

# The University of Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

### 1. Background

Mental Health Research UK commissioned us to develop "Managing Your Mood Online" (MYMO), an evidence-based online resource to improve depression literacy and management for Nottinghambased university students. Several research projects were conducted to influence MYMO's content:

**Interviews** with 37 students revealed their uncertainty in assessing the importance of symptoms of mental distress. Some students described unawareness about how GPs, counsellors and tutors could help. Students studying specific degrees (e.g. medicine) may have better mental health literacy.

An **online survey** with 758 students found a third (N=276) displayed elevated depressive and/or anxiety symptomology, of which almost two-thirds (60.9%) had not sought professional help. Elevated symptomology was associated with lower maternal education and studying Arts & Humanities degrees.

A systematic review and meta-analysis of 17 student-only trials of computer and website-based interventions for common mental health problems found support for their use in improving depression, anxiety and stress outcomes, when compared to no-treatment controls<sup>1</sup>. This included three trials of *MoodGym*.

A vignette-based study with 483 students found males and those studying non-healthcare/psychology degrees had greater depression-related stigma, lower perceived confidence and poorer quality mental health first aid skills to help a friend with depression. These students \_may be less knowledgeable about depression and less able to support their peers' mental health needs.

**Literature review** explored mental health help-seeking theory and mental health literacy interventions. The four-stage process model of help-seeking<sup>2</sup> was used to guide website development and content. The Cycle of Avoidance non-help-seeking model<sup>3</sup> was applied to content improving students' appraisal of symptoms, and cognitive learning theory<sup>4</sup> was used to model positive experiences of depression, help-seeking and self-management.

References: [1] Davies EB, Morriss R, Glazebrook C. (2014). Computer-Delivered and Web-Based Interventions to Improve Depression, Anxiety, and Psychological Well-Being of University Students: A Systematic Review and Meta-Analysis. J Med Internet Res, 16 (5), e130; [2] Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. Advances in Mental Health, 4 (3), 218-251; [3] Biddle, L., Donovan, J., Sharp, D., & Gunnell, D. (2007). Explaining non-helpseeking amongst young adults with mental distress: a dynamic interpretive model of illness behaviour. Sociology of Health & Illness, 29 (7), 983-1002; [4] Bandura, A. (2004). Health Promotion by Social Cognitive Means. Health Education & Behavior, 31 (2), 143-164 [5] Currie, S. L., McGrath, P. J., & Day, V. (2010). Development and usability of an online CBT program for symptoms of moderate depression, anxiety, and stress in postsecondary students. Computers in Human Behavior, 26 (6), 1419-1426; [6] Breakey, V., Warias, A., Ignas, D. White, M., Blanchette, V., & Stinson, J. (2013). The value of usability testing for Internet-based adolescent selfmanagement interventions: "Managing Hemophilia Online". BMC Medical Informatics and Decision Making, 13 (1), 113.

#### Development and Usability of a Website-Based MentalHealth **Depression Literacy Intervention for University** Students in Nottingham ResearchUK <u>E Bethan Davies<sup>1\*</sup></u>, Richard Morriss<sup>1</sup> & Cris Glazebrook<sup>1</sup> <sup>1</sup>Division of Psychiatry & Applied Psychology, The University of Nottingham, Nottingham, UK (\*mcxebd@nottingham.ac.uk) 2. Development 4. Usability feedback **Overall impression** Findings were used to develop the preliminary All participants felt the website was useful and liked using it: website using a website-building tool ('Weebly'): • Liked aspects: signposted to relevant resources (N=7), provided enough • MYMO consisted of 67 webpages in 10 sections: information about depression (N=6), clarity of content and appropriate these sections included general information about language (N=3), evidenced-based content (N=3), 'supporting a friend depression, guidance on understanding symptoms with depression' section (N=3). and when to seek help, available professional help, • *Disliked aspects*: text too lengthy on some webpages (N=4), frontpage self-help, and how to support a friend. presentation (N=4), colour scheme (N=5). • Content was delivered through text, pictures and Many participants suggested improvements for website, e.g. adding audio (*Figure 1*). specific information, changing the videos, altering presentation of some • Quotes from the interview-based study were used to webpages. model and reiterate content to the target audience. All felt website's content was evidenced-based and was relevant to local university students. Managing Your Mood Online (MYMO) Navigation issues Visual presentation • Overall it was easy to navigate around • Sample felt the website MYMO: front page Why is getting help important? website, minimal problems made a good first Seeking help as soon as you recognise you may have an issue is important so that action can be taken before your About this website encountered, clearly defined sections, symptoms become more severe and further impact your ability to carry out usual activities and affect your impression, liked the use relationships. Keeping your feelings to yourself and trying to self-manage can prolong depression. felt it was easy to find information and What is depression? of multimedia, could read There are many things you can do by yourself to help you manage your symptoms and a wide range of treatments, could remember how to navigate What should I do if I both medical and non-medical, will be available at the university or in the surrounding area. Many young people think I might have the text/fonts and was initially find seeking out help a difficult thing to do, but it is available and can help you feel better sooner and enjoy around it. depression? life. Help available includes: clearly presented. GPs and other healthcare professionals Problems: interactive side-menu not Who can I seek help Counselling In one module we were having all these Colour scheme a problem: from? ectures about how to tell when somebody' functioning well; some hyperlinks Medication, such as anti-depressants pressed and it was just like 'yes that's me Academic help – your tutor (may vary by school) may not be suitable for How you can help I felt I should do something about it before broken or incorrect. Self-help – e.g. exercise, stress management, eating well, I started trying to treat people who are yourself depressed if I couldn't admit to myself visually-impaired users making a routine, complementary therapies that I was depressed ?? Mobile/tablet-version of MYMO not as Online self-help CBT programmes such as MoodGym Help yourself using and too "cold", colours not Hayley MoodGym Support from trusting family and friends easy to navigate or access as (4th Yr Medicine si very appealing. Help yourself using Professionals are trained in understanding the kinds of mental health issues young people face and how university life can affect students' health. Understandably you may have worries about the help sources available or about seeking

Mindfulness

Supporting a friend with depression

Information for parents

In a crisis?

Figure 1. A screenshot of MYMO. The website's sections are presented on the left.

# evaluation

#### **19 student participants volunteered to evaluate** the preliminary website:

 They were provided with seven-day access to MYMO and completed an online evaluation survey which rated the website's usability and acceptability.

Back: How can I tell if I need help?

- Rating-scale and open-ended questions evaluated the website's content, presentation, navigation, perceived relevancy and usefulness to students. Questions were based on previous usability studies of internet-based interventions <sup>5, 6</sup>.
- The majority of participants reported regular use of the internet for health-related purposes.







help in general. The information provided on other pages of this website may help address concerns you may have.

Next: Deciding to seek help - pros and cons

- laptop/computer-version.

#### Language and content

- Website's content understandable and used familiar language which was sensitive and appropriate to the topic.
- Majority liked use of multimedia and aided understanding of text videos may not have been recorded at high-enough quality.
- All felt there was no content which could negatively impact upon future student users.
- Five participants liked use of student quotes: could help users feel 'less isolated' about their depression.
- Fifteen felt text was too lengthy on some or all webpages:
  - Participants suggested text could be shortened, divided into some webpages together.
- Fifteen participants stated the website did provide them with previouslyunknown information relating to depression and its management.

## 5. Discussion

This usability evaluation forms the first part of an iterative process to redesign the intervention. The problems identified in evaluation and user suggestions will be used to change the website and improve its interactivity, and professional developers/designers will be hired to build the next version of MYMO.

sections or bullet-pointed to make more concise, or combine