Even Buddhist Monks Use a Gong: A Mindfulness Skills Programme for Young People Delivered through the “Mindful Gnat” Computer Game and App.

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ABSTRACT

Mindful Gnat is a computer game and App that introduces mindfulness and relaxation skills to young people aged nine years and older. In this paper the authors describe their model for using technology to support children with the development of psychological skills. This model combines a computer game to introduce and practice psychological skills played in the presence of an adult, with an App that assists young people as they practise and transfer those skills into their everyday life at home, at school and in the community. The Mindful Gnat computer game comprises a six level 3-D game world and is available on iOS and Windows. The Mindful Gnat App is available for both iOS and Android operating systems. This paper describes the background research that informed the design of Mindful Gnat as well as the specific mindfulness and relaxation contents of the programme. The authors’ on-going research to evaluate the effectiveness of Mindful Gnat with regular children and those with clinical difficulties is described, along with the key lessons the authors have learnt from their experience in the design of mental health promoting technology.

KEYWORDS

Computer Games, Mindful Gnat, Mindfulness, Relaxation, Technology

INTRODUCTION

Mindfulness is now a mainstream therapeutic intervention in psychology and has also become pervasive in modern Western culture. This paper describes our first attempts to use technology to support the development of mindfulness and relaxation skills in young people. Mindful Gnat has two components (1) a computer game, and (2) an App. Both are designed to be used in combination by young people aged 9 years and older (O’Reilly, & Coyle, 2015a; O’Reilly, Coyle, & Tunney, 2016). The Mindful Gnat computer game introduces a young person to eight mindfulness and relaxation skills across six different game levels. The Mindful Gnat App is designed to support a young person train those skills in their everyday life between game levels.

The origins of Mindful Gnat is best understood from its context as part of a range of computer games and Apps our team is designing and releasing on a not-for-profit basis that support good mental health in young people. The first game released from our range was a seven level computer game and App designed to be played by a young person and a mental health professional called Pesky gNATs (O’Reilly & Coyle, 2015b). Pesky gNATs supports the delivery of a Cognitive Behaviour
Therapy (CBT) intervention for young people with clinically significant Anxiety or Low Mood. The gNATs in the game’s title is a play on words animating a key concept of CBT, Negative Automatic Thoughts (or NATs) as gNATs or little flies. Pesky gNATs progresses by teaching a young person to manage their anxious or depressed mood by understanding and applying the general cognitive model (Beck, & Haigh, 2014). That is, in exploring the “gNATs Island” 3-D game world they learn that gNATs lower our mood or make us anxious and in turn negatively influence our behavior, but can be changed leading to improvements in mood and behavioural functioning. The young person with assistance from their therapist learns how to observe their thinking and spot negative thinking by trapping gNATs, learns how to re-appraise and change their negative thinking by swatting gNATs (cognitive re-structuring). They also learn how to bring about healthy change to their underlying view of themselves, other people, and the world through hunting gNATs back to their Hive and splatting unhelpful Hives (identifying and changing their negative Core Beliefs). Young people complete between session therapy tasks with the assistance of a smartphone App. The Pesky gNATs App is available for free to young people through the iTunes or Google Play stores (O’Reilly & Coyle, 2015c). The Pesky gNATs App rewards young people for the completion of between therapy tasks by unlocking fun gNAT related games that reinforce CBT concepts as a young person applies them to their everyday life by using the App between sessions. Our website (www.peskygnats.com) provides a portal for mental health professionals to register with us and complete seven hours of on-line video-based training in how to use Pesky gNATs.

As such the model we are developing is one of technology assisting therapists in the delivery of an evidence-based mental health intervention while maintaining all of the key characteristics of a good therapeutic relationship. As illustrated in figure 1 our model assists therapy by supporting it with three pieces of technology: 1 our website provides therapists with access to our games and on-line training. 2 A computer game that a young person and a therapist play together during a traditional face-to-face therapy session that delivers an evidenced-based mental health intervention.
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