International Society for Research on Internet Interventions (ISRII)

View Abstract

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TITLE: Exploring the potential of existing and emerging digital health technologies in tackling non-communicable diseases and mental health conditions: Focus group study with a multi-ethnic Asian population

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PRESENTATION PREFERENCE: Oral

CURRENT PRIMARY TOPIC: Mobile health

CURRENT SECONDARY TOPIC: Next generation interventions & technology

ABSTRACT BODY:

Context: Changing lifestyle patterns over the last decades have seen growing numbers of people in Singapore affected by non-communicable diseases and common mental health disorders, including diabetes, cancer or depression. Interventions targeting healthy lifestyle behaviours through digital health technologies, including new approaches such as smartphone app-based conversational agents, may be an effective, low-cost approach to reduce the burden of these conditions. To ensure uptake and engagement with digital health interventions, it is essential to understand the end-users' perspectives on using such solutions to address lifestyle behaviour change. The aim of this study was to explore public perceptions of digital health interventions targeting healthy lifestyle behaviours in three major Asian populations from Singapore.

Methods: Six virtual focus group discussions, with a total of 35 participants (mean ± SD; aged 45 ± 3.6 years; 64.7 % females), were conducted to explore perceptions, barriers, and facilitators to the use of digital health interventions for lifestyle behaviour change. Focus group recordings were transcribed verbatim and analysed using a thematic approach.

Results: Four themes were identified: (1) holistic wellbeing (i.e., the importance of both physical and mental health); (2) uptake of digital health interventions (i.e., factors influencing an individual's decision to use a digital solution such as incentives or government backing); (3) use and engagement with digital health interventions (i.e., factors influencing an individual's decision to continue using a digital solution such as limited features available or data collection burden); and (4) emerging technologies (e.g., experiences with chatbots and their potential role in providing lifestyle behaviour support).

Conclusions: Findings highlighted a number of factors that are relevant for the effectiveness of existing and emerging digital health solutions. Deviations were found with factors that have been shown to be critical for (better-studied) Western populations.

Implications: Recommendations from this work can inform those wishing to develop and implement digital health interventions targeting physical and mental health in Singapore and other Asian countries.

(No Image Selected)

Full Manuscript: No

BY CHECKING THIS BOX, I AGREE TO PRESENT MY SUBMISSION AT ISRII 11 IF IT IS ACCEPTED:

Oscar Castro : Selected

Agreement: Oscar Castro: I attest.;Oscar:Castro | Jacqueline Mair: I attest.;Jacqueline:Mair | Alicia Salamanca-Sanabria: I attest.;Alicia:Salamanca-Sanabria | Bea Frese: I attest.;Bea:Frese | Tobias Kowatsch: I attest.;Tobias:Kowatsch | E Shyong Tai: I attest.;E Shyong:Tai | Florian von Wangenheim: I attest.;Florian:von Wangenheim | Falk Müller-Riemenschneider: I attest.;Falk:Müller-Riemenschneider

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Other Relationships: Oscar Castro: | Jacqueline Mair: | Alicia Salamanca-Sanabria: | Bea Frese: | Tobias Kowatsch: ;TK is affiliated with the Center for Digital Health Interventions, a joint initiative of the Department of Management, Technology, and Economics at ETH Zurich and the Institute of Technology Management at the University of St Gallen, which is funded in part by CSS, a Swiss health insurer.:CSS:Other;TK is also the cofounder of Pathmate Technologies, a university spin-off company that creates and delivers digital clinical pathways. However, Pathmate Technologies was not involved in any way in the design, interpretation, and analysis during the study, or in writing the paper.:Pathmate Technologies:Other | E Shyong Tai: | Florian von Wangenheim: ;FvW is affiliated with the Center for Digital Health Interventions, a joint initiative of the

Department of Management, Technology, and Economics at ETH Zurich and the Institute of Technology Management at the University of St Gallen, which is funded in part by CSS, a Swiss health insurer.:CSS:Other | Falk Müller-Riemenschneider: