing in a low-income housing facility. *BMC Complementary and Alternative Medicine*, *11*(1), 44. http://doi.org/10.1186/1472-6882-11-44

Taggart, F., & Stewart-brown, S. (2015). A Review of Questionnaires Designed to Measure Mental Wellbeing. Review, London: Royal Society of Public Health. Retrieved from https://www.semanticscholar.org/paper/A-Review-of-Questionnaires-Designed-to-Measure-Taggart-Stewart-Brown/187e0f5e984c7af949cc9976239837bf93f9b91c/pdf

The Centre for Welfare Refrom. (2016). UK in breach of international human rights. Retrieved July 28, 2016, from http://www.centreforwelfarereform.org/news/uk-in-breachhuman-rights/00287.html

Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 well-being index: A systematic review of the literature. *Psychotherapy and Psychosomatics*, *84*(3), 167–176. http://doi.org/10.1159/000376585

U.N. Human Rights Report. (2014). *Economic and Social Council*. New York. Retrieved from http://tbinternet.ohchr.org/_layouts/treatybodyexternal/SessionDetails1.aspx?SessionID=1059&Lang=en

United Nations. (1995). *Report of the World Summit for Social Development* (Vol. 11651). New York: United Nations.

Vallejo, Z., & Amaro, H. (2009). Adaptation of Mindfulness-Based Stress Reduction Program for Addiction Relapse Prevention. *The Humanistic Psychologist*, *37*(2), 192–206. http://doi.org/10.1080/08873260902892287

Van Dam, N. T., Earleywine, M., & Borders, A. (2010). Measuring mindfulness? An Item Response Theory analysis of the Mindful Attention Awareness Scale. *Personality and Individual Differences*, *49*(7), 805–810. http://doi.org/10.1016/j.paid.2010.07.020

Weiss, a, Bates, T. C., & Luciano, M. (2008). Happiness Is a Personal (ity) Thing. *Psychological Science*, *19*(3), 205. http://doi.org/10.1111/j.1467-9280.2008.02068.x

Wells, E. A., Jiang, H., Suarez-Morales, L., Campbell, A. N. C., Cohen, L. R., Miele, G. M., … Zhang, Y. (2009). J Consultant clinical Psychol. *J Consult Clin Psychol.*, *77*(4), 607–619. http://doi.org/1Doi:10.1037/a0016227.,

Wenzel, M., von Versen, C., Hirschmüller, S., & Kubiak, T. (2015). Curb your neuroticism – Mindfulness mediates the link between neuroticism and subjective well-being. *Personality and Individual Differences*, *80*, 68–75. http://doi.org/10.1016/j.paid.2015.02.020

Wilkinson, R. (2000). Inequality and the social environment: a reply to Lynch et al. *Journal of Epidemiology and Community Health*, *54*(6), 411–413. http://doi.org/10.1136/jech.54.6.411

Wilkinson, R. (2002). *Unhealthy Societies:The Afflictions of Inequality*. London and New York: Taylor & Francis. Retrieved from taylorandfrancisgroup.com

Wilkinson, R. G. (1997). Socioeconomic determinants of health. Health inequalities: relative or absolute material standards? *BMJ (Clinical Research Ed.)*, *314*(7080), 591–595. http://doi.org/10.1136/bmj.314.7080.591

Wilkinson, R. G., & Pickett, K. E. (2015). Income Social Dysfunction and. *Annual Review of Sociology*, *35*(2009), 493–511. http://doi.org/10.1146/annurev-soc-070308-115926

Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). *The Mindful Way through Depression*. New York: The Guilford Press.

Working Party on Ethical Guidelines for Psychological Research. (2010). Code of human research ethics. *Code of Human Research Ethics*. Code of Ethics, Leicester: The British Psychological Society. Retrieved from http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf

World Health Organization. (1997). MEASURING QUALITY OF LIFE. Compendium of measures, Geneva: World Health Organisation. http://doi.org/WHO (MNH/PSF/93.4).

Wu, S.-F. V. (2014). Rapid Screening of Psychological Well-Being of Patients with Chronic Illness: Reliability and Validity Test on WHO-5 and PHQ-9 Scales. *Depression Research and Treatment*, *2014*(2007), 1–9. http://doi.org/10.1155/2014/239490

www.hpi.org.uk. (2004). Health Poverty Index. Retrieved December 28, 2015, from http://www.hpi.org.uk/

Young, I. M. (1990). *Justice and the Politics of Difference.* Princeton: Princeton University Press.

Zautra, A. J., Affleck, G. G., Tennen, H., Reich, J. W., & Davis, M. C. (2005). NIH Public Access, *73*(6), 1511–1538. http://doi.org/10.1111/j.0022-3506.2005.00357.x.Dynamic

Zimmerman, F. J., & Bell, J. F. (2006). Income inequality and physical and mental health: testing associations consistent with proposed causal pathways. *Journal of Epidemiology and Community Health*, *60*(6), 513–21. http://doi.org/10.1136/jech.2005.040154

Tables displayed in the order of appearance in the text.

Table 1

Common measures of SWB [1]

Category	Scale	Paper
Happiness	1. Oxford Happiness Inventory	(Argyle et al., 1989)
	2. Self-Description Inventory	(Fordyce, 1977)
	3. Memorial University of Newfoundland Scale of Happiness	(Kozma & Stones, 1980)
Life satisfaction	1. Satisfaction with Life Scale	(Diener et al., 1985).
	2. Life 3 Scale	(Andrews & Withey, 1976)
	3. Life satisfaction item of the Index of Well-Being	(Campbell et al., 1976)
Positive affect	1. PANAS	(Watson et al., 1988)
	2. Bradburn Balanced Affect Scale	(Bradburn, 1969)
	3. Profile of Mood States -Vigor/Activity	(McNair et al., 1971)
Negative affect	1. PANAS	(Watson et al., 1988)
	2. Bradburn Balanced Affect Scale	(Bradburn, 1969)
	3. Adjective List	(Emmons & Diener, 1985)
Overall affect	1. Bradburn Balanced Affect Scale	(Bradburn, 1969)
	2. PANAS	(Watson et al., 1988)
	3. Affectometer 2	(Kammann & Flett, 1983)
Quality of life	1. Scales of Psychological Well-Being	(Ryff, 1989)
	2. Perceived Quality of Life Scale	(Andrews & Withey, 1976)
	3. Lancashire Quality of Life Profile	(Oliver et al., 1996)

Note ; [1]Steel, Schmidt and Shultz, 2008

Table 2

Diener's Two Component Wellbeing Construct

Hedonic		Eudaimonic
Pleasant affect	Unpleasant affect	Life satisfaction
Joy	Guilt and shame	Desire to change life
Elation Contentment	Sadness	Satisfaction with current life
Pride	Anxiety and worry	Satisfaction with past
Affection	Anger	Satisfaction with future
Happiness	Stress	Significant others' views of one's life
Ecstasy	Depression	Desire to change life
Joy	Envy	Satisfaction with current life

Note ; Adapted Diener 1999

Table 3.

Theoretical models & proposed mechanisms of action for MBI's[1]

Baer (2003)	Brown *et al.* (2007)	Grabovac *et al.* (2011)	Hölzel *et al.* (2011)	Shapiro *et al.* (2006)	Vago & Silbersweig (2012)
Exposure, cognitive change (decentering), self-management (increased adaptive coping skills), relaxation, and acceptance.	Insight (decentering), exposure, nonattachment (non-aversion and non-craving), enhanced mind-body functioning, and integrated functioning (behaving in more purposeful ways).	Acceptance/compassion, attention regulation, ethical practices, nonattachment and non-aversion, and mental proliferation (narrative thought processes).	Attention regulation, body awareness, emotion regulation (reappraisal, exposure, extinction and reconsolidation), and change in perspective on the self.	Reperceiving (decentering), Self-regulation (stability of functioning and adaptability to change), emotional, cognitive and behavioural flexibility, value clarification, and exposure.	Self-awareness, self-regulation, self-transcendence (self-other connection)

Gu et al. (2015); [1]Clarifications in parentheses.

Table 4.

MBSR & SED Literature: Summary of publications

Publication	Context	Study Design	Features	Sample type	N= C= c=	Adaptions	Results
1. Roth & Creaser (1997)	America Inner city health centre	Quantitative UCT D=1 month Measures Pre/post-test	Income-based No financial exclusion Travel Childcare	CLINICAL 68% state benefits 28% low income English/Spanish Latino/Caribbean	N=144 C=86	In session More small groups, choice emphasised Bi-Lingual Literacy Support Phone reminders Recordings	> wellbeing Significant change all measures.
2. Roth & Stanley (2002)	America Inner city health centre	Quantitative Pilot D = 2 year Measures T1:1 year pre T2:1 year post	As above	CLINICAL English/Spanish Latino/Caribbean	N=47	As above	> Eudemonic > satisfaction. >clinic visits.
3. Roth & Robbins (2004)	America Inner city health centre	Quantitative RCT Measures T1:1 month pre T2:1 month post	As above	CLINICAL 50% state benefits 29% no benefits 19% NIG English/Spanish Latino/Caribbean	N = 68 C=14 7c=22 6c= 16 5c= 16	In session	>psychological wellbeing > general health > distress reduction

4. Abercrombie *et al*. (2007)	America Inner city Public hospital Outpatient clinic	M/M UCT/Feasibility Measures T1: Pre T2: post T3: 3 Month	Travel Childcare	CLINICAL Abnormal pap smears Anxiety/cancer Multi ethnic Low income 75% insufficient income	N=51 C = 8 = 16% drop out 54% non-attender 20% N= 10	6 Sessions	< anxiety Post Focus group: < daily stress; >health, > coping, > appointment attend > mindfulness (during gynaecological examinations)
5. Amaro *et al.* (2014) Vallejo and Amaro (2009)	America Inner city health clinics: 4 residential 1 out-patient	Quantitative UCT/Feasibility D = 4 years Measures T1: Interview pre T2: Interview post T3: 6 months T4: 12 months	Attendance Paid	CLINICAL Low income Afro/American/Latino Women (SUD)	N = 262 women DO = 58 = 22% C= 124 = 61% 8c = 32 = 12% NC= 48 = 27%	MBRP-W 9 Session, 2 per week Therapist + 1 staff More didactic tress and relapse Literacy support	< perceived stress < PTSD < drug dependence < alcohol dependence
6. Hick & Furlotte (2010)	Canada Community health centre	Mixed Method UCT Focus group for course design Measures T1: pre T2: post		NON-CLINICAL Homeless Depression ≥ 1 incident Low income Social welfare/Disability benefits Food Banks	N=22 C=8 AAc = 7 NC=14 Focus group N=23 N=16	MBSR 9 step Adversity & oppression practice Social change triad Interpersonal skills Financial limitations	> subjective wellbeing SCS p = 0.10
7. Szanton *et al.* (2011)	America Senior Housing facility	Qualitative Focus groups measure Post course		NON-CLINICAL Low income Minority ethnic adults	N=13	3 Sessions Short sessions: 1 hr More sitting Visual impairment Hand-outs Large print	3 primary themes Stress management Applying mindfulness The social support of the group

8. Palta *et al.* (2012)	America Senior housing facility	Quantitative RCT Pilot Measures T1: Pre T2: post	Social support group -control (active) Healthy snack	CLINICAL Low income African American	N=85	Phone Reminders attrition	BP Reduction
9. Dutton *et al.* (2013)	America Homeless shelter Community hospital	Quantitative RCT Feasibility Study T1: Baseline T2: week 6 T3: completion T4: 3 months	Paid Dinner Travel childcare	CLINICAL Not employed 47.3% Employed:37.7% (n= 20), BPL 73.7% (n=14) Disability 15% (N=8)	Test n=53 Control n=53 C = 70%	10 sessions Session sequence Mindful listening 3 SBS/ 3BB, LKM Phone/e mail reminders	Anecdotal: >Awareness, >acceptance, self-empowerment, >non-reactivity >self-care, < arousal/distress > compassion, > belonging
10. Bermudez *et al.* (2013)	America Women's Shelter	Qualitative Longitudinal >15 months measure Semi structured Interview x 3 T1: pre T2: mid-point T3: post T4: 3 month T5: focus group 9 months		CLINICAL low income African American/Asian American PTSD	N=53 C =13 AAc=10 Focus group n=12	Restructured 10 sessions Loving Kindness Meditation Soft music	> interpersonal, > socialisation, > assertiveness < stress >Serenity > awareness > emotion regulation > self-compassion.
11. Van der Gucht *et al.* (2014)	Dutch social welfare centre	Quantitative UCT Measures T1: 8 wks. pre T2: 1 wk pre T3: 1 wk post T4: 12 wk post		NON-CLINICAL Social Welfare Benefits	N= 42 AAc= 17 3Ac= 23	MBSR/MBCT 2 instructors	< all research spheres. > wellbeing < un-wellbeing

12. Eames *et al*. (2015)	British NHS Rural setting	Quantitative UCT Measures T0: pre T1: post	NONE	NON-CLINICAL Low income Women/Parents	N = 23 Benefits N= 13 PT employed N= 7 high drop out	MBW-P Shorter practices. 10 ≥ 30 mins. Social interaction & break Theory taught: attachment & Three affect system model.	> stress > depression > Clinical status pre From 77% > 33% within concern < Wellbeing to clinically recovered

Note: UCT = Uncontrolled trial; N= total participants; C= completers; NC = non-completers; c=sessions completed; AAc= All assessments completed; 3Ac = 3 assessments completed;

T = when assessment given; D = Duration; MBRP-W = Mindfulness Relapse Prevention for Women; SUD = Substance use disorder; LKM + Loving kindness meditation;

BPL = below poverty line: MBW-P = mindfulness based wellbeing-parenting.

Table 5.

Participant health and attrition

Publication	Physical Health	Mental Health	Course Attrition: non-attendance & Drop-out
Roth & Creaser (1997)	Chronic pain Diabetes Migraine Angina/heart failure/ hypertension Asthma Cancer Chronic fatigue Crohn's disease, Fibromyalgia, HIV Hyperlipidaemia Obesity Psoriasis Rheumatoid arthritis Seizure disorder Traumatic brain injury.	Depression Anxiety Bereavement PTSD Psychosis Psychosocial stress Schizophrenia Addiction Recovery	Life circumstances beyond control Personal illness Family illness Death Imprisonment of a family member Inclement weather Securing employment Immigration problems Deportation
Roth & Robbins (2004)			Transport Childcare State-dictated work schedules
Abercrombie et al (2007)			Lack of time lack of interest Family responsibilities Care barriers African Americans distrust Less access in poor communities Immigrants fear of deportation Information lack re. health or research

Amaro et al (2014)	Addiction (SUD) Trauma	Scheduling conflicts with external agencies
Amaro et al (2009)	PTSD	Courts, medical providers, child protective services
Dutton et al (2013)	Abuse & PTSD	Retention of minority patients in SUD treatment
Van der Gucht et al (2014)		Health problems Child care Death of a family member Work scheduling

Table 6.

Sample sizes for research study

	Applicants	Excluded	**Accepted**
Total	107	3	104
MBSR participants	75	3	72
Wait list control	32	0	32

Table 10

Pre-training Responses and Themes

Pre-course Qualitative analysis of response to open ended query; Please tell me, what does the term 'wellbeing' mean to you? You can mention as many things as you like including mental or psychological and/or physical health issues, social relationships and activities and anything else you think of. There are no right or wrong answers.

Pre Course Coding details

ID	Response	Primary theme	Refined Primary theme	Overarching theme	Meta theme
6	Wellbeing? In simple terms feeling well.	Feeling Well	General health	Not feeling ill	*Having need of the necessary resources to manage difficulty and illness*
	But when there are concerns, stress or worries it can be difficult to deal with issues and remain feeling well. I think it is about feeling well.	Concerns, stress, worries	Stress reduction & coping	Managing difficulty	
		Deal with issues	Stress reduction & coping	Taking action	
		Feeling balanced	Emotional stability		
	I think it is about feeling balanced, reacting appropriately to events around us. That means physically as well as mentally.	Reacting appropriately	Emotional stability		
		Balanced exercise	Activities		
		Balanced eating and drinking	Physical health		
	Balanced exercise.	Balanced responses	Diet		
			Emotional stability		
	Balanced eating and drinking.	Control of temper	Emotional stability		
	Balanced responses – control of temper.	Balanced judgement	Emotional stability		
	Balanced judgement of events and friends and other people.	Being able to cope	Stress reduction & coping		
	Being able to cope with "regular" life.				
11	Contentment	Contentment	Happiness	Feeling positive	
	Being pain free	Being pain free	Physical health	Not feeling ill	
	Feeling valued	Feeling valued	Supportive relationships	Making connections	
	Feeling respected	Feeling respected	Supportive relationships	Having needs met	
	Being included	Being included	Social inclusion		
	Feeling safe and secure	Feeling safe and secure	Environment/living conditions		
	Having enough to eat	Having enough to eat	Food security/diet		
10	Having a positive outlook on life with a healthy body and mind and having a balanced lifestyle with good relationships and activities.	Positive outlook	Positive attitude	Feeling positive	
		Healthy body and mind	General health	Not feeling ill	
		Balanced lifestyle	General health	Making connections	
		Good relationships	Supportive relationships	Taking action	
		Activities	Activities		

18	Wellbeing means being happy when I get up in the morning Wellbeing means don't have to take lots of medication each day to me. Wellbeing means no stress or depression	Being happy Don't need to take lots of medication No stress or depression	Happiness Physical health Stress reduction and coping	Feeling positive Not feeling ill Managing difficulty
19	Wellbeing to me means getting out in the community and doing things – feeling connected to other people.	Getting out In the community Doing things Feeling connected	Social inclusion Activites Counteract Social exclusion	Making connections Taking action
22	Living day to day, being with yourself. Able to cope with daily pressure, living stress free. Being mentally stable. Being able to go into town without thinking everyone is out to get you.	Being with yourself Able to cope Living stress free Able to go into town Without thinking everyone is out to get you	Self-care Stress reduction and coping Stress reduction and coping Mental health Social inclusion	Taking action Managing difficulty Making connections
24	Peaceful mind Happy with myself Relaxed At ease To have energy and motivation	Peaceful mind Happy with myself Relaxed At ease To have energy and motivation	Happiness Self esteem Relaxation Relaxation Positive attitude	Feeling positive Taking action
26	The term wellbeing encompasses many parts of life including mental, physical, emotional wellbeing. A positive wellbeing means feeling good active emotionally sound etc. while a negative wellbeing means feeling down, inactive, emotionally unstable.	Mental, physical, emotional wellbeing Feeling good Active Emotionally sound Feeling down Inactive Emotionally unstable	Mental health Emotional stability Physical health Activities Emotional stability Emotional stability Activities Emotional stability	Managing difficulty Not feeling ill Taking action
27	Wellbeing for me means being physically, cognitively, socially and emotionally healthy, happy and well.	Physically, cognitively, socially and emotionally healthy Happy Well	Physical health Mental health Emotional stability Happiness General health	Not feeling ill Managing difficulty Feeling positive
32	Not needing to rely on others for help and support – becoming emotionally independent. Not feeling ill all the time and requiring medical intervention. Being able to cope with the normal stress of life.	Not needing to rely on others Emotionally independent Not feeling ill Able to cope with the normal stress of life	Self-care Emotional stability Physical health Stress reduction and coping	Taking action Managing difficulty Not feeling ill

36	Wellbeing means to me being in a state of peacefulness, relaxation and contentment within myself. Also having good friendships with people who are genuine.	Peacefulness Relaxation Contentment Good friendships	Happiness Relaxation Happiness Supportive relationships	Feeling positive Making connections
37	Feeling at one with self, being able to relax, less stress, more thoughtful clarity when thinking.	Feeling at one with self Able to relax Less stress More thoughtful clarity	Present moment awareness Relaxation Stress coping and reduction Present moment awareness	Feeling positive Managing difficulty
47	Wellbeing means to me a healthy positive attitude in all areas of life.	Healthy Positive attitude	General health Positive attitude	Not feeling ill Feeling positive
54	The condition of an individual or group and how it is coped with be it their mental health social or economic state. The measures taken in order for assessing your own life.	How it is coped with Mental health Social Economic state Assessing your own life	Stress reduction and coping Mental health Social inclusion Financial security Goal setting and achievement	Managing difficulty Making connections Having needs met Feeling positive
56	Wellbeing means being healthy and in control of your mind and thoughts and my body swimming and keeping fit is good for my health and wellbeing.	Being healthy In control of your mind My body swimming Keeping fit Health	General health Mental health Activities Physical health General health	Not feeling ill Managing difficulty Taking action
57	To look after myself better, take time for myself, help stress and anxiety, manage my emotions better. I am open minded and hopeful I can improve how I feel. Feel I am on edge all the time. I want to enjoy being a mother and not worry so much about what might happen. (2 year old has a very complex medical condition and in hospital a lot).	To look after myself Help stress and anxiety Manage my emotions Open minded & hopeful On edge all the time Enjoy being a mother Not worry so much	Self-care Stress reduction and coping Emotional stability Hope Emotional stability Supportive relationships Stress reduction and coping	Taking action Managing difficulty Feeling Positive Making connections
61	Relaxation and health.	Relaxation Health	Relaxation General health	Feeling positive Not feeling ill
63	Wellbeing means health and feeling good. For me it means good feelings and feeling positive.	Health Feeling good Feeling positive	General health Happiness Relaxation	Feeling positive Not feeling ill
69	Being at peace with brain. Being able to react properly.	At peace Able to react properly	Mental health Emotional stability	Managing difficulty

73	Mental health Physiological Physical health Social health	Mental health Physiological Physical health Social health	Mental health Physical health Physical health Social inclusion	Managing difficulty Not feeling ill Making connections

Table 11

Post training responses and themes

Post -course Qualitative analysis of response to open ended query; “Please tell me, what does the term ‘wellbeing’ mean to you? You can mention as many things as you like including mental or psychological and/or physical health issues, social relationships and activities and anything else you think of. There are no right or wrong answers.”

