Notice of the Final Oral Examination
for the Degree of Doctor of Philosophy

of

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MPhil (Norwegian University of Science and Technology, 2013)
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“Green gamification: Changing habits through long term engagement and stories”

Department of Psychology

Thursday, August 1, 2019
11:30 A.M.
Clearihue Building
Room B007

Supervisory Committee:
Dr. Robert Gifford, Department of Psychology, University of Victoria (Supervisor)
Dr. Andrea Piccinin, Department of Psychology, UVic (Member)
Dr. Jens Weber, Department of Computer Science, UVic (Outside Member)

External Examiner:
Dr. Markus Brauer, Department of Psychology, University of Wisconsin-Madison

Chair of Oral Examination:
Dr. Deborah Begoray, Department of Curriculum and Instruction, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies
Abstract

Gamification offers methods for influencing human behaviour that are not available with other approaches to behaviour change interventions. Its widespread and successful use in business, education, and health care notwithstanding, it has so far not been extensively used for improving sustainability, nor have its underlying psychological principles been studied in depth. This dissertation investigates gamification with a special focus on the role of perspective taking and emotion. A gamified behaviour change app was compared with a standard app and a webpage for its effect on participants’ sustainable behaviours. During the one month period the participants engaged with the intervention, they kept diaries about their experience with sustainability and the technology. Furthermore, the influence of dramatic elements was tested through an augmented reality approach. Gamification causes longer engagement with the intervention, thereby influencing behaviour. Specifically, gamification increases knowledge about and willingness to invest effort into sustainable behaviours. Dramatic elements, using the power of narrative persuasion and immersion, are important aspects to consider in gamification. The theory of behavioural choice can fruitfully serve as a psