

Why consider well-being?



A bit of data



In the UK 1 in 4 people each year, or 1 in 6 people each week, suffer from poor mental health and nearly half suffer from mental health difficulties during their life-time (Edwards *et al.*, 2016).

Since 2000 the occurrence of common mental health disorders has increased steadily (McMagnus *et al.*, 2016)

There is a fourfold increase in people seeking treatment from the NHS for mental health disorders from 2013 to 2017 (*NICE guidance and current practice report*, 2017).

In 2015 mental health related issues accounted for 17.9 million sick days, which was 12.7% of the total sick days in the UK.

Depression was the second highest reason for having time off work (after back pain) (Edwards *et al.*, 2016) and 38% of morbidity was accounted for by mental health, whereas heart disease account for just 3% (Centre for Economic Performance, 2012).

It is down to money...

This is not just costly to people but is financially expensive. In 2009-10 an estimate of the cost of most common mental health problems in the UK was £105.2 billion (Centre for Mental Health, 2010).

More recent estimates suggest that this includes a loss of £25 million in GDP (Edwards *et al.*, 2016),

A cost to businesses of £34.9 billion (Parsonage and Saini, 2017)

Projected total costs to the NHS of over £12 billion by 2026 – an increase of 76% from 2007 (Mccrone *et al.*, 2008).

The average annual cost per employee of lost employment is estimated at £7,230 due to depression and £6,850 due to anxiety.(Mental Health Taskforce, 2016).

There is a link between reducing antisocial behaviour and increasing well-being(Centre for Mental Health & Health, 2010; Elsey et al., 2018; Parsonage & Saini, 2017)

Further costs are met by social care and charities.

The Global Situation

- Depression accounts globally for 4.3% of disease and over 20% of all disabilities are mental health related. The World Health Organisation highlights that it is “the largest single cause of disability worldwide” (WHO, 2013).
- This means that there is essentially a global epidemic of mental health disorders demanding a high price of both the sufferers and global finances. Indeed, many people struggle to be treated for common mental health disorders.
- WHO highlighting the lack of provision in all countries (Centre for Economic Performance, 2012; Demyttenaere et al., 2004; Kieling et al., 2011;
- However whilst mental illness accounts for 23% of disease in the UK, it receives only 13% of NHS health expenditure (Centre for Economic Performance, 2012).
- Mental health research attracts just 3.1% of charity funds in the UK – compared to cancer, which attracts 30% (Mental Health Taskforce, 2016).
- In the UK one in ten people have to wait for more than 2 years to be offered any sort of counselling (Mental Health Taskforce, 2016).
- Worldwide in high income countries up to half of people with mental health illness never receive any treatment, and in middle income countries that figure rises to 85% (W.H.O., 2018a).

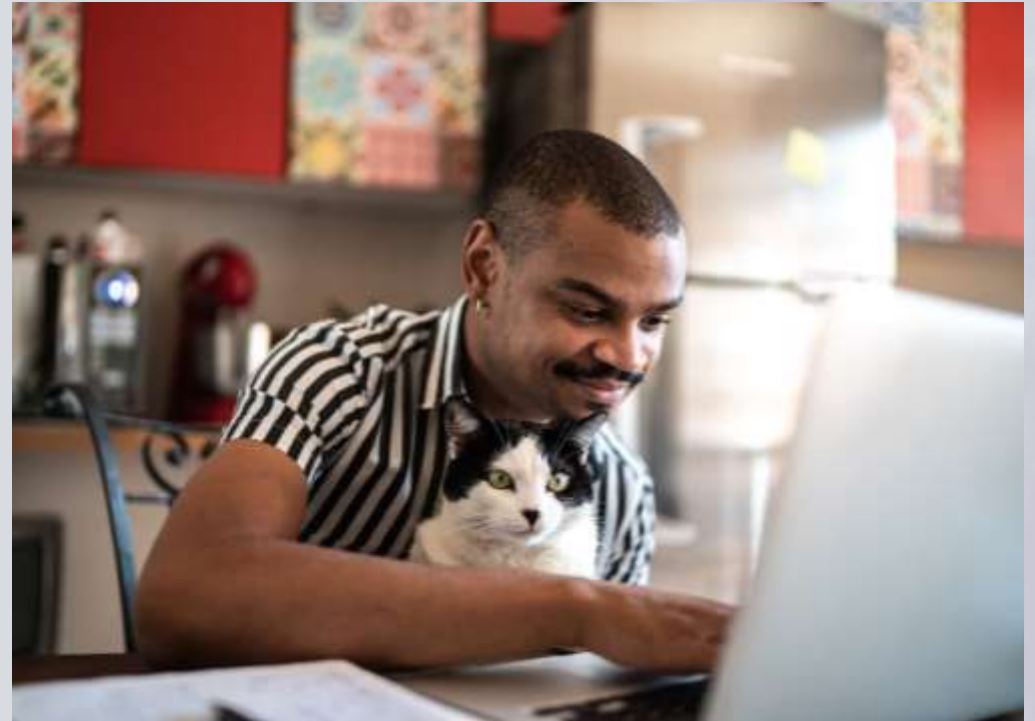
Well-being and Covid

- Covid - increased focus on mental well-being, and highlighted the need for greater provision (Armitage & Nellums, 2020; Dawson & Golijani-Moghaddam, 2020; Jiloha, 2020; Liu et al., 2020; Prime et al., 2020; Smith et al., 2020; WHO, 2020)
- Highlight importance of nature for well-being during Covid - (Berdejo-Espinola et al., 2021; Dickerson, 2020; Ho Su Hui et al., 2020; Jacobs et al., 2020; Marsh et al., 2021; Ratschen et al., 2020; Shoesmith et al., 2021; Vimal, 2018)



The importance of well-being

- Given the growing prevalence of mental health disorders, the lack of finances and inability for people to be given help, it is unsurprising that interest in mental health and well-being is increasing both nationally and internationally.
- Political and media - a lot of interest



Discussion

1. Why is there an increase in mental illness?
2. How would you approach it?
3. What do you think well-being is?



What is well-being?

What is well-being?

- Well-being is very hard to define - consists of physical and mental, if we just focus on mental then consists of hedonic and eudemonic
- Often the same ideas have different terms, and similar terms can mean different things
- Is it a positive measure - of good well-being or a measure of lack of bad mental health?
- Aked defined it as feeling well and doing well

(Aked & Thompson, 2011; Dodge et al., 2012, Mccrone et al., 2008; Health, 2010; Steel et al., 2014; NICE guidance and current practice report, 2017; Elsey et al., 2018; W.H.O., 2018a, 2018b)

Hedonic Well-being

- An in the moment sense of well-being.
- Often linked to emotions or mood. Very sensory
- Definition - "feeling well" - Aked
- Emotions - Short term, transient
- Affect - A tendency towards something - long term



Measuring Hedonic well-being

- Bodily sensations
- POMS and shortened scales
- PANAS
- Affective slider
- SAM - self assessment manikin
- Feeling scale and felt arousal scale
- UWIST

Eudemonic well-being

- Eudemonic differs from hedonic in that it is about a sense of satisfaction with life.
- Of being assured about ones place in life - Aked
- Often links with other aspects such as connection to those around and life satisfaction
- More long terms, but still can be impacted by short term aspects.
- Definition - "doing well" (Aked)

Measuring Eudemononic well-being

- Lack of coherence in green well-being measures (and other well-being measures) (Bragg et al., 2015)
- NEF undertook a study to consider the best approach to measuring well-being to provide an acceptable stand by which to compare interventions. (Michaelson, Mahony and Schifferes, 2012)
- This includes the Office of National statistics (ONS) life satisfaction scales and the shorter Warwick Edinburgh mental well-being scale (SWEMWBS) (Warwick and Edinburgh, 2006; 'Swemwbs_7_Item', 2008; 'Mental Well-being Scale (SWEMWBS)', 2008)

SWEMWBS

- These have been used in green well-being studies. (Bragg, Wood and Barton, 2013; Richardson et al., 2016)
- In museums a museum tool kit was developed based on the WEMWBS, (Thomson and Chatterjee, 2015)



Other well-being measures

- Ryff, Deiner, other. (Brandel et al., 2017; Deiner et al., 1997; Diener et al., 2010; Linton et al., 2016; Mcdowell, 2010)
- The WHO-QOL (78 questions) and WHO-QOLbref (26 questions) measures are based on an original measure of eudaimonic well-being developed by Ryff (Ryffs Model of Eudaimonic well-being; Brandel, Vescovelli and Ruini, 2017)
 - WHO-QOL aims to measure quality of life.
 - Dodge *et al.* (2012) has questioned whether quality of life is the same concept as well-being and concluded it is a different concept, although others think it is the same!
 - WHO-QOLBref has been translated into lots of languages, but it has not been assessed for reliability in detecting changes in personal well-being (WHO, 2018).

Self esteem

- Another area related to well-being – and has been used as a measure in green well-being, where it has been found that following a day/experience in nature there was an increase in sense of self and esteem.
- Linked to noticing (in mindfulness)
- Measured using Rosenberg scale (or adaptation thereof), which having been around for over 70 years is well established and adapted.
- Of interest to NHS as links to eudemonic well-being and can lead to poor mental health, and of increasing interest in social prescribing

Mental acuity

- Another area associated with well-being, and often used as a measure of stress/distress. Notably by using a specified test such as the backward digit scan test or a stroop test.
- It has been used in green well-being to indicate an improvement on cognitive tasks

Measuring this...

- Digit scan test =
 - <https://www.memorylosstest.com/digit-span/>
 - <https://tools.timodenk.com/digit-span-test>
 - https://www.psychtoolkit.org/experiment-library/experiment_digitspan.html
- Stroop test =
 - <https://www.psychtoolkit.org/experiment-library/stroop.html>
 - https://metodorf.com/tests/stroop_matches_colors.php
- Corsi test
 - <https://www.psychtoolkit.org/experiment-library/corsi.html>

Physical?

Mental health and physical health are entwined and measure often overlap, so whilst this looks at mental well-being it is worth noting some of the areas of improvement in green well-being have been on the physical side - see the table from last time.

These include

- Heart Rate (and variability)
- Blood Pressure Immunity,
- Crime Rates
- Concentration
- Salivary Cortisol
- Mortality
- Physical Health
- Social Inclusion



Go for a walk...

- You are now going for a walk, but to test a few ideas.
- Pick a test – try it out
- Walk – with 5, 4, 3, 2, 1 activity
- Try the test – any change?

A close-up photograph of a person's hand holding a single, vibrant green leaf. The leaf is held gently between the fingers, with its veins clearly visible. The background is a soft, out-of-focus green, suggesting a lush, natural environment. The overall mood is peaceful and connected to nature.

Nature and well-being

Becoming common, can be variable.

i.e. local to me woodland walks, healthy walks, farm visits, history walks, craft groups and more potentially offered at doctors surgeries

NHS Forest

<https://nhsforest.org/>

Green social prescribing =

<https://www.england.nhs.uk/personalisedcare/social-prescribing/green-social-prescribing/>

Sustainable health care

<https://sustainablehealthcare.org.uk/>

(Carrell, 2018; Hinds, 2019; McGroarty, 2019; Morton et al., 2015; Richardson et al., 2019; Thomson et al., 2018)

Social Prescribing



Green well-being

- Green well-being -increase in physical or mental health through interaction with nature and the natural environment.
 - Doesn't have to be for poor mental health
- Lovell, Depledge and Maxwell (2018) - Defra Review
 - "There is strong and consistent evidence for mental health and well-being benefits arising from exposure to natural environments, including reductions in psychological stress, fatigue, anxiety and depression" (p8)
 - benefits - reduced mortality, increased immunity, increase pre and post-natal health and more favourable "heart rate; blood pressure; vitamin D levels; recuperation rates; and cortisol levels and... lower prevalence of diabetes type 2" (Lovell, Depledge and Maxwell, 2018 p8).

Strong link between Social prescribing and nature

- Request for 1% of UK health funding was given to “green” initiatives in an attempt to address well-being (Valuing Nature Programme Coordination Team, 2015).
- 2018 the NHS in Scotland started to prescribe “nature” to people as a treatment for depression and anxiety (Carrell, 2018)
- 2019 one of the trends highlighted in global wellness was “nature prescriptions” (McGroarty, 2019).
- Department of Education - activity passports aimed at promoting “character and well-being” including activities such as interacting with pets, museums, farm and caring for nature (Education, 2019)
- Biodiversity, has been linked to biophilia and eudemonic well-being (Pritchard *et al.*, 2019)

Notable research

- RSPB - Bird (2007) reviewed evidence linking nature and well-being.
 - Nature is important in helping people to cope with anxiety or stress, in helping with ADHD, cancer, dementia and operations, and in strategies for reducing crime.
- National Trust - Moss (2012) children spent less time in nature today than 30 years ago.
 - <1 in 4 visit a natural areas regularly, <1 in 10 visit a wild area - a fivefold drop in a generation
 - lack of interacting with nature was causing both physical and mental health problems and inability of children to be able to assess risks to both themselves and others.
- The Wildlife Trusts Review - Bragg *et al.* (2015 p5)
 - There is a lot of evidence to suggest contact with the natural environment (and increased biodiversity) benefits health and wellbeing, such as stress, anxiety, mood, self-esteem and resilience, social functioning and social inclusion

Eco-minds

- Mind – Bragg et al. (2007) – Eco-minds – a study of interventions in green wellbeing
 - Funded a large number of projects that were then evaluated
 - No matter what form of green well-being was undertaken, there was an increase in measures of well-being, self-esteem, pro-environmental behaviours and mood
 - 81% of participants increased their involvement in the local community,
 - evidence of well-being improvements were found in participants both after just one session and after a series of interventions.



Alternative Ideas in Green Wellbeing



Animal Aided Interventions/Therapy

- Animal aided interventions - animal used for therapeutic impacts (Kruger, Trachtenberg and Serpell, 2004)
 - service animal programmes (SAP)
 - animal assisted activities (AAA); animal focused activities offered by professionals or volunteers in a variety of environments normally with a social, educational or well-being focus
 - Animal aided therapy (AAT) - specific to a client with identified needs and is delivered by trained professionals responsible for the health and well-being of not just their patient, but the animal as well (O'Callaghan and Chandler, 2011).
- Animals used in AAT include dolphins, dogs, cats, sheep, horses, rabbits, birds, fish, guinea pigs and more
- Shen *et al.* (2018) - therapists saw animals as central to the process, concluding that the animal can implement change in a client.
- Animals can
 - increase motivation and compliance with the intervention (Henry and Crowley, 2015; Schramm, Hediger and Lang, 2015a), decrease anxiety (Barker, Rasmussen and Best, 2003; Gardiánová and Hejrová, 2015), increase attention seeking neuro-transmitters in both animals and humans (Odendaal, 2000) and have a calming impact (Nimer and Lundahl, 2007; Busch *et al.*, 2016).

Research on AAI/AAT

- In a randomly assigned trial of dolphin therapy compared to water therapy, Antonioli and Reveley (2005) found that those assigned to the dolphin condition showed significantly fewer symptoms of depression following an intervention than those receiving comparative water therapy sessions. Moreover,
- Nimer and Lundahl (2007) in a meta-analysis of 250 studies found that AAT specifically enhanced therapeutic outcomes in; emotional well-being; behavioural problems; Autism-spectrum symptoms; and medical difficulties.
- Through interactions with animals knock-on effects of enhanced social interactions with other people have been found (Jackson-Grossblat, Carbonell and Waite, 2016).
- Grandgeorge and Hausberger (2011) have identified a clear lack of scientific data regarding the species and the therapeutic methods that are used, and as such there is no definitive best practise in terms of approach or indeed animal in AAT.

Care Farms

- Care farming, (also known as social farming in the UK or therapeutic farming in Europe) is defined as the use of farming and agricultural practises in a therapeutic manner (Haubenhofers *et al.*, 2010).
- Often cater for specific populations such as people with learning difficulties, mental health difficulties or prisoners.
- Farming-related practises are used in supervised programmes to develop health, social and educational care.
- In the UK care farming has grown from negligible 20 years ago to 80 in 2010 (Haubenhofers *et al.*, 2010) and 230 in 2016 (Elsey, Murray and Bragg, 2016).
- More common in Europe, - over 1000 in the Netherlands and Belgium (Hassink, Hulsink and Grin, 2014).
- In the UK care farms provide “health, social, and educational care services for a wide range of client groups including people with mental ill health, learning disabilities, autism, and dementia” (Elsey, Murray and Bragg, 2016 p100)
- May even be GP prescribed
- May help with reoffending rates in prisoners, reduction of symptoms in ADHD, nature connection and self-esteem. (Custance *et al.*, 2015; Hemingway, Ellis-Hill and Norton, 2016; Elsey *et al.*, 2018).
- But more research needed (Iancu *et al.*, 2014)



Museums

- Some studies have looked at Wellbeing and museums
- Often for older adults (Binnie, 2010; Ferilli *et al.*, 2016; Schall *et al.*, 2018).
- Positive impact of museums on well-being, with interventions leading to;
 - an increase in subjective well-being (Thomson and Chatterjee, 2013, 2015; Thomson *et al.*, 2018);
 - improvements in quality of life (Schall *et al.*, 2018);
 - a sense of restoration (Kaplan, Bardwell and Slakter, 1993); and
 - a reduction in symptoms of anxiety (Binnie, 2010).
 - But limited research
- Notably Thomson and Chatterjee (2013) developed a museum toolkit for measuring the outcome of well-being interventions, based on SWEMWBS



Zoos and wellbeing... to come