Post Course Coding details

ID	Response	theme	Sub theme	Overarching theme	Meta theme
6	Feeling at ease with myself and from that feeling at ease with others. Fulfilling my own objectives and therefore having a sense of achievement. Being able to contribute effectively at home, at work and at play. Living life as best as I can in any moment. Being fit and healthy.	Feeling at ease with myself and from that at ease with others Fulfilling my own objectives Sense of achievement Able to contribute Living life as best as I can In any moment Fit and healthy	Supportive relationships Goal setting and achievement Goal setting and achievement Social inclusion Present moment awareness Physical health	Confidence & self-esteem Taking part Healthy choices	Having the strength and self-confidence to make healthy choices and move forward in life
11	A balance between the spiritual, mental and physical. A balanced diet leading to maintained good health. Taking regular exercise and maintaining a wholesome discipline. Avoiding self-destructive practices. Keeping focused on having a positive outlook as far as that is possible. Not allowing resentment and bitterness into your life.	Balance Spiritual Mental Physical Diet Good health Regular exercise Wholesome discipline Avoiding self-destructive practices Positive outlook Not allowing resentment and bitterness into your life	General health Spirituality Mental health Physical health Diet General Health Self-care Self-care Positive attitude Emotional stability	Healthy choices Contentment Managing difficulty Taking part Moving forward	
10	A balance and mental and physical health with nourishing activities and relationships.	Balance Mental Physical health Nourishing activities relationships	General health Mental health Physical health Activities Supportive relationships	Healthy choices Taking part Confidence & self-esteem	

18	Wellbeing for me is health and happiness and I am working hard on all of those things and I am getting there and this course has help me greatly and will do more as life goes on.	Health Happiness	General health Happiness	Healthy choices Contentment
19	It has helped me mentally. I was in a bad place before I came here. I am so grateful for the help I have been given.	Mentally	Mental health	Managing difficulty
22	Peace of mind, of being able to focus on the now.	Peace of mind Able to focus on the now	Happiness Present moment awareness	Contentment Healthy choices
24	Being able to trust in self and others allows a confidence and contentment which means there is nothing to fear and a resilience to mental and physical illness develops.	Able to trust Confidence Contentment Nothing to fear Resilience to mental/physical illness	Confidence Confidence Relaxation Confidence Self-care	Confidence & self-esteem Contentment Healthy choices
26	Wellbeing describes a person's physical and mental state. It is influenced by a number of physical, psychological and social issues. A positive wellbeing is characterised by a stress free, healthy mind-set, conversely a negative wellbeing is characterised by a stressful, unhealthy mind-set.	Physical Mental Psychological Social Stress free Healthy mind-set Stressful Unhealthy mind-set	Physical health Mental health Mental health Social inclusion Stress reduction & coping Mental health Stress reduction and coping Mental health	Healthy choices Managing difficulty Taking part Developing Resilience
27	Wellbeing is all encompassing, physically, psychologically, mentally, socially, emotionally and spiritually.	Physically Psychologically Mentally Socially Emotionally Spiritually	Physical health Mental health Mental health Social inclusion Emotional stability Spirituality	Healthy choices Managing difficulty Taking part Contentment
31	Paying attention to what is really going on – trusting that you always have options when life is tough. Mindfulness helps deal with everything to panic, to malaise and even gives a chink of hope for the species and the earth. Mindfulness helps with taking positive steps. So being one more fully is wellbeing, being kind to yourself and others is wellbeing – meeting good people and getting to know them is wellbeing.	Paying attention Trusting You always have options Mindfulness helps Chink of hope Positive steps Being one more fully Being kind to yourself and others Meeting good people	Present moment awareness Confidence Making choices Present moment awareness Hope Positive attitude Present moment awareness Self-care Supportive relationships	Healthy choices Confidence & self-esteem Moving forward

32	Wellbeing is about creating a balance between what crap the past has dumped on me and finding a new future – where it is possible to take part in the world again. I want to be succeed in the working world and bring the benefits back to myself and my family.	Balance Finding a new future Take part in the world again Succeed in the working world Bring the benefits back to myself and my family	General health Positive attitude Social inclusion Goal setting and achievement Supportive relationships	Healthy choices Moving forward Taking part Confidence & self-esteem
36	Coping with mental health problems and not allowing chronic anxiety to control me. Being less “full on” with a girlfriends in an all or nothing attitude to my relationships which often end up with me being badly hurt in a “break up” and feeling depressed and suicidal.	Coping Mental health problems Not allowing chronic anxiety to control Attitude to my relationships	Stress reduction and coping Mental health Self-care Positive attitude Supportive relationships	Developing resilience Managing difficulty Healthy choices Moving forward Confidence & self-esteem
37	Happiness and comfort, feel good in spirit, health being able to communicate thoughts positively with no feeling of rejection.	Happiness Comfort Feel good in spirit Able to communicate thoughts positively No feeling of rejection	Happiness Relaxation Spirituality Communication Emotional stability	Contentment Confidence & self-esteem
47	Physically and mentally healthy.	Physically Mentally healthy	Physical health Mental health	Healthy choices Managing difficulty
54	The state of being comfortable, healthy and happy.	Comfortable Healthy Happy	Relaxation General health Happiness	Contentment Healthy choices
56	Wellbeing is feeling less anxious and stressed.	Less anxious and stressed	Stress reduction and coping	Developing resilience
57	Being mindful and looking after myself, taking time to myself.	Mindful Looking after myself Taking time to myself	Present moment awareness Self-care Self-care	Healthy choices
61	It means a lot to me. I have got the confidence to do the things I want to do.	Confidence	Confidence	Confidence & self-esteem
63	Wellbeing means a sense of calm tranquillity and physical good health. A safe haven. Wellbeing to me means a sense of the above.	Calm Tranquillity Physical good health Safe haven	Relaxation Relaxation Physical health Mental health	Contentment Healthy choices Managing difficulty

69	To be confident around people. To be patient, to have clarity. To take little steps instead of trying to do everything. I have bipolar and PTSD. I have lived in turmoil all my life and been on medication, this course has helped me so much. I'm not going round in circles. I can only say I feel born again, I have hope, faith and feel brighter for my future. I am also calmer, more positive with my children and friends.	Confident around people Patient Clarity To take little steps Hope Faith Brighter for my future Calmer More positive with my children and friends	Confidence Present moment awareness Present moment awareness Self-care Hope Confidence Positive attitude Relaxation Supportive relationships	Confidence & self-esteem Healthy choices Moving forward Contentment
73	Health Happiness Fitness Happy family Calmness Freedom Mindfulness has helped me slow life down. Happier in life. Closed the door on my past. Doors open for my future and present.	Health Happiness Fitness Happy family Calmness Freedom Mindfulness Happier in life. Closed the door on my past. Doors open for my future and present.	General health Happiness Physical health Supportive relationships Relaxation Making choices Present moment awareness Happiness Positive attitude Present moment awareness	Healthy choices Contentment Confidence & self-esteem Moving forward

Table 12

Initial themes (pre-training)

Themes	direct text references	Properties	Example of participant response
1. Environmental/living conditions	1	Feeling safe	Feeling safe and secure
2. Financial security	2	Having enough to live	Having enough to eat
3. Happiness	8	Feeling good	Wellbeing means being happy when I get up in the morning
4. General Health	11	Feeling well	Wellbeing? In simple terms feeling well.
5. Mental Health	7	Stability	Being mentally stable. Being able to go into town without thinking everyone is out to get you.
6. Emotional stability	14	Managing difficult feelings	Balanced responses – control of temper.
7. Physical Health	9	Not Feeling ill	Not feeling ill all the time and requiring medical intervention.
8. Diet	1	Taking care of self	Balanced eating and drinking
9. Activities	6	Being more active	Swimming and keeping fit is good for my health and wellbeing.
10 Positive attitude	4	A positive approach to life	Having a positive outlook on life
11 Goal setting & achievement	2	Feeling good about self	Enjoying simple things from enjoying a shower to feeling personal progress.
12 Hope	1	Positive future	I am open minded and hopeful I can improve how I feel.
13 Self esteem	1	Feeling good about self	Happy with myself
14 Present moment awareness	4	Accepting life	Wellbeing means to me to be open to life and to view difficulties more as they are rather than the extra drama and fear we add to difficult times.
15 Self-care	3	Taking care of self	To look after myself better, take time for myself
16 Social Inclusion	6	Being part of community	Wellbeing to me means getting out in the community and doing thing – feeling connected to other people.
17 Stress Reduction & Coping	11	Being able to manage	Being able to cope with the normal stress of life.
18 Present moment awareness Relaxation	5	Feeling positive	Feeling at one with self, being able to relax
19 Supportive relationships	5	Feeling valued	Having loving family and friends and appreciating them

Table 13

Initial Themes (Post-training)

	themes	No of direct references	Properties	Example of participant response
1	Happiness	6	Contentment	Happier in life.
2	General Health	7	Healthy choices	A balance of mental and physical health with nourishing activities and relationships.
3	Mental Health	12	Managing difficulty	Coping with mental health problems and not allowing chronic anxiety to control me.
4	Emotional stability	3	Managing difficulty	Not allowing resentment and bitterness into your life.
5	Physical Health	8	Healthy choices	Being fit and healthy
6	Diet	1	Healthy choices	A balanced diet leading to maintained good health.
7	Hobbies, activities & learning	1	Taking part	Where it is possible to take part in the world again. I want to be succeed in the working world and bring the benefits back to myself and my family.
8	Positive attitude	6	Moving forward	Closed the door on my past. Doors open for my future and present.
9	Making choices	2	Self esteem trust/confidence	Paying attention to what is really going on – trusting that you always have options when life is tough.
10	Goal setting & achievement	3	Self-esteem/trust/confidence	Fulfilling my own objectives and therefore having a sense of achievement.
11	Confidence	7	Self esteem trust/confidence	I have got the confidence to do the things I want to do.
12	Spirituality	3	Contentment	Happiness and comfort, feel good in spirit.
13	Hope	2	Moving forward	I can only say I feel born again, I have hope, faith and feel brighter for my future.
14	Self esteem	1	Self esteem trust confidence	Being able to trust in self and others allows a confidence and contentment which means there is nothing to fear and a resilience to mental and physical illness develops.
15	Present moment awareness	10	Healthy choices	Living life as best as I can in any moment.
16	Self-care	8	Healthy choices	Being mindful and looking after myself, taking time to myself.
17	Communication	1	Self esteem trust/ confidence	Being able to communicate thoughts positively with no feeling of rejection.
18	Social Inclusion	4	Taking part	Being able to contribute effectively at home, at work and at play.
19	Stress Reduction & Coping	4	Resilience	Avoiding self-destructive practices.
20	Relaxation	7	Contentment	Wellbeing means a sense of calm tranquillity
21	Supportive Relationships	7	Self-esteem/ trust/confidence	Feeling at ease with myself and from that feeling at ease with others.

Table 14

Refined primary themes and overarching themes (pre-training)

Refined primary theme	Overarching theme	frequency
Emotional stability, Stress Reduction & Coping, Mental Health Present moment awareness	Managing difficulty	37
General health, Physical health	Not feeling ill & health	20
Happiness, Positive attitude, goal setting, hope, relaxation	Feeling positive	20
Supportive relationships, Social Inclusion	Making connections	11
Activities, Self-care, Self-esteem, Diet,	Taking action	11
Financial security, Good environment,	Having needs met	3

Meta theme; having the necessary resources to manage difficulty Illness/health

Table 15

Refined Primary themes and overarching themes (post-training)

Refined primary-themes (In order of frequency)	Overarching Themes	frequency
Present moment awareness, self-care General health, Physical health, Diet,	Healthy choices	34
Confidence, Supportive relationships, Goal- setting , Making choices, Self-esteem, Communication.	Confidence/self esteem	21
Happiness, relaxation Spirituality	Contentment	16
Mental health, emotional stability	Managing difficulty	15
Positive attitude, Hope	Moving forward	8
Activities, Social inclusion	Taking part	5
Stress reduction & coping	Developing resilience	4

Meta Theme; Having the strength and self-confidence to make healthy choices and move forward in life

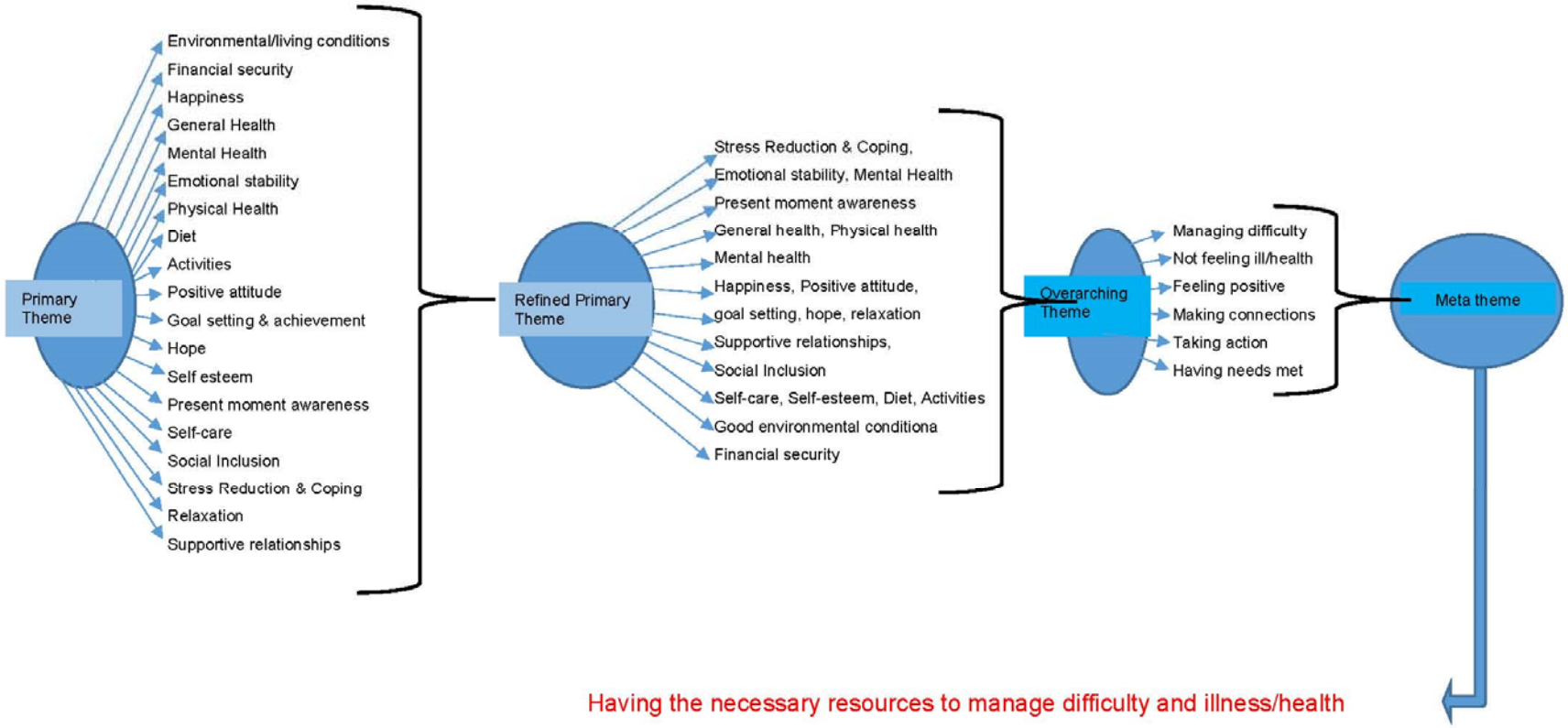


Figure 18. Pre-training map of thematic development

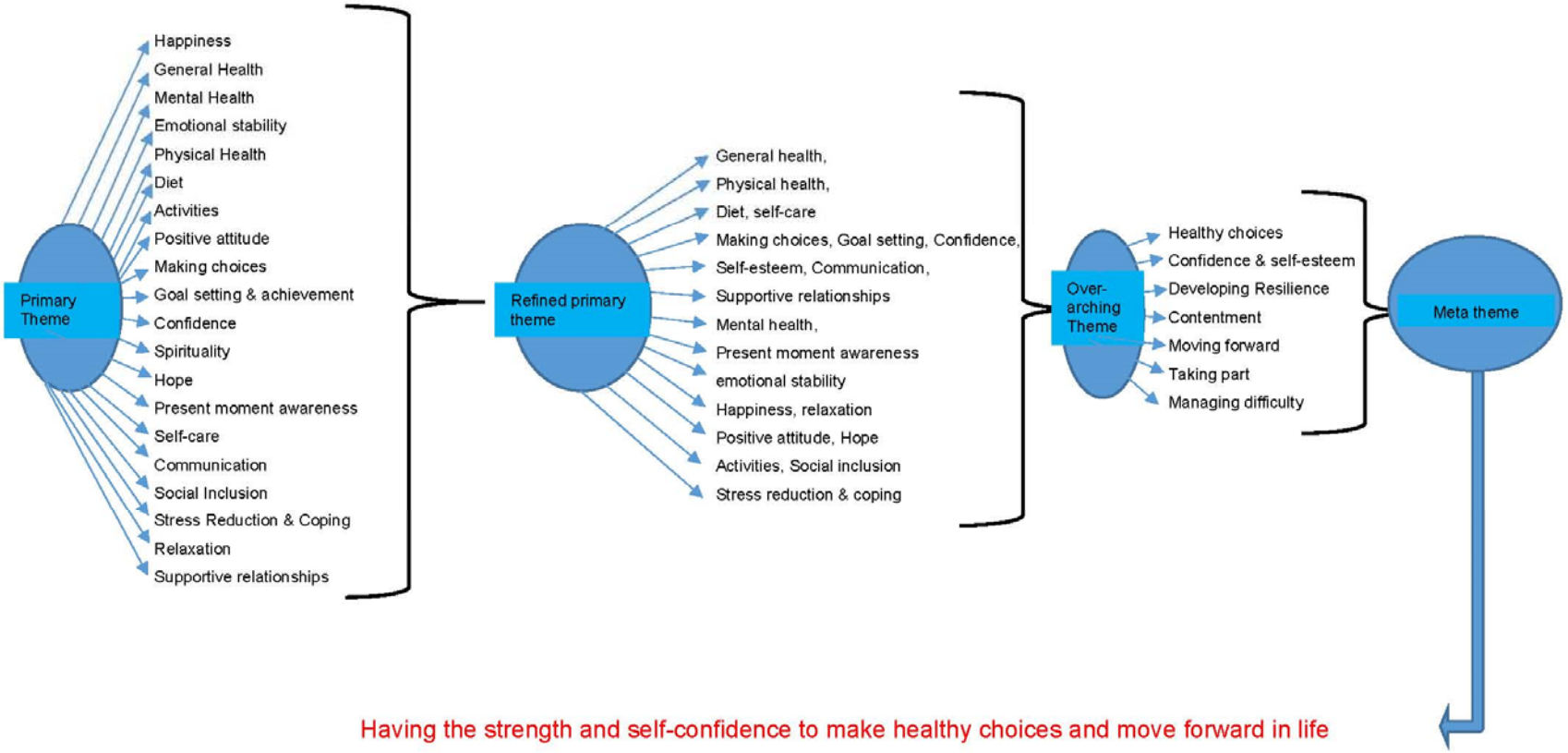


Figure 19. Post-training map of thematic development

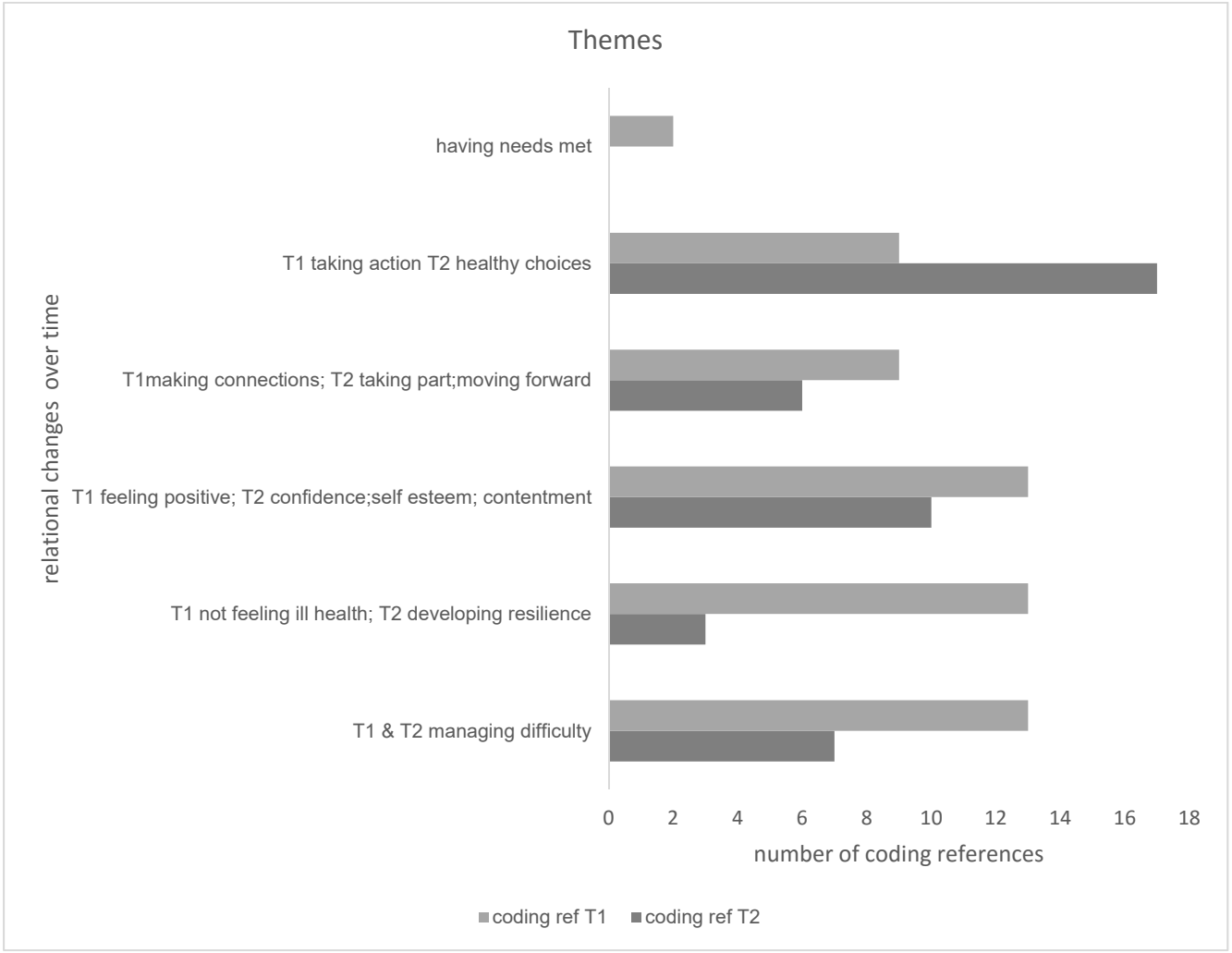
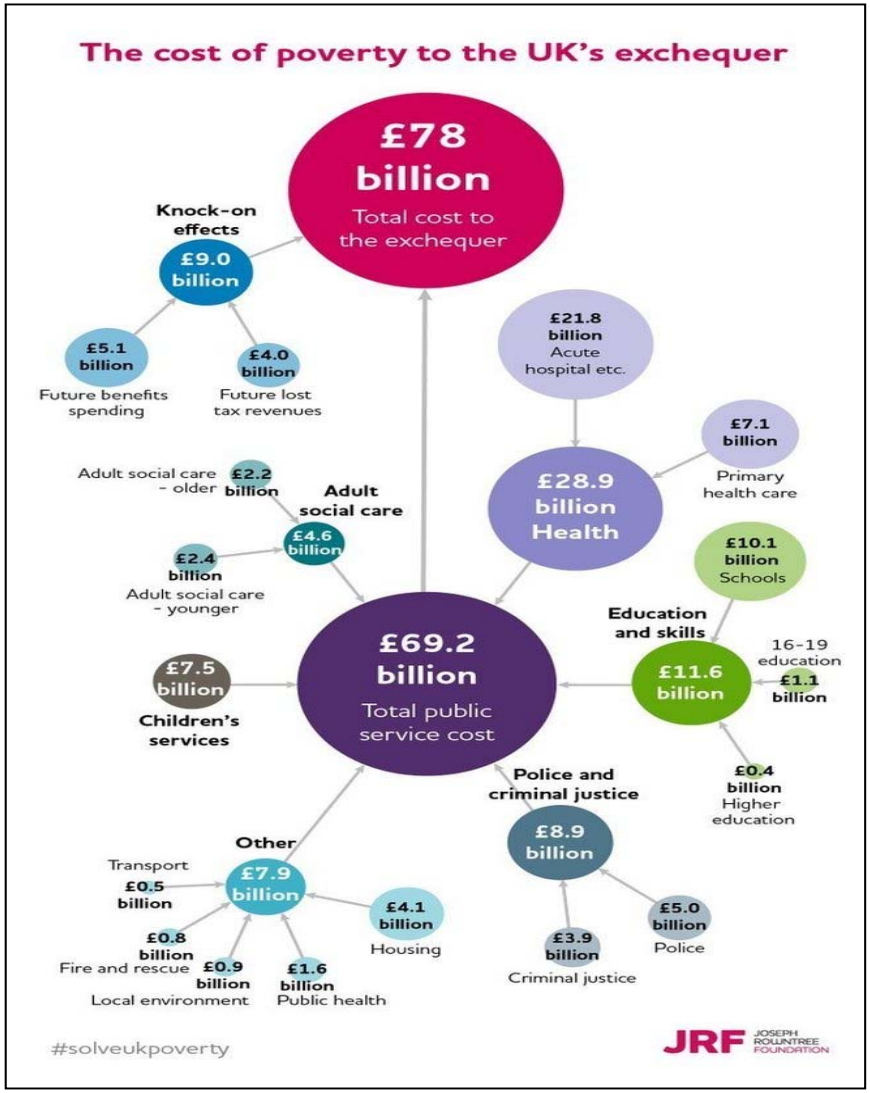


Figure 20. Relational transitions between overarching themes



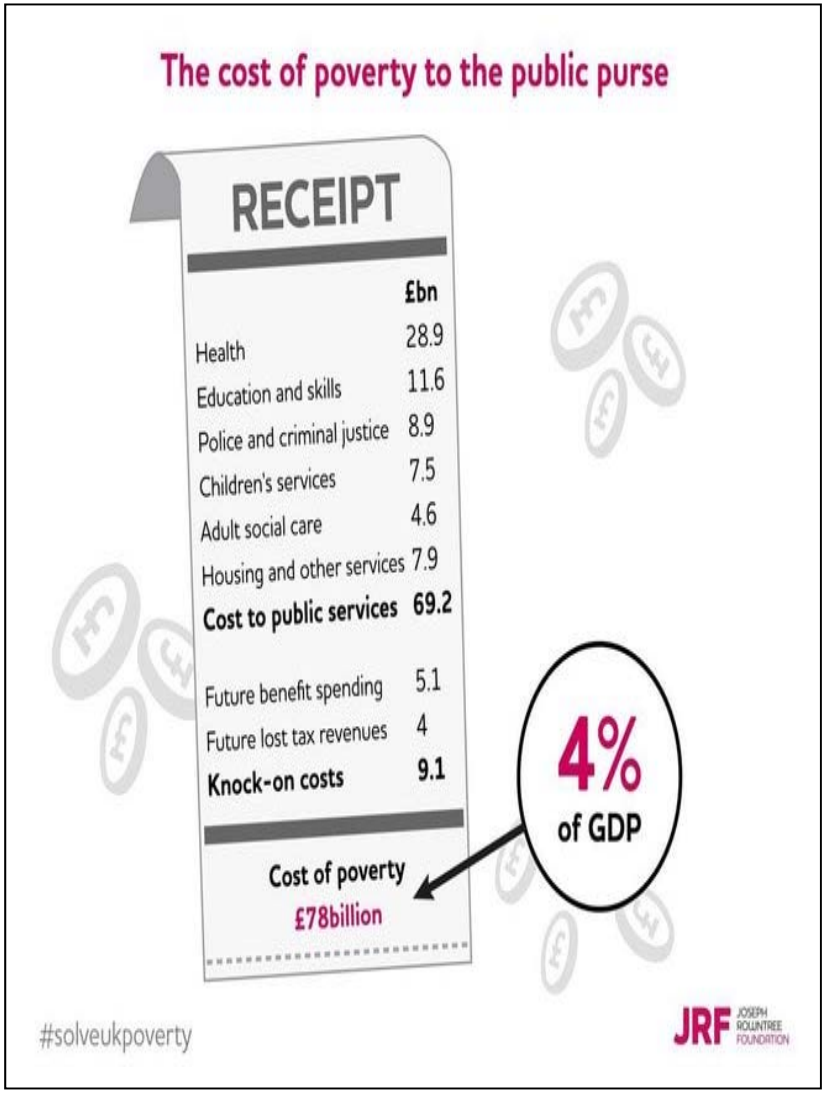


Figure 23. The cost of poverty to the UK

Appendix

Appendix

Appendix A

Personal communication 1 and 2

Kathleen van der Gucht

Personal Communication 1

Dear Ven Karma Jiga,

This sounds as a very interesting project!

The program adaptations we used were:

- Shorter sessions, only 90 minutes
- The core components (such as body scan, sitting meditation with a focus on the breath, awareness of physical sensations, thoughts and emotions, walk meditation, mindful movement = yoga, loving kindness practice) originating from MBSR and MBCT programs were part of the training but the exercises were shorter and more repetitious. We experienced that it was more challenging for these people to focus attention on a single activity for longer periods of time therefore we choose to work with shorter exercises and this worked well for them.

So basically the MBSR/MBCT protocol was followed with the main difference working with shorter exercises and more repetitious.

I hope this information is helpful.

I wish you a lot of success with the project and if I can be of any help just let me know.

Warm regards,

Katleen

Katleen Van der Gucht, PhD

Postdoctoral researcher

KU Leuven

Faculty of Psychology & Educational Sciences

Tiensestraat 102 (box 3720)

3000 Leuven / Belgium

T: ++32 (0)16 37 31 83

https://ppw.kuleuven.be/mindfulness

Appendix

Appendix A

Personal communication 2

Kathleen van der Gucht

Indeed we used a mixture of MBSR/MBCT.

For the psychoeducation part we used examples based on the context those people are living in like the stress you feel due to living with less money than you need, we also had some psychoeducation on communication – how to deal with difficult conversations, what do you feel in your body at such moments etc.

A lady who worked in a social welfare center and was used to work with these people for many years helped with the adjustments. She was a certificated mindfulness trainer and used her experience with people living in poverty. She was also one of the trainers in the study.

Best regards

katleen

From: KarmaJiga[mailto:karmajiga@nilupul.org]
Sent: Tuesday,September22, 2015 10:40 AM
To: Katleen Van der Gucht <katleen.vandergucht@ppw.kuleuven.be>
Subject: RE: 2014 study adaptions

Hi Katleen

Thanks for that!

That helps.

I am currently looking at how to take this project forward through making programme adaptions.

I'm presuming from your reply that both courses were a mixture of MBSR/MBCT?

Look forward to your reply

Thanks again

Appendix

Appendix B

Page 1

Local Justification (press).

City's rising tide of mental ill health linked to poverty

DUNDEE: Greatest problems are reported in areas of severe deprivation

MARK MACKAY

A rising tide of poverty is having a catastrophic impact upon the mental health of Dundonians, shocking new figures have revealed.

The city now has a higher prevalence of people medically diagnosed with a mental health problem than other parts of Tayside and Scotland.

The mental wellbeing of residents has also reduced significantly over the past 12 months, with the greatest problems reported in areas of severe deprivation.

The worrying findings are contained in the annual report of Dundee's chief social worker and are of significant concern to the city council.

It has pledged to launch a new mental health strategy in 2016 in an effort to reverse the trend and provide residents with the support they need.

Just last week The Courier revealed NHS Tayside now has the country's worst record on waiting times for children with mental health problems, with less than a third of the 532 requiring support between July and September seen within 18 weeks.

Youngsters with problems such as depression, ADHD and early onset psychosis wait an average of six months in Tayside – compared with nine weeks nationally.

NHS Tayside said that the worrying increase in mental health problems is directly linked to the city's struggle with poverty.

"There is a strong association between social and economic disadvantage and poor mental health and wellbeing," said Dr Drew Walker, director for public health.

"Early intervention will be vital if we are to address this.
COUNCILLOR KEVIN KEENAN

Dr Walker said significant steps had been taken by NHS Tayside and its partners to provide and improve services for those in need.

"NHS Tayside has been involved in a number of awareness-raising activities across communities encouraging anyone with mental health issues to access the help that is available," he said.

"NHS Tayside works in partnership with the Dundee Healthy Living Initiative and Equally Well on projects that aim to improve community mental health and wellbeing in Dundee and these have had a positive impact on services, patients and the community.

"It is also positive news that more people are taking the step of going to their GP to seek help for mental health issues.

"If anyone is worried that they or a friend or family member is suffering from a mental health condition, we would encourage them to speak to their GP in the first instance."

Dundee Labour group leader Councillor Kevin Keenan is among those keen to see the city's new mental health strategy introduced as soon as possible.

He said: "The number of people with mental health problems in Dundee is growing.

"That is most worrying when you look at the increase in young people suffering from mental health issues in particular.

"Early intervention will be vital if we are to address this."

NHS Tayside recommends that no one suffer in silence and anyone with concerns about their mental health can call NHS 24 on 111 or the Samaritans on 0845 7 90 90 90.

The confidential service Breathing Space can also be contacted on 0800 838587 or by emailing www.breathingspacescotland.co.uk.

mmackay@thecourier.co.uk

Appendix

Appendix B

Page 2

New figures reveal shocking scale of child poverty in Dundee

COMMISSION:
New body set up to address issues of inequality in city

MARK MACKAY

The wages brought in by Dundee families must increase if the city is to break free from the grasp of a crippling poverty crisis, local leaders have been told.

One in four children in the city are now said to be living in poverty and that number jumps to one in three in some of the worst areas of deprivation.

The latest figures from the Child Poverty Action Group reveal that of Scotland's 32 local authority areas only Glasgow has a greater problem.

Over half of those in poverty in Dundee are in "working" families and addressing that issue is one of the key challenges facing the Dundee Fairness Commission.

It has been set up to help address poverty and inequality in the city and had its second meeting this week at which low pay was identified as a key factor behind Dundee's ills.

"We currently have a frankly scandalous situation where one in five of Scotland's children are growing up in poverty," Child Poverty Action Group director John Dickie said.

"That is over 220,000 children growing up in families with incomes that are inadequate for the task of giving them a fair start in life in 21st Century Scotland.

> **"There are, however, things that can be done at a local level in terms of working with local employers in all sectors to ensure that parents get the living wage and are paid decently.**
>
> **JOHN DICKIE, CHILD POVERTY ACTION GROUP DIRECTOR**

"Sadly, the harsh reality is that in Dundee an even greater proportion of children are growing up in poverty, with one in four children living below the poverty line.

"In some areas that figure jumps to one in three children.

"There are, however, things that can be done at a local level in terms of working with local employers in all sectors to ensure that parents get the living wage and are paid decently.

"It is also important that families here in Dundee receive the support that they are entitled to and do not miss out on vital benefits and tax credits."

Also speaking at the meeting was John McKendrick, a senior lecturer at the Glasgow School for Business and Society at Glasgow Caledonian University.

He praised the efforts of Dundee City Council to help tackle poverty, but said much more would need to be done in the years ahead.

"This is a bad news story for Dundee but that is not to say that there is anything wrong with the types of things that are being done in Dundee," he said.

"Dundee City Council has a tremendous amount of services that it provides but it has some tough decisions to make in the years ahead as budgets are squeezed.

"We must do everything we can locally and nationally to ensure that those who are most vulnerable are least affected by those tough decisions."

In the coming months, the Dundee Fairness Commission will look to address some of the most pressing issues facing the city through a series of monthly meetings open to the public.

mmackay@thecourier.co.uk

Appendix

Appendix B

Page 3

The National/Friday, March 27, 2015 5

Without action young adults risk long-term poverty trap

BY KATHLEEN NUTT

A GENERATION of young Scots risk being trapped in poverty long-term, unless action is taken to tackle a lack of decent jobs and affordable homes, experts have concluded.

The warning follows a study by the New Policy Institute (NPI) for the Joseph Rowntree Foundation (JRF), which revealed 16- to 29-year-olds were most likely to experience severe financial hardship.

It found the number of young people living in poverty – measured as 60 per cent of median income – soared to 220,000 over the last decade, despite a reduction among other age groups.

It also highlighted that around one in eight under-25s was unemployed – more than twice the rate of any other age group – and 29 per cent of people in poverty live in privately-rented homes.

Over the last 10 years, the number of people in poverty in the social rented sector fell sharply, whereas the number in the private rented sector soared.

The study is the latest in a series of projects by different charities and organisations which have found growing levels of poverty in Scotland and the rise in the number of people having to turn to food banks to feed themselves and their families.

NPI researchers also found that men in Scotland have a lower life expectancy than men in England at all levels of deprivation, but the difference is greatest in the most-deprived areas.

Echoing the results of previous reports, it also found that 43 per cent of people in poverty live in working households, despite those who are low-paid being better-qualified than ever.

The researchers also examined welfare reforms and found that in 2013, almost one in six claimants of Jobseeker's Allowance had been referred for a benefit sanction each month.

It also drew attention to a "postcode lottery" of sanctions, with on average, one in six to seven jobseekers in Clackmannanshire, Aberdeenshire, Aberdeen and Angus referred for a sanction each month, around twice as many as in North Ayrshire, South Lanarkshire and East Ayrshire.

The JRF wants more employers to pay the living wage, plus increased training opportunities for people in low-paid work, and more affordable homes.

Chief executive Julia Unwin said: "Falls in child and pensioner poverty over the past decade in Scotland show it can be reduced.

"But sustained action must be taken to stop a lack of high-quality work and a shortage of affordable homes from trapping a generation of young people in poverty."

Keith Dryburgh, Citizens Advice Scotland policy manager, said: "The numbers of young people hit by poverty is worrying."

Julie Webster, co-ordinator of Greater Maryhill Foodbank in Glasgow, said the report's findings confirmed what she was seeing first hand.

"Most people we see are as a result of problems with benefits, either they have been sanctioned or there's been a delay in their payments," she said.

"Probably the single biggest group of people we see are young men between the ages of 19 to 29. For me this is a massive concern. They are the sort of group who turn to drugs and alcohol. I think they are also the group most likely to take their own lives when they feel there is no way out."

Social justice secretary Alex Neil said: "The Joseph Rowntree Foundation recognises the role we can all play in tackling poverty and acknowledges the positive effects of the Scottish Government's effort to mitigate the worst of the UK Government's welfare cuts."

Labour's shadow Scotland secretary Margaret Curran said her party would extend the living wage, ban zero-hour contracts and invest more than £1 billion in jobs, training and education.

Graeme Brown, director of the homeless charity Shelter Scotland, said young adults are also at higher risk of homelessness.

"While the overall number of homeless applications is decreasing, the rate of homelessness in Scotland is higher for young people than other age groups. In real terms, 10,794 young people aged 16-24 faced the human tragedy of homelessness last year."

Appendix

Appendix C

Informed Consent Form

PRIFYSGOL
BANGOR
UNIVERSITY

Consent Form

Title of Project: An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

Principal Investigator: Ms Eluned Gold
mhsa0b@bangor.ac.uk

Researchers: Alexander Campbell Duncan (AKA Ven. Karma Jiga)
pspefd@bangor.ac.uk

Dr Dusana Dorjee
pssa07@bangor.ac.uk

1. I confirm that I have read and understand the Participant Information Sheet for the above study and have had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and this will not affect any services I might receive from health or social services nor will it impact on any benefits I receive.
3. I understand that I can withdraw from the study any personal data (i.e. data which identify me personally) at any time.
4. I understand that anonymised data (i.e. data which do not identify me personally) collected during the study may be used in future publications.
5. I understand that any information recorded in the investigation will remain confidential and no information that identifies me will be made publicly available.
6. I agree / do not agree (delete as applicable) to take part in the above study.

Name of Participant	Date	Signature
Researcher	Date	Signature

Appendix

Appendix D

Course Application Form

MBSR Application Form*

Is your hourly employment rate below the living wage? (£7.85 / hour) Yes _____ No _____

Are you in receipt of state benefits? Yes _____ No _____

Self-referral Yes _____ No _____ Organisation Referral Yes _____ No _____

Organisation Name (If applicable) _____

Your details (Please print name)	Referrers details (If Applicable)
Name _____	Referrer _____
Email _____	Email _____
Contact No. _____	Contact No. _____

GP's Name _____ GP's Address _____

_____

If you have any difficulty doing simple exercise please tell us about it below:

If you have had any mental ill-health, e.g. anxiety or depression in the last six months tell us here:

If you are taking any medication at present, please say what it is and what it is for:

If you are experiencing stressful life-events at present or recently, briefly tell us here:

Can you tell us about any barriers which could prevent you from taking part fully in the course?
(i.e. difficulty reading and writing, hearing impairment, childcare, travel, family carer...)

N.B. All personal data will be processed in accordance with the provisions of the Data Protection Act 1998.

* Participants will be invited to contribute to research investigating the efficacy of MBSR in enriching community wellbeing within regeneration areas

MBSR at the Crescent Community Facility is funded by Nilupul Foundation, through an award from The Communities & Families Fund, a joint initiative between Scottish Government and the Big Lottery Fund in Scotland.

Appendix

Appendix E

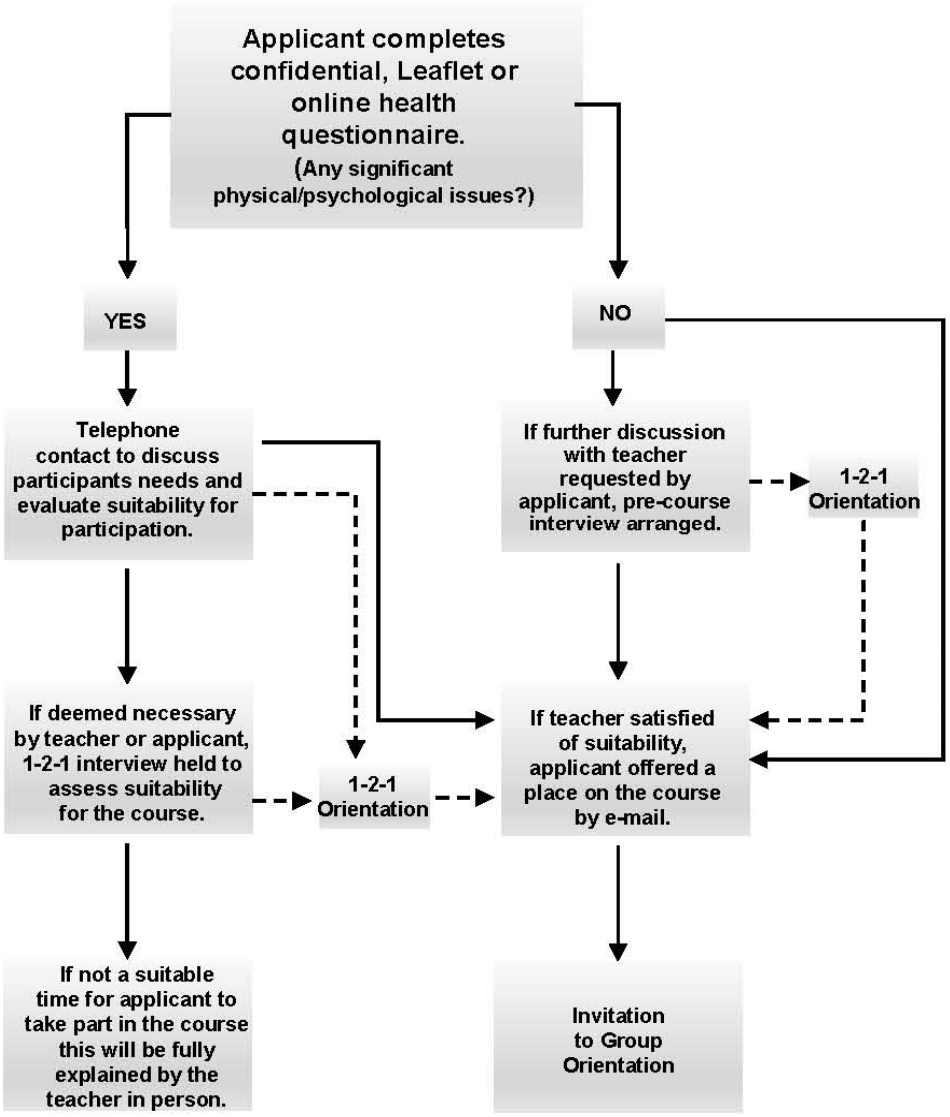
Example poster/flyer

Appendix

Appendix F

Assessment and Orientation 1

(Flow diagram)

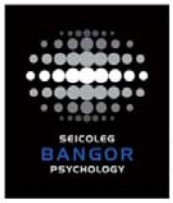


Appendix

Appendix G

Participant Information Sheet

Page 1



PRIFYSGOL
BANGOR
UNIVERSITY

PARTICIPANT INFORMATION SHEET

An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

1. What is this research study about?

Many people in Dundee are experiencing the effects of stress caused by consumerism, poverty, rising debt and welfare reform. This study will investigate how taking part in an 8 week Mindfulness-Based Stress Reduction (MBSR) programme effects the wellbeing of individuals who live in the areas of Dundee hardest hit by these issues(Dundee City Council, Fairness Strategy and Action Plan, 2012).

Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

2. Why have I been asked to take part?

After discussions between the course leader, Alexander Duncan (Karma Jiga) and local community support workers, you have been invited to take part in this study as you are 18 or over and live in one of Dundee's Regeneration areas.

3. What if I don't want to take part?

You are not obliged to take part. Your participation is entirely voluntary.
Even if you do decide to take part, you can choose to withdraw at any time during the study, without giving any reason. This will not affect any services you might receive from health or social services nor will it impact on any benefits you receive.

4. What will happen if I take Part?

If you choose to take part in the study, after reading this information sheet you will be asked to give your consent.

After giving your consent, we will ask you to fill in some questionnaires relating to mindfulness and wellbeing and provide some basic (age group, gender, family status, employment, housing etc.) information which usually takes around 15 to 20 minutes, in addition to the health (pre-existing psychological and physical conditions) information already given.

