

Impact case study (REF3)

Institution: Bishop Grosseteste University (BGU)		
Unit of Assessment: 4 – Psychology, Psychiatry and Neuroscience		
Title of case study: Public and professional understandings of mindfulness on wellbeing		
Period when the underpinning research was undertaken: 2012-2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Dr Thomas Dunn	Role(s) (e.g. job title): Senior Lecturer in Psychology	Period(s) employed by submitting HEI: 01/04/2016 to date
Period when the claimed impact occurred: 01/04/2016 to 31/12/2020		
Is this case study continued from a case study submitted in 2014? No		
1. Summary of the impact		
<p>Research that has investigated the significance of mindfulness-based interventions (MBIs) on wellbeing-related indicators has provided significant impact in the domains of contributing to public 'understanding and learning', supporting 'practitioners and practice', and enhancing 'health and well-being'. This is reflected in extensive discussion and citation in the professional, practitioner and popular media, external partnership with professional organisations and delivery agencies, and improved wellbeing outcomes within trials. Several intervention trials, longitudinal studies, and a large cohort study were conducted demonstrating the positive impact of MBIs on wellbeing, resiliency, workaholism, fibromyalgia, work-related stress, and psycho-spiritual wellbeing.</p>		
2. Underpinning research – References in section 3 are indicated by number (e.g., R1)		
<p>Dunn's research has contributed important insight into the field of mindfulness-based interventions on wellbeing by demonstrating that:</p> <ul style="list-style-type: none"> • Mindfulness-based therapies are effective at increasing wellbeing across a range of disorders; • Non-attachment (the ability to 'suspend attempts to control experience') is a core component in how meditation may impact wellbeing; and • A greater range of meditative techniques can impact psycho-spiritual wellbeing (R1, R2). <p>Second-generation mindfulness-based interventions (SG-MBIs) have been employed, such as Mindfulness Awareness Training (MAT), reflecting a new direction in mindfulness research and practice (R1, R2, R3, R4). Differing from the emphasis placed on attentional processes found in mindfulness-based stress reduction and mindfulness-based cognitive therapy, SG-MBIs emphasise the Buddhist principle of non-attachment, which is based on the view that suffering arises as a result of an individual's 'attachment' to both themselves and external phenomena (e.g., wealth, people, and reputation). The typical MAT schedule employed by Dunn requires participants to attend weekly workshops (e.g., taught/presentation, group-discussion, meditation) and receive a CD of guided meditations to facilitate daily self-practice. Applied to several psychological and psychosomatic disorders, MAT has demonstrated beneficial impact, including fibromyalgia syndrome (FMS), work-related stress, workaholism, and resiliency.</p> <p>Given that self-attachment is deemed to play a role in the maintenance of FMS, interventions that specifically aim to reduce attachment (to self, symptoms, and environment) warrant empirical investigation (i.e., MAT) – something addressed in the research. Specifically, a randomised controlled trial (RCT) was conducted (R4), examining the impact of MAT on</p>		

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multiple FMS symptom-related outcomes (e.g., FMS symptomatology, pain perception, sleep quality, psychological distress, civic engagement, and non-attachment to self, symptoms, and environment).

Workaholism has been empirically demonstrated to be a distinct construct compared with enthusiastic working and work engagement. Despite the relatively high instances of workaholism, there is a concern that prevalence rates could increase even further with the proliferation of technology-driven modern working styles (e.g., use of laptops, tablets, and smartphones) that blur the work–leisure boundary. A controlled trial (CT), was conducted, testing the effect of MAT on work addiction, job satisfaction, work duration and work involvement, depression, anxiety and stress (**R3**).

Mindfulness has recently shown promise in mental illness treatment and preventative contexts with school-aged young people. However, there is a shortage of studies investigating the effects of school-based mindfulness interventions on young people of a pre-adolescent and early-adolescent age. Thus, Dunn’s research has aimed to bridge the intersection between wellbeing and education, with particular reference to the Department of Education’s drive to ensure adequate *Mental Health and Wellbeing Provision in Schools*. As such, an investigation has explored the effects of a regional multi-site school-based mindfulness programme on wellbeing and resiliency in a large cohort of school children aged 9-13 years old.

