CALL FOR PAPERS

Special Issue on Health Behavior Change Support Systems (HBCSS)

International Journal of Medical Informatics

Submission deadline: 31.1.2015
Notification to authors: 30.4.2015
Revision deadline: 31.7.2015
Notification to authors: 30.9.2015
Final version due: 30.11.2015

Special issue website: http://specialissuehbcss.wordpress.com/

Special Issue Focus and Objective

"A Behavior Change Support System (BCSS) is a socio-technical information system with psychological and behavioral outcomes designed to form, alter or reinforce attitudes, behaviors or an act of complying without using coercion or deception." (A Foundation for the Study of Behavior Change Support Systems, Personal and Ubiquitous computing, Vol. 17, No. 6, August 2013, pp. 1223-1235)

The purpose of this *International Journal of Medical Informatics* Special Issue is to develop a richer understanding of the Health Behavior Change Support Systems (HBCSSs) as an object of persuasive technology.

All BCSSs have a persuasive component. What distinguishes research into BCSSs from other persuasive systems is that BCSSs are full-fledged systems, which emphasize user's voluntariness in the persuasion process, personal goal-setting, quality and content of information provided, computer-mediated communication, development of software platforms and architectures, methods and processes to develop these systems, requirement for 24/7, organizational and social impacts on par with end-user impacts, and feasible business models, among other issues.

Health BCSSs are persuasive systems or software services aimed at influencing health behavior and wellbeing. In this special issue, we focus on how persuasive components can be used to develop, design and implement HBCSSs. The special issue highlights how persuasive theories and models can be used to develop efficient and effective interventions (i.e. HBCSS) for different contexts in healthcare (e.g. persuasive decision support systems for self-care or persuasive games to support chronic care), how co-creation can be used to implement HBCSS in practice and what evaluation methods are needed to assess the impact of HBCSS on healthier living.

Emphasis in the special issue will be placed on both design and development of the HBCSSs and implementation and appraisal of the artifacts (i.e. the system) and their outcomes. The primary focus should not be purely about methodologies or technologies.

Topics/Themes

Design and development
- User involvement in early stages of HBCSS development to tailor systems in accord with user profiles
- Stakeholders' perspectives (users and experts) to create HBCSSs that have value in practice
- Persuasive strategies that are effective at different stages of the persuasion process in achieving behavior (attitude, behavior, compliance) change
- Using persuasive strategies to support activities offline (e.g. to support viewing and downloading mindfulness exercises, to support social support in lifestyle changing programs)
- Persuasive prompts to create engagement and involvement in serious game interventions
- User profiles to identify which persuasive strategies matter most for whom
- Software designs and design approaches for developing HBCSSs
- Discussion or evaluation of development approaches for HBCSSs

Implementation and evaluation
- Usage data to know the dose, duration, time and format of persuasive strategies
- Adequate design for measuring the effect of persuasive strategies on task adherence during usage and long-term effects (fractional factorial designs)
- Frameworks and methodologies to measure A/B/C-Changes (attitude or behavior change, or an act of compliance)
- Profiling personalities and matching them with persuasive strategies
- Multimodal cues and measurement of the effects on adherence and outcomes
- Advanced analytics to predict adherence, and to identify usage patterns and the effects on adherence
- Evaluation of persuasiveness of different HBCSSs (mobile, ubiquitous, ambient technologies), moving towards a checklist for practice

Submissions

All submissions will be rigorously screened for their overall quality and suitability for the special issue before being sent out for external review. Only submissions that clearly address the Behavior Change Support Systems approach will be considered. All submissions to be considered for publication will have to be either unpublished or significantly extended manuscripts of earlier published work. If the latter is the case, the submission must include a separate explanation of how the current submission differs from any previous work.

Submissions should be prepared according to the instructions found on the IJMI homepage. Manuscripts must submitted through the submission system of IJMI. Select "SI: HBCSS" when you reach the "Article Type" step in the submission process.

Please email Saskia Kelders (s.m.kelders@utwente.nl) if you plan to submit an article or have any questions about the theme issue. We look forward to receiving your submissions.

Special issue editors

Kelders Saskia, University of Twente, the Netherlands, s.m.kelders@utwente.nl

Oinas-Kukkonen Harri, University of Oulu, Finland, harri.oinas-kukkonen@oulu.fi

Öörni Anssi, University of Oulu, Finland, anssi.oorni@oulu.fi

van Gemert-Pijnen Julia (Lisette), University of Twente, the Netherlands, J.vanGemert-Pijnen@utwente.nl