You will then be eligible to take part in a mindfulness programme. This involves attending a 2 hour orientation session, eight 2 hour weekly classes, held once a week at the Crescent Community Centre, Whitfield and undertaking a daily programme of personal mindfulness meditation practice, which forms the main part of the course.

Appendix

Appendix G

Participant Information Sheet

Page 2

The teaching, correlation and finalising of research data will be carried out free of charge by Alexander Duncan (AKA Karma Jiga) as part of a masters research project.

9. Has this study been approved by an ethics committee?
The study will be carried out according to the ethical guidelines of the British Psychological Society and has been approved by the Research Ethics Panel of Bangor University.

10. Who do I contact about the study?

Principal Investigator: Ms Eluned Gold

Head of Personal & Professional Development
Centre for Mindfulness Research & Practice
School of Psychology
Bangor University
Bangor
Gwynedd
LL57 2AS

mhsa0b@bangor.ac.uk

Researchers: Alexander Campbell Duncan (AKA Ven. Karma Jiga)
3 Glenesk Avenue
Dundee
DD3 6AR

pspefd@bangor.ac.uk

Dr Dusana Dorjee
Lecturer & Research Lead
Centre for Mindfulness Research & Practice
School of Psychology
Bangor University
Bangor
Gwynedd
LL57 2AS

pssa07@bangor.ac.uk

Who do I contact with any concerns about this study?
If you have any concerns or complaints about this study, or the conduct of individuals conducting this study, then please contact:

Mr Hefin Francis
School Manager
School of Psychology
Bangor University
Adeilad Brigantia
Penrallt Road
Gwynedd
United Kingdom
LL57 2AS
Tel: +44 (0) 1248 388339 or e-mail h.francis@bangor.ac.uk.

Thank you for taking the time to read this.

Appendix

Appendix G

Participant Information Sheet

Page 3

Your travel expenses will be reimbursed on attending the course (up to a maximum value of £5 per session) and crèche facilities will be provided.

At the conclusion of the course, you will again be asked to complete the questionnaires about your personal experiences as before, which usually takes around 15 to 20 minutes and given information about how and where to continue your practice should you wish.

5. Are there any benefits or risks?

Taking part in an MBSR course can help you to manage psychological and physical difficulties you may experience and can help improve your general wellbeing.

There are no risks associated with taking part in an MBSR course, however, participants are invited to turn towards difficult experiences and may wish to seek additional support during the course. You may choose to seek:

- One to one support provided by the course leader,
- a friend to confide in (buddy),
- help and advice from your GP,
- or counselling support from organisations such as,
    - INSIGHT Counselling
      15 South Tay Street, Dundee, DD1 1NU
    - TAYNET is the North Fife & Tayside Counselling Resources Network
      http://taynet.org.uk/

There are also a number of national organisations who can offer support and advice through regional offices and online resources such as,

- www.relate.org.uk
- www.mind.org.uk

6. Will my part in this study be kept confidential?

All the data you provide will be kept strictly confidential and used only for the purpose of this research. Your confidentiality and anonymity will be preserved by allocating your data with an ID number which will be kept separate from all other data that can identify you.

Data will be stored securely for 5 years after which time all personal information will be destroyed by shredding. If you choose to withdraw from the study you have the right to request that your data is also withdrawn and destroyed.

Bangor University is registered with the Information Commissioner's Office who implements the Data Protection Act 1998. All personal data on participants will be processed in accordance with the provisions of the Data Protection Act 1998.

7. What will happen to the results of the research study?

The results of the research will be used as the basis for a Thesis for a Master's Degree at the Centre for Mindfulness Research & Practice at Bangor University and may be published in a peer-reviewed academic journal.

Written statements and quotations made in class may be used in publications but no participant will be identified in any report or publication.

8. Who is funding this study?

The course costs to provide MBSR at the Crescent Community Facility are funded by Nilupul Foundation, a local Dundee charity, through an award they received from The Communities & Families Fund, a joint initiative by the Scottish Government and the Big Lottery Fund in Scotland.

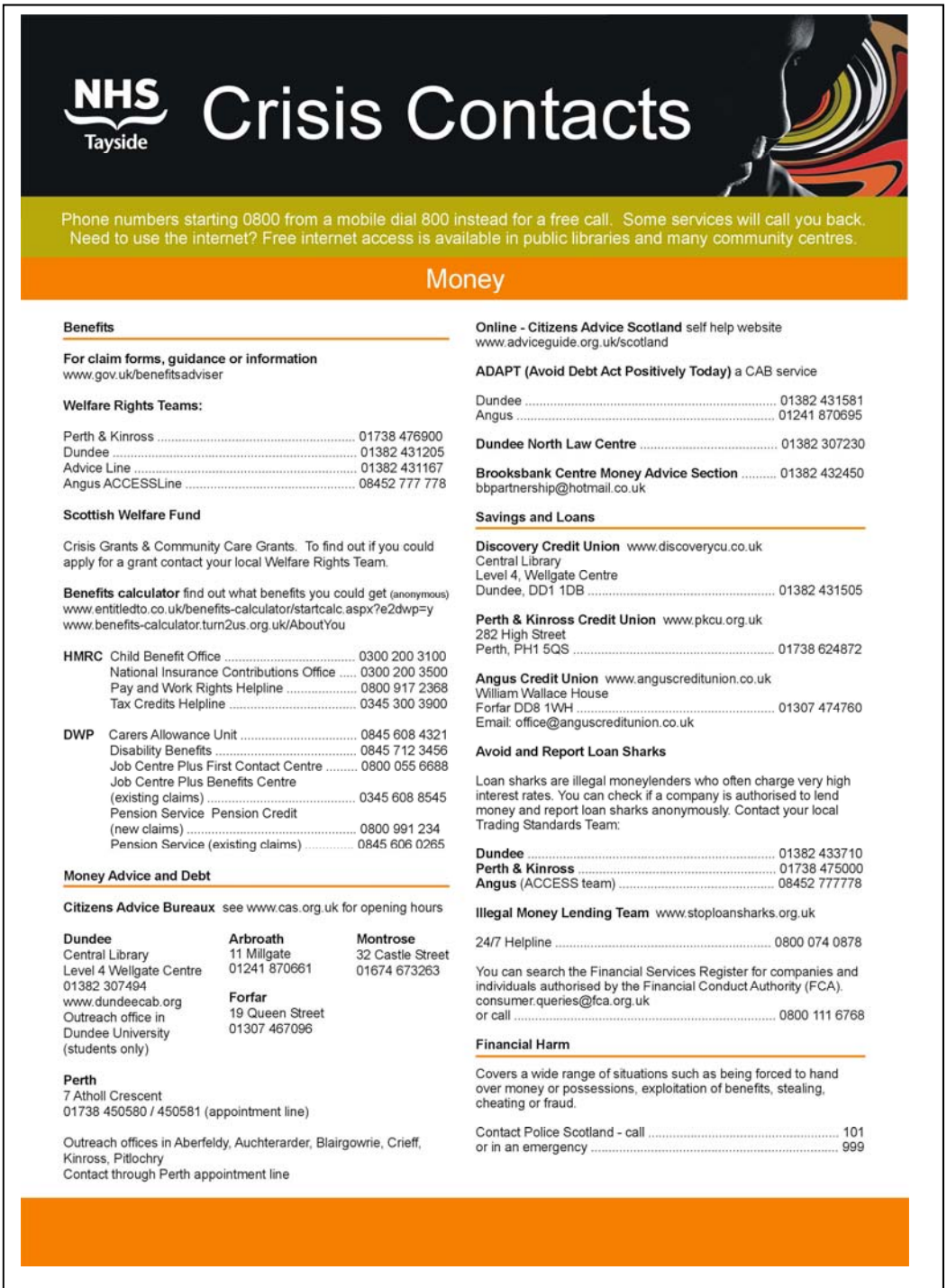
Appendix

Appendix G

Participant Information Sheet

Additional Information if requested

NHS Crisis contacts



NHS Tayside

Crisis Contacts

Phone numbers starting 0800 from a mobile dial 800 instead for a free call. Some services will call you back.
Need to use the internet? Free internet access is available in public libraries and many community centres.

Money

Benefits

For claim forms, guidance or information
www.gov.uk/benefitsadviser

Welfare Rights Teams:

Perth & Kinross 01738 476900
Dundee 01382 431205
Advice Line 01382 431167
Angus ACCESSLine 08452 777 778

Scottish Welfare Fund

Crisis Grants & Community Care Grants. To find out if you could apply for a grant contact your local Welfare Rights Team.

Benefits calculator find out what benefits you could get (anonymous)
www.entitledto.co.uk/benefits-calculator/startcalc.aspx?e2dwp=y
www.benefits-calculator.turn2us.org.uk/AboutYou

HMRC Child Benefit Office 0300 200 3100
National Insurance Contributions Office 0300 200 3500
Pay and Work Rights Helpline 0800 917 2368
Tax Credits Helpline 0345 300 3900

DWP Carers Allowance Unit 0845 608 4321
Disability Benefits 0845 712 3456
Job Centre Plus First Contact Centre 0800 055 6688
Job Centre Plus Benefits Centre (existing claims) 0345 608 8545
Pension Service Pension Credit (new claims) 0800 991 234
Pension Service (existing claims) 0845 606 0265

Money Advice and Debt

Citizens Advice Bureaux see www.cas.org.uk for opening hours

Dundee
Central Library
Level 4 Wellgate Centre
01382 307494
www.dundeecab.org
Outreach office in Dundee University (students only)

Arbroath
11 Millgate
01241 870661

Forfar
19 Queen Street
01307 467096

Montrose
32 Castle Street
01674 673263

Perth
7 Atholl Crescent
01738 450580 / 450581 (appointment line)

Outreach offices in Aberfeldy, Auchterarder, Blairgowrie, Crieff, Kinross, Pitlochry
Contact through Perth appointment line

Online - Citizens Advice Scotland self help website
www.adviceguide.org.uk/scotland

ADAPT (Avoid Debt Act Positively Today) a CAB service

Dundee 01382 431581
Angus 01241 870695

Dundee North Law Centre 01382 307230

Brooksbank Centre Money Advice Section 01382 432450
bbpartnership@hotmail.co.uk

Savings and Loans

Discovery Credit Union www.discoverycu.co.uk
Central Library
Level 4, Wellgate Centre
Dundee, DD1 1DB 01382 431505

Perth & Kinross Credit Union www.pkcu.org.uk
282 High Street
Perth, PH1 5QS 01738 624872

Angus Credit Union www.anguscreditunion.co.uk
William Wallace House
Forfar DD8 1WH 01307 474760
Email: office@anguscreditunion.co.uk

Avoid and Report Loan Sharks

Loan sharks are illegal moneylenders who often charge very high interest rates. You can check if a company is authorised to lend money and report loan sharks anonymously. Contact your local Trading Standards Team:

Dundee 01382 433710
Perth & Kinross 01738 475000
Angus (ACCESS team) 08452 777778

Illegal Money Lending Team www.stoploansharks.org.uk

24/7 Helpline 0800 074 0878

You can search the Financial Services Register for companies and individuals authorised by the Financial Conduct Authority (FCA).
consumer.queries@fca.org.uk
or call 0800 111 6768

Financial Harm

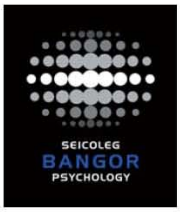
Covers a wide range of situations such as being forced to hand over money or possessions, exploitation of benefits, stealing, cheating or fraud.

Contact Police Scotland - call 101
or in an emergency 999

Appendix

Appendix H

Participant Debrief Sheet



PRIFYSGOL
BANGOR
UNIVERSITY

We would like to thank you for taking part in the research project below:

An Investigation into the Efficacy of Mindfulness Based Stress Reduction in Enriching Community Wellbeing within Regeneration Areas in the UK.

Living with financial worries can cause stress and anxiety and have a huge impact on wellbeing. Learning about and practicing mindfulness can help people to cope better with stress.

By taking part in this study you have helped us to see if being more mindful has had any effect on your wellbeing. Your generosity and willingness to participate in this study are greatly appreciated.

If you would like to know more about mindfulness-based stress reduction or have any questions for the research team you can e-mail Alexander Duncan (AKA Karma Jiga), pspefd@bangor.ac.uk.

You can also continue your practice at all day sessions or by joining a local mindfulness meditation group in your area:

Crescent 'Sit & Share' Mindfulness Group
The Crescent,
71 Lothian Crescent,
Whitfield,
Dundee
DD4 0HU

01382 438681

Regular classes & workshops
Mindfulness Dundee
Nilupul Foundation
51 Reform Street
Dundee
DD1 1SL

01382 872020

Or for more information about mindfulness in your area visit www.mindfulnessdundee.co.uk

If you have any complaints, concerns, or questions about this research, please contact

Mr. Hefin Francis,

School Manager, School of Psychology, Bangor University, Bangor, Gwynedd, LL57 2AS.

Version 2 – 12/03/15 Bangor University, School of Psychology. Ethics Application No. 2014-14467

Appendix

Appendix I

Venue Permission Letter

Dundee City Council
Chief Executive
CHANGING FOR THE FUTURE

Stewart Murdoch – Leisure and Communities
Community and Policy Department

North East Development Team
The Crescent
71 Lothian Crescent
Dundee DD4 0HU

If calling please ask for Mike Welsh
Our Ref MW/AG Your Ref Date 25th November 2014

Letter of Agreement
Organisation: Dundee City Council
Contact: Mike Welsh (Communities Officer)

Assistance Requested:
Support is agreed for the delivery of an 8 week MBSR course at the Crescent Community Facility, Whitfield, Dundee in the form of venue provision and support in the recruitment of participants for the following research project.

Project Title: An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

University: Bangor University
Subject: MA/MSc Mindfulness Based Approaches
Principal Researcher: Alexander Campbell Duncan (AKA Ven. Karma Jiga)
Supervisor: Eluned Gold
Qualification: Masters Research Thesis

Facilities will be made available as long as required.

Total Number of Study Participants Involved: 50

Mike Welsh
Signature of Approving Authority

20.1.15.
Date amended

If you have trouble understanding English please contact the address below

اگر آپ کو انگریزی سمجھنے میں مشکل پیش آتی ہے تو برائے مہربانی نیچے درج پتے پر رابطہ کریں:

ਜੇਕਰ ਤੁਹਾਨੂੰ ਇੰਗਲਿਸ਼ ਸਮਝਣ ਵਿੱਚ ਮੁਸ਼ਕਿਲ ਪੈਦਾ ਹੁੰਦੀ ਹੈ ਤਾਂ ਕ੍ਰਿਪਾ ਕਰਕੇ ਸਾਡੇ ਨਾਲ ਹੇਠਾ ਦਿਤੇ ਪਤੇ ਤੇ ਸੰਪਰਕ ਕਰੋ

Jeżeli masz trudności w zrozumieniu języka angielskiego, skontaktuj się na poniżej podany adres:

如果你對英語理解有困難, 請聯絡以下地址

Dundee Translation & Interpreting Service, Mitchell Street Centre, Mitchell Street, Dundee DD2 2LL
Tel: 01382 435615 Fax: 01382 435805

For information about Dundee City Council visit our website www.dundeecity.gov.uk

Recycled Paper

POSITIVE ABOUT DISABLED PEOPLE

Appendix

Appendix J

Ethics research approval e mail

Karma Jiga

From: Eluned Gold <eluned.gold@bangor.ac.uk>
Sent: 24 April 2015 09:26
To: Dusana Dorjee; Karma Jiga
Subject: Fwd: Ethical approval granted for 2014-14467 An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

Hurrah
Looks like we are good to go. Well done Karma Jiga for getting this through, and thanks Dusana for all your help with this .
Karma Jiga. Let me know what you plan to do next and let me know if you need my input on the curriculum
Best wishes

Eluned

Begin forwarded message:

> **From:** <e.mcquarrie@bangor.ac.uk>
> **Date:** 23 April 2015 15:01:48 BST
> **To:** <eluned.gold@bangor.ac.uk>
> **Subject: Ethical approval granted for 2014-14467 An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.**
>
> Dear Eluned,
>
> 2014-14467 An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.
>
> Your research proposal number 2014-14467
> has been reviewed by the Psychology Ethics and Research Committee
> and the committee are now able to confirm ethical and governance approval for the above research on the basis described in the application form, protocol and supporting documentation. This approval lasts for a maximum of three years from this date.
>
> Ethical approval is granted for the study as it was explicitly described in the application
>
> If you wish to make any non-trivial modifications to the research project, please submit an amendment form to the committee, and copies of any of the original documents reviewed which have been altered as a result of the amendment. Please also inform the committee immediately if participants experience any unanticipated harm as a result of taking part in your research, or if any adverse reactions are reported in subsequent literature using the same technique elsewhere.

1

Appendix

Appendix K

Page 1

Pre session sample texts and e mails

Sample text 1

Hi Everyone,

We look forward to seeing you at the Crescent at 10.00 for your introduction to your stress reduction course. Please arrive by 9.45 if you wish to claim travel expenses or if you will be using the crèche. Thanks. Karma Jiga

Sample text 2

Hi Everyone,

Don't forget your mindfulness course tomorrow. We look forward to seeing you at the Crescent at 10.00! Please arrive by 9.45 if you wish to claim travel expenses or if you will be using the crèche. I look forward to seeing you, thanks, Karma Jiga

Sample e mail 1

8 Week Course in Mindfulness-Based Stress Reduction.

Hi everyone,

We look forward to seeing you at the Crescent tomorrow for you orientation and introduction to your stress reduction course at 10.00 a.m.

Please arrive by 9.45 if you wish to claim travel expenses or if you will be using the crèche.

I look forward to seeing you, thanks, Karma Jiga

Appendix

Appendix K

Page 2

Sample E mail 2

Dissemination of Course Materials

Sample e mail 2

8 Week Course in Mindfulness-Based Stress Reduction.

Hi everyone,

Below are this week's course downloads

Click here for Course Workbook Chapter 1

Below are instructions to help you download recordings:

Instructions for downloading files to a PC

For Apple iPhone For Apple iPad For Android Devices

If there is anything you need help with or want to discuss with Karma Jiga, please do not hesitate to phone us on 01382 872020.

If you are unable to attend any session or are going to be late, please phone 07868 320 503

Thanks , we look forward to seeing you on Tuesday.

Appendix

Appendix L

Assessment and orientation Session

Sample Agenda

Pre-Course

Secondary

Group Assessment and Orientation

Checklist

Application forms

Information sheet (PIS)

Research Forms

Participant resource requirements

Session outline

First……..Short sitting

Pause

check out what's happening in your body

check out what's happening in your mind

Teacher personal introduction.

Logistics

Fire exits……

toilets……

switch off mobile phones.

PIS distributed…… explained

All personal info. Strictly confidential.

Explain about research….take part or not

Consent form

Research forms

2 sets: one to be filled in today.
One at end of the course.

2. ASSESSING THE GROUP

Brief personal introductions

My name is…….

What has brought you here?

What do you want from the course?

Any health issues to keep in mind?

What support do you need to come along?
e.g. Taxi instead of public Transport?

Is this the right time for you to take part?

Has anyone done any meditation/yoga before?

Short practice

3. INFORMING THE GROUP

What is mindfulness?

The awareness that arises from paying attention, on purpose, in the present, non-judgementally.

A different way of relating to our thoughts, feelings, emotions and what happens in, on and around your body.

What are the Benefits of MBSR…

Use advocate if possible.

Course Leader……

We are not looking for the reasons why something happens.

The sessions aren't for revealing long personal stories.

Everyone in the group has space to share briefly during the course, if they want to.

With all this in mind

……..how do you think this course can help you?

4. Very Short practice

An introduction to mindfulness practice.

5. Short practice

Does anyone have any additional needs….?

eg. help with reading and form filling …..

Time to read and complete consent forms and participant questionnaires

6. Short practice

7. HOME PRACTICE

There are 2 parts to the course

- **Weekly session**
- **Home practice…..this is the actual course.**
  - **Need for regularity….**
  - **Common difficulties….**
  - **Falling asleep, can't find the time, too busy…..etc**

Manuals/recordings to support home practice…

1. **Register taken**
2. **Who is computer literate and who not?**
3. **What device will you be using….**

Android, I pad, Laptop, PC or MAC

4. **List for those requiring….**

Dropbox for computer Literate.

Hard Copy for those with no computer literacy.

5. **Would you prefer…… ?**

Downloads, MP3 or Memory Stick

Hard copies of recordings C/D

1. Any Additional needs (Course Manual) ?
Large print copy, Audio Version (c.d.)

8. CHALLENGES

The course might be difficult at times…..

As you become more aware you might experience things a bit more intensely

Balance challenges with long term benefits…..

Learning to be more gentle/friendly with self

Turning towards the difficult…..Being with the difficult

Exploring patterns that appear when things feel difficult and how we might work with these during the course

Be open and inquisitive about what might happen because you don't know how it is going to turn out

9. Short sit ….3 step breathing space.

10. ASSESSING THE GROUP cont.

Discuss comfort of individuals in group.

Is group MBSR suitable?

You can choose how much to join in with the group discussions.

You don't have to if you don't want to.

Please fill in consent form

Please fill participant questionnaire

11. WEEKLY CLASS

TUESDAYS 10 am - 12

Please

Arrive before 9.45 am…for travel expenses. Crèche open from 9.30 am.

10. Short sit

11. Any ?'s

12. Concluding remarks

Appendix

Appendix M

Participant Questionnaire

Page 1

ID No.

Participant Questionnaire

Title of Project: An Investigation into the Efficacy of Mindfulness Based Stress Reduction (MBSR) in Enriching Community Wellbeing within Regeneration Areas.

1[1] Please tell me, what does the term 'wellbeing' mean to you? You can mention as many things as you like including mental or psychological and/or physical health issues, social relationships and activities and anything else you think of.

There are no right or wrong answers:

Overall, would you say your own wellbeing was :

Very Good Good Alright Bad Very Bad

Please rate your mental wellbeing, would you say your mental wellbeing was:

Very Good Good Alright Bad Very Bad

Appendix

Appendix M

Participant Questionnaire

Page 2

WHO (Five) Well-Being Index (1998 version)

Please indicate for each of the five statements which is closest to how you have been feeling over the last two weeks.

Notice that higher numbers mean better well-being.

Example: If you have felt cheerful and in good spirits more than half of the time during the last two weeks, put a tick in the box with the number 3 in the upper right corner.

	Over the last two weeks	**All of the time**	**Most of the time**	**More than half of the time**	**Less than half of the time**	**Some of the time**	**At no time**
1	I have felt cheerful and in good spirits	5	4	3	2	1	0
2	I have felt calm and relaxed	5	4	3	2	1	0
3	I have felt active and vigorous	5	4	3	2	1	0
4	I woke up feeling fresh and rested	5	4	3	2	1	0
5	My daily life has been filled with things that interest me	5	4	3	2	1	0

Appendix

Appendix M

Participant Questionnaire

Page 3

15 ITEM MAAS INQUIRY FORM

Day-to-Day Experiences

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate 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, while 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