3. References to the research (indicative maximum of six references)

Five independently peer-reviewed journal articles – with Impact Factor [*IF*] indicated

1. Van Gordon, W., Shonin, E., **Dunn, T.J.**, Sapthiang, S., Kotera, Y., Sheffield, D., & Garcia-Campayo, J. (2019). Exploring emptiness and its effects on non-attachment, mystical experiences, and psycho-spiritual wellbeing: a quantitative and qualitative study of advanced meditators, *Explore: The Journal of Science and Healing*, 15, 261-72. [*IF* 1.485]
2. Van Gordon, W., Shonin, E., **Dunn T.J.**, Garcia-Campayo, J., & Griffiths, M.D., (2018). The meditation-induced near-death experience: a three-year prospective study, *Mindfulness*. 9, 1794-1806. [*IF* 3.581]
3. Van Gordon, W., Shonin, E., **Dunn T. J.**, Garcia-Campayo, J., & Griffiths, M.D. (2017). Meditation awareness training for the treatment of workaholism: a controlled trial, *Journal of Behavioural Addictions*, 6, 2, 212-20. [*IF* 5.143]
4. Van Gordon, W., Shonin, E., **Dunn T.J.**, Garcia-Campayo, J., & Griffiths, M.D. (2016). Meditation awareness training for the treatment of fibromyalgia syndrome: a randomized controlled trial, *British Journal of Health Psychology*, 22, 1, 186-206. [*IF* 2.917]

4. Details of the impact – Sources in section 5 are indicated by number (e.g., S1)

Impact types related to:

- ‘Understanding, learning and participation’;
- ‘Practitioners and professional services’;
- ‘Health and wellbeing’.

Principal modes of impact were:

- Discussion and citation in the professional, practitioner and popular media;
- Development of practice with external professional partners;
- Improved wellbeing outcomes within trials.

The main beneficiaries were:

- Media readerships and audiences;
- Schools;
- External professional partners;

- Trial participants.

Media and public engagement

Impact on promoting understanding, learning and participation can be evidenced through extensive media coverage. Discussion and citation of Dunn's work on the health benefits associated with MBIs has enhanced cultural understanding, stimulated interest and engagement in the research, and informed public attitudes and abilities to make decisions.

Media engagement has been across a total of 34 publishing and broadcasting forms. This includes various professional/practitioner (**S1**), and popular (**S2**) media, including: *Metro* (1.3 million average circulation), *IFL Science* (25m unique visitors per month; Facebook 625m people), *PsyPost* (1.4 million readers per month), *Medical Express*, *US News*, and *Bangkok Post*.

A series of the engagements related specifically to a project in Derbyshire (see below), including: *Derbyshire Times* and *BBC Radio Derby*. Additionally, as part of a wider 'Wellbeing in Schools project', Dunn also produced Vlog material on the benefit of meditation. This was distributed to over 264 schools in the UK (with a student population of over 63,000 pupils) enhancing 'public understanding and learning'.

Professional partnership

Impact was reflected in a project comprising partnership with professional agencies engaged in the development and delivery of services. This aimed to connect wellbeing and education, with reference to the DfE (2018) *Mental Health and Wellbeing Provision in Schools*.

Working with stakeholders (Derbyshire Education Services and Derbyshire County Council) and end users (school-aged pupils), Dunn engaged with 20 schools and 1138 pupils, piloting a mindfulness programme designed to enhance resiliency and wellbeing and reduce vulnerability in children aged between 9-12 years. The project utilised a specific 9-week school-based MBI called Mindfulness Attention Programme (MAP), where weekly sessions aimed to support children's wellbeing by focusing on how to cope with stress. In addition to the weekly sessions, students took part in daily mindful practice for two minutes following playtime and lunchtime. Results showed a significant decrease in Vulnerability Index and significant increase in Resource Index, between pre- and post-MAP participation. Overall, MAP provided a positive impact across multiple educational sites in terms of increasing personal strength and reducing the disparity between personal resources and emotional reactivity (i.e., vulnerability) - constructs thought to be at the core of developing resiliency.

Trial outcomes

Impact is evidenced through improved trial outcomes for several patient groups including sufferers of fibromyalgia, work-related stress, and workaholism. All intervention studies included at least a three-month follow up which provided a measure of MBIs long-term impact on wellbeing markers.

There is growing interest into the applications of MBIs for treating fibromyalgia syndrome (FMS), where designing interventions continues to be a challenge. FMS is associated with high rates of presenting at medical services, yet there is no reliable laboratory test for FMS. Additionally, while some patients appear to respond favourably to pharmacological treatments, many experience limited symptom reduction as well as adverse pharmacotherapy effects. The MAT intervention has resulted in significant reductions in FMS symptomatology for 74 adults with a current diagnosis of FMS, compared to an active control group. The impact of the MBI intervention for patients suffering with FMS was moderate to high. This effect was empirically shown to increase when assessed at six-month post intervention, demonstrating a measurable and lasting impact of MAT on improving functioning for 74 individuals diagnosed with FMS.

