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Editorial: Serious Games and Mental Health

Today the use of digital technology available to inform, train and educate is ubiquitous, with everyday lives seemingly becoming immersed in technology (Howard-Jones 2011). Further, the recently published UK digital strategy provides the structure to enable free access to digital skills training for everyone in the UK (Department for Culture Media and Sport 2017).

As part of the digital technology toolset, serious games hold the promise of relatively low risk experiential learning-curves that are engaging, fun and desirable. Serious games are digital games which are developed for a purpose other than entertainment; often this is for education, skills development or to rehearse the management of high risk situations such as natural disasters. However, serious games retain features of game play inherent within entertainment games (Wattanasoontorn, Garcia and Sbert 2013).

Serious gaming has the potential to transform mental health services by providing a collaborative environment in which users can create and explore complex problems. A serious game will augment, reinforce and customise existing therapies; it can be used independently by service users on demand, and, if desired, intelligent agents within the game can quantify player behaviour to produce actionable reports (Loh et al 2015). Serious games may also be a portal for online communities, crossing geographical boundaries and enabling new models of care; a virtual space where service providers and service users can work in partnership. Indeed existing online communities are reporting the therapeutic use of consumer games and sharing experiences using social media.

We developed a serious game with Forensic Mental Health (FMH) service users and practitioners. Our prototype game is aimed at enabling service users to explore and engage with community based risky situations in a safe environment. Developing and testing the game in partnership with service users ensured that realistic and meaningful scenarios were built into the game, drawn from the service users' own experiences. This is outlined in our article published in this issue of JPMHN. The development of a serious game with realistic simulation of characters, location and dialogue is novel in FMH. However, the game was well received by service users with simulation affording player engagement; promoting flow and instinctive behaviours.

Serious gaming is in its infancy in mental health services, and the evidence for a positive impact of digital gaming on health and well-being is limited (Johnson et al 2016). The complexity and cost

involved in generating and evaluating a therapeutically valid game may not represent an immediately obvious answer to an overstretched and under resourced service. A significant amount of investment of both time and money would be needed for health services to develop a service user led and fully evaluated serious game, which in the absence of a clear evidence base for therapeutic efficacy and at a time when the NHS is seeking to balance its books would be difficult to justify. However, big industry and corporations have recognized the potential in creating serious digital games for health. Pharmaceutical conglomerates are investing heavily in software development, large traditional game publishers now have dedicated serious game divisions, and the developers of brain training and meditation applications are working with Universities to validate their products as beneficial cognitive therapies.

There are great benefits for an industry led approach with the costs of initial game development being met by software companies; cutting edge software and expertise will be available to create the most effective and realistic gaming environments. Whilst the developers of serious games will always consider the end-user, the development of a serious game from first principles in genuine two-way partnerships with users, to reflect the worlds that they inhabit, remains novel. And there is a current trend for existing entertainment games such as Tetris and Pokémon go to be re-purposed for therapy (Clark and Clark 2016). It is also unclear how serious games for health which have been developed by industry will be licensed for use by the NHS. The cost of games development must be recouped and on-going maintenance will need to be provided by profit making organisations. Furthermore questions need to be asked regarding the ownership of data gathered by analytic devices and intelligent agents embedded within games.

There is huge potential for serious games within mental health, they offer a safe zone to address social and psychological dimensions through which users and practitioners can explore and untangle complex issues. Serious games provide an accessible, friendly and desirable point of contact for users, and the right game will result in valid and meaningful therapies and recovery. Serious games can provide the tools to advance and enhance the core components of the role of the mental health nurse - to exploit this technology to the full, it is vital that nurses are part of the conversation.

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