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Topic of the Speech:
The Opportunity for More Human-computer Conversations (Using Chatbots) During Social Distancing in a Pandemic

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Dr. Raymond Bond has research interests within biomedical and healthcare informatics, which is the application of digital technology in healthcare (otherwise known as digital health). Raymond's work involves the application of data science and human-computer interaction to healthcare.

His work has involved health data analytics as well as the modelling, processing and visualisation of medical data to enhance clinical decision-making including the creation of decision support systems. He also has research interests in computerised simulation-based training in healthcare, usability engineering for medical devices, eye-gaze analytics in decision science, and is also involved in developing digital health interventions in the form of apps and chatbots.

Raymond has around 280 research publications and has been a grant holder on research projects funded by EPSRC, ESRC, MRC, HSC, H2020, FP7, Interreg, Northern Periphery and Arctic programme, InvestNI, Samaritans Ireland, Innovate UK, Higher Education Academy, InterTrade Ireland and the Royal Irish Academy. Raymond obtained his BSc(hons) and PhD in the School of Computing and Mathematics (Ulster University). He recently chaired the 32nd International BCS Human-Computer Interaction conference and the European Conference on Cognitive Ergonomics. He is a senior fellow of the UK Higher Education Academy and a directing board member of the International Society for Computerized Electrocardiology.

ABSTRACT SUBMISSION
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The Opportunity for More Human-computer Conversations (chatbots) During Social Distancing in a Pandemic

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ABSTRACT (NO MORE THAN 500 WORDS:)

The talk will outline the current challenges and opportunities for chatbots and conversational assistants to promote mental wellbeing. Given that 'lockdowns' and social distancing are measures to combat the spread of viruses such as COVID-19, and when considering the potential economic impact and personal job loses (and indeed the loss of relatives), many people may experience increased anxiety, depression or other wellbeing problems. As a result, people may need support to engender a more positive mental wellbeing. Social distancing can also create lonely environments for people who are secluded and may result in further social isolation and loneliness. Computer technologies and digital health interventions can be used to support mental wellbeing. One particular digital intervention is the 'chatbot'. A chatbot is a program that allows a user to have a conversation with a computer, 24 hours a day, 7 days a week. A chatbot can coach users by providing psycho-education and support through engaging dialogues and by suggesting activities that are suitable to the user. Whether it is appropriate to anthropomorphize a chatbot is a concern but theories such as 'computers as social actors – CASA' postulate that humans already humanize their interactions with digital technology. In this presentation, I will discuss a project called ChatPal that is funded by the Northern Periphery and Arctic programme. I will discuss survey results that detail the degree to which mental health professionals support the prescription of chatbots to clients. I will then discuss needs analysis that informed the design of a chatbot to support mental wellbeing which is being released during this COVID-19 pandemic. The chatbot uses a positive psychology framework to coach users on how to maintain positive emotions. I will also discuss the ethical aspects of chatbots and whether people really should talk or have a dialogue with a computer that lacks a conscience, empathy and understanding.