Work-related stress (WRS) accounts for 55% of all work-related illness (Health and Safety Executive, 2020) and 17.9 million working days were lost in Great Britain due to WRS in 2019-2020 (Health and Safety Executive, 2020), which in conjunction with other work-related mental health issues, costs the British economy up to £34.9 billion per year (Sainsbury Centre for Mental Health, 2017). Thus, Dunn's work is particularly significant as it shows meditation to concurrently improve work-related wellbeing, job performance (across five job roles) and positively reduce work involvement for individuals who work excessively. The research shows a reduction in WRS indicators for 76 male and female full-time office-based employees with middle management responsibility. The magnitude of this reduction was estimated to be high. Building on this, the impact was gauged of MAT interventions on workaholism for 37 male and female adults in full-time employment. Investigation showed a large reduction in behaviours associated with work addiction for the MAT intervention compared to controls.

5. Sources to corroborate the impact (indicative maximum of 10 references)

Media engagement

1. Professional/practitioner media:

- **PsyPost**: "Meditation linked to enhanced social cognition in new psychology research". 19th September 2019.
- **Natural Health**: "What you need to know about Fibromyalgia". 6th March 2018.
- **Medical Xpress**. "New Research Reveals Meditation Can Help Cure Workaholics". 2nd November 2017.
- **Natural Awakenings**: "Transcendental meditations: Near-death experiences can be learned". 9th March 2019.
- **Tocana**: "Meditation-induced near-death experiences: An exclusive interview with Dr William Van Gordon." 10th February 2019.
- **PsyPost**: Study of advanced Buddhist meditators suggests inducing near-death experiences can be learned and perfected". 8th December 2018.
- **Journal of Anaesthesia Practice**: "University of Derby research shows mindfulness improves sleep in fibromyalgia patients". 23rd August 2018.
- **Health Food Business**: "Mindfulness found to support sleep in fibromyalgia sufferers". 1st September 2018.
- **Natural Health**: "What you need to know about Fibromyalgia". 6th March 2018.
- **International Therapist**: "Fibromyalgia symptoms reduced in new meditation study". 28th February 2018.
- **Medical Xpress**: "Fibromyalgia Sufferers See Chronic Pain Symptoms Reduced in New Meditation Therapy Study". 27th February 2018.
- **Ambulance Today**: "Mindfulness improves sleep in fibromyalgia patients". 26th August 2018.
- **Medical Express**: "New study suggests existence of meditation-induced near-death experiences". 27th March 2018.
- **International Therapist**: "Mindfulness improves sleep in fibromyalgia patients". 4th September 2018.

2. Popular media:

- **BBC Radio Derby**. "Can Meditation Tackle Workaholism". 3rd November 2017.
- **Metro**: "How to give yourself a near-death experience (without actually dying)". 12th December 2018.
- **IFL Science**: "You can meditate yourself into a near-death experience". 10th December 2018.
- **Derbyshire Times**: "University study into painful condition". 23rd August 2018.

- **Bangkok Post.** “Can Meditation Help Companies Thrive in Times of Turmoil – Part 1”. 15th January 2018.
- **US News.** “The Best Kind of Meditation for Your Goals”. 17th September 2017.
- **New Thinking Allowed (TV):** “Research on the Buddhist practice of emptiness with William Van Gordon”. 25th October 2019.
- **Lion’s Roar:** “New study suggests meditating on emptiness might be better than mindfulness”. 29th March 2019.
- **New Thinking Allowed (TV).** “Meditation-induced near-death experience with William Van Gordon.” 28th January 2019.
- **Bhagavant:** “Experiences Ahead of Death Can Be Learned with Buddhist Meditation”. 22nd December 2018.
- **The Island:** “Study of advanced Buddhist meditators suggests inducing near-death experiences can be learned and perfected”. 21st December 2018.
- **Buddhistdoor Global:** “Study suggests Buddhist meditators can learn and “perfect” meditation-induced near death experiences”. 18th December 2018.
- **Buxton Adviser:** “University conducts new study on sleep and pain”. 13th September 2018.
- **Soul:Ask:** “A glance beyond near death experience”. 29th March 2018.
- **Infosurhoy:** “New study suggests existence of meditation-induced near-death experiences”. 28th March 2018.
- **Bangkok Post.** “Can Meditation Help Companies Thrive in Times of Turmoil – Part 2”. 22nd January 2018.
- **wtopnews.** “The Best Kind of Meditation for Your Goals. 3rd January 2018. MI Business Mag. “Meditation Can Help Cure Workaholics”. 6th November 2017.
- **Your Coffee Break.** “New Research Reveals Meditation Can Help Cure Workaholics”. 2nd November 2017.
- **Greater Good.** “How Mindfulness Is Changing Law Enforcement”. May 18th 2016.