Cambridge Adaptive Testing

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Measuring the mind, efficiently.

Website

Overview

Addressing the global concerns about worsening mental health and the mounting costs to society and to organisations, Cambridge Adaptive Testing (CAT) creates precise, standardized, ultra-rapid and easily managed assessments of mental distress. This supports screening for mental health difficulties, the effective allocation of mental health resources and the evaluation of change.

The elegant use of computerised adaptive technology allows bespoke products for young people and for adults, and can be used as a measurement 'chip' for use in other mental health applications.

The Challenge

Mental ill-health (MH) is a global concern that costs the UK economy £117.9 billion annually, deepening during the pandemic. Worryingly, the steady deterioration recorded throughout the last two decades has accelerated during the Covid-19 Pandemic. A 2021 survey found that 17.4% of children aged 6-16 and up to 21% of adults had a probable mental disorder.

Major barriers to addressing this are:

- Cumbersome and time-consuming MH assessments

- The existence of myriad assessment tools (e.g. >280 for depression, alone) that complicate comparison and transferability

- No data management tools for distributing assessments, collating responses and organising reports

The Solution

We have developed two mental ill-health (MH) screening platforms: one for children, another for adults. Each utilizes innovative computerised adaptive testing technology that pools questions from many existing measurement tools into a large repository of questions previously answered by thousands of people from which only a small, bespoke subset of the most informative questions are administered to subsequent individuals depending on their previous responses.

This leads to a personalized, brief but precise assessment (under a minute). We also offer a dashboard panel to help organizations manage their internal MH assessments and reporting.

Publications and Patents

Here the rationale for CAT: Stochl J, Ford T, Perez J, Jones PB. Modernising measurement in psychiatry: item banks and computerised adaptive testing. Lancet Psychiatry. 2021 May;8(5):354-356. doi: 10.1016/S2215-0366(21)00041-9.

Here is an account of our co-production school children: Burn AM, Ford TJ, Stochl J, Jones PB, Perez J, Anderson JK. Developing a Web-Based App to Assess Mental Health Difficulties in Secondary School Pupils: Qualitative User-Centered Design Study. JMIR Form Res. 2022 Jan 10;6(1):e30565. doi: 10.2196/30565. PMID: 35006079

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