New Australian-led research has confirmed that smartphone apps are an effective treatment option for depression, paving the way for safe and accessible interventions for the millions of people around the world diagnosed with this condition.
Depression is the most prevalent mental disorder and a leading cause of global disability, with mental health services worldwide struggling to meet the demand for treatment.

In an effort to tackle this rising challenge, researchers from Australia's National Institute of Complementary Medicine (NICM), Harvard Medical School, The University of Manchester, and the Black Dog Institute in Australia examined the efficacy of smartphone-based treatments for depression.

The researchers systematically reviewed 18 randomised controlled trials which examined a total of 22 different smartphone-delivered mental health interventions.

The studies involved more than 3400 male and female participants between the ages of 18-59 with a range of mental health symptoms and conditions including major depression, mild to moderate depression, bipolar disorder, anxiety and insomnia.

The first of its kind research, published today in World Psychiatry found that overall smartphone apps significantly reduced people's depressive symptoms, suggesting these new digital therapies can be useful for managing the condition.

Lead author of the paper, NICM postdoctoral research fellow Joseph Firth says this was an important finding which presented a new opportunity for providing accessible and affordable care for patients who might not otherwise have access to treatment.

"The majority of people in developed countries own smartphones, including younger people who are increasingly affected by depression," said Mr Firth.
"Combined with the rapid technological advances in this area, these devices may ultimately be capable of providing instantly accessible and highly effective treatments for depression, reducing the societal and economic burden of this condition worldwide."

Co-author, NICM deputy director, Professor Jerome Sarris highlighted the importance of the findings for opening up non-stigmatising and self-managing avenues of care.

"The data shows us that smartphones can help people monitor, understand and manage their own mental health. Using apps as part of an 'integrative medicine' approach for depression has been demonstrated to be particularly useful for improving mood and tackling symptoms in these patients," said Professor Sarris.

When it comes to the question of "Which app is best?" and "For who?", the results suggested these interventions so far may be most applicable to those with mild to moderate depression, as the benefits in major depression have not been widely studied as of yet.

The researchers found no difference in apps which apply principles of mindfulness compared to cognitive behavioural therapy or mood monitoring programs.

However, interventions that used entirely 'self-contained' apps - meaning the app did not reply on other aspects such as clinician and computer feedback - were found to be significantly more effective than 'non-self-contained' apps.

The authors suggested this might be due to the comprehensiveness of these particular stand-alone apps rather than the combination of therapies.
Despite the promising early results, there is currently no evidence to suggest that using apps alone can outperform standard psychological therapies, or reduce the need for antidepressant medications.

According to co-author and co-director of the digital psychiatry program at Beth Israel Deaconess Medical Center and a clinical fellow in the department of psychiatry at Harvard Medical School, Dr John Torous, the research is a timely and promising step forward in the use of smartphones in mental health.

"Patients and doctors are faced with a vast array of mental health apps these days, and knowing which ones are actually helpful is imperative," said Dr Torous.

"This research provides much needed information on the effectiveness of apps for depression, and offers important clues into the types of apps which can help patients manage their condition."

Jennifer Nicholas, a PhD Candidate at Black Dog Institute and co-author of the paper says with the knowledge that apps can be effective for managing depression, future research must now investigate which features produce these beneficial effects.

"Given the multitude of apps available - many of them unregulated - it's critical that we now unlock which specific app attributes reap the greatest benefits, to help ensure that all apps available to people with depression are effective."
