This is the archive for the *Insights with impact* section (pg. 41) of the 2016 Insights for Impact report.

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<th>Practice tests improve learning</th>
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**Primary citations (max 2 – 1 original study; 1 review)**


**Most recent significant citation (2011-2015)**


**Highest dissemination**

6. 84% of students performed better on the final test when they studied science via practice tests, relative to when they studied science via elaboration.

**50-word summary of insight (non-technical)**

Practice tests foster better long-term memory compared to other common study techniques such as repeated studying and elaboration. Incorporating practice tests in authentic classrooms improves learning. The benefits of practice tests further extend to reduced anxiety for the final exams. Students are often unaware of the advantages of this powerful study strategy.

**Headline findings & critical numbers (simplify if overly technical)**

- 84% of students performed better on the final test when they studied science via practice tests, relative to when they studied science via elaboration.
- Practice tests improved final test scores by 50% compared to elaboration.
- 75% of students believed that elaborative studying would be just as effective or even more effective than practice tests.
- 72% of the students in a large-scale classroom-based program incorporating practice tests reported that practice tests made them less anxious for exams.

**Cautions & limitations**

Practice tests render information more likely to be remembered only when administered in low-stake contexts.

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# Insight headline
Health-promoting financial incentive interventions

## Theme
Illness and disorder

## Domain
Clinical psychology

## Proposed by
Victor Estal Muñoz

## Primary citations (max 2 – 1 original study; 1 review)

## Most recent significant citation (2011-2015)

## Highest dissemination

## 50-word summary of insight (non-technical)
Using financial incentives within behavioural interventions have shown to promote a variety of outcomes such as weight loss, smoking cessation and improved physical activity.

## Headline findings & critical numbers (simplify if overly technical)
Financial incentive interventions are more effective than usual care or no intervention for encouraging health behaviour change.

For dietary behaviour change, the incentive group lost 3.5 times more weight than the usual care Group.4

For smoking cessation, rates of sustained abstinence from smoking through 6 months were 10% higher than with usual care.5

For physical activity, incentive group did 2 times more hours of exercise per week than the control group.6

## Cautions & limitations
Health-promoting financial incentive interventions take a wide range of formats and it is difficult to draw conclusions on the most effective of these. There is a lack of trials which seek to determine if effects of interventions vary according to socio-demographic characteristics. Furthermore, they have shown to be effective in the short-term, but it is not that clear with regards to the long-term yet.

## Policy Assessment Index
9

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Insight headline
Impact of obesity on mental illness

Theme
Illness and disorder

Domain
Mental illness

Proposed by
Lea Jakob

Primary citations (max 2 – 1 original study; 1 review)


Most recent significant citation (2011-2015)


Highest dissemination


50-word summary of insight (non-technical)
Recent studies have proven the existence of a link between physical activity and the onset as well as progress of mental illnesses. Simple interventions, such as improving access to healthy food and promoting physical activity, have potential of being an efficient strategy for lasting mental disorder reduction.

Headline findings & critical numbers (simplify if overly technical)

Body mass index (BMI) is significantly related to presence of most common mental disorders in over 26 scientific studies, increasing probability of mood and anxiety disorders by 25%²

BMI above 30 (considered as obese) having 1.18 times higher chances of having depression, 1.5 times for bipolar disorder, and 1.3 times for anxiety disorders.²

Physical activity has a moderate effect on lowering depression symptoms and low (but still significant) effect on reducing anxiety.³

Being physically active and of normal body weight reduces the chances of older populations developing dementia and major depressive episodes.⁴

Strategies in preventing and treating obesity have been developed, such as downsizing (reducing portion size), providing nutritional values on packages, promoting physical exercise, etc.⁴

Cautions & limitations

Certain studies have found only small effect of exercise on mental illness onset and progress, but meta-analyses of high-quality research on the topic show that there typically is an effect, thus a focus on developing interventions should be seriously considered. Failing to take into account different effects in various groups can lead to diminishing the impact of interventions and discourage individuals from continuing the programme.

Policy Assessment Index 10
Online cognitive behavioral treatments are effective

Illness & disorder

Psychotherapy, Clinical psychology

Jovana Gjorgjiovska


Online CBT provides an effective and viable alternative to face-to-face treatment for individuals who are unwilling or unable to seek traditional forms of mental healthcare. Most patients adhere to the full online treatment. Short- and long-term improvements in various mental disorders are comparable to those of face-to-face CBT.

7 out of 10 patients complete every step of an online CBT.

7 out of 10 patients report on significant decline of their symptoms, while 5 out of 10 fully recover.

One to three years after the treatment, these improvements are maintained.

When online CBT programs rely on self-diagnosis (instead of prescreening for eligibility), a major challenge is making sure that the people accessing the services are in fact those who could benefit from them. Concerns about how to reach a person in crisis, identity verification, maintaining privacy and confidentiality, and premature termination of the treatment are important to consider, given the minimal or total lack of face-to-face contact between therapist and the client.
## Insight headline
Mindfulness improves psychological health and well-being

## Theme
Health and Well-being

## Domain
Mindfulness

## Proposed by
Oscar Lecuona

### Primary citations (max 2 – 1 original study; 1 review)

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### 50-word summary of insight (non-technical)

Mindfulness-based interventions are an effective treatment for many psychological problems. These may reduce repetitive negative thinking, emotional reactivity and mind-wandering, which are key mechanisms in psychopathology. Results show decreases in anxiety, depression and stress, and also increases in well-being, and thus improve psychological functioning. MBIs are effective also in heterogeneous samples and contexts (e.g., schools), therefore indicating MBIs potential to be effective to general population.

### Headline findings & critical numbers (simplify if overly technical)

From aggregated evidence up to 13,000 participants in a variety of countries, MBIs seem to be moderately effective in reducing stress, anxiety and depression (about 20% of improvement above the highest score in control group). No significant differences to CBT or pharmacological therapies in effectiveness. Well-being is also improved (10%) alongside positive emotions (7%), emotion regulation (4.5%) and self-realization (5.7%). Specific programmes (MBSR and MBCT) are more effective (13%; 15.5%) than regular meditation (1.2%).

### Cautions & limitations

Although these interventions are found to be effective, key mechanisms are currently being identified and understood. In addition, they may not be effective or even not indicated for some populations. Practices are being applied worldwide but is necessary to ensure intervention’s quality and standardize programmes. In addition, their effectiveness may be culturally specific.

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