

UCL TechSharing Seminar Series

Nikki Newhouse, multidisciplinary PhD student (UCLIC and PCPH) and coordinator of the TechSharing Seminars, reports on the latest seminar in the series, which invited the audience to question prevailing paradigms in digital intervention evaluation.

September saw the return of the popular UCL TechSharing Seminar, a quarterly collaborative half-day workshop aimed at sharing multidisciplinary knowledge and experience of working with technology and digital interventions. The seminar series was established in 2013 and is organised by PhD students and early career researchers from UCL's Interaction Centre (UCLIC) in the Department of Computer Science and the eHealth Unit in the Research Department of Primary Care and Population Health. The series was established as a way of bringing together colleagues from across UCL who work in complementary but disparate fields including health, online intervention development and human-computer interaction, in order to share expertise and knowledge and encourage strong and fruitful future collaborations. Previous seminars have focused on a range of topics, from developing theory underpinning intervention development, to systems analysis and storyboarding, even how to select your software developer. Targeted at UCL students and academics, external attendees and speakers are more than welcome!

The seminars follow a format that allows for a wide variety of presentations and questions from the audience. Discussion and debate are positively encouraged and this seminar's audience did not disappoint, with lots of lively conversation between speakers and audience members keeping the seminar's timekeepers on their toes.

This term's seminar was entitled *Evaluating digital interventions - challenging prevailing paradigms* and focused on challenging the paradigms currently ingrained in the design and evaluation of healthcare interventions, with speakers from across numerous disciplines talking about different approaches to digital healthcare research. Following welcome and introductions from outgoing seminar series coordinator Dr Rosie Webster, the event kicked off with the first session, focused on the pros and cons of utilising participant usage data in health intervention development. [Delmiro Fernandez-Reyes](#) (UCL - Paediatrics, Global Health Infectious Diseases and Computational Statistics) began with a presentation on his work based on sampling the burden of childhood infectious diseases in urban densely-populated Africa. [Kathy Stawarz](#) (UCL-UCLIC) then gave a well-received presentation on her doctoral work around the development of a digital intervention whose ultimate aim is to be discarded: *Forming healthy habits and leaving the app behind* explored the role of technology in the formation of long-lasting, health-promoting habits. [Mirco Musolesi](#) (UCL – Geography) was up next, talking about data collection and analysis by means of smartphones for behaviour change interventions; he was followed by Rosie Webster, [myself](#) & [Ghadah Alkhalidi](#) (UCL-eHealth Unit & UCLIC). We shared our experiences of working with usage data within the context of digital intervention development and the randomised controlled trial paradigm, ultimately questioning whether or not usage data is (often) more trouble than it's worth...

Following a break for coffee and networking, the second session was entitled *What control groups should we be using (if any)?* and was started by [Aleksandra Herbec](#) (UCL - Epidemiology and Public Health) who gave us an insight into the complexity of choosing the right control, illustrating this with

examples from her work in RCTs of smoking cessation/medication adherence involving apps. Visiting PhD student [Tobias Sonne](#) (Aarhus University) talked next about his doctoral work on the development of an ADHD app intervention with no control groups and [Claire Garnett](#) (UCL - Clinical, Educational & Health Psychology) and [Ildiko Tombor](#) (UCL - Epidemiology and Public Health, UCL) finished the session with a presentation on controls in factorial trials.

This seminar enjoyed presentations from two keynote speakers who addressed the fundamental questions of whether or not the 'gold-standard' RCT paradigm is the best approach to take in the context of digital interventions and, if not, what is the alternative. [Professor Elizabeth Murray](#) (UCL- Head of the Research Department of Primary Care and Population Health & eHealth Unit) used her presentation to explore the option of implementation as an alternative to the RCT, using examples from the [HeLP-Diabetes](#) research programme. Professor Murray suggested that we consider the possibility that implementation can be undertaken prior to, or in parallel to the traditional trial paradigm. There was much discussion about the consequences and implications of the continued dominance of RCTs. [Professor Ann Blandford](#) (UCL- UCLIC & Institute for Digital Health) then asked *To RCT or not to RCT? That is the question...* Professor Blandford's talk focused on the philosophical and practical similarities and differences between traditional public health and computer science complex intervention development frameworks and stressed the need for a multi-lingual approach, which effectively translates between and across the disciplines. She stressed the importance of context in the development and evaluation of digital interventions and highlighted the role of qualitative methods as a key approach in both establishing user requirements and system effectiveness.

The session concluded with thanks to the speakers and audience and an invitation to attendees to help shape future seminars by suggesting hot topics and themes. If you would like to know more about the seminars or to get involved as part of the organising committee, please get in touch!

A huge thank you to this event's organising committee: Rosie Webster, Aisling O'Kane, Ghadah Alkhaldi and Aleksandra Herbec. In addition, we wish Rosie all the best in her new role as Senior Public Health Officer at Breast Cancer Now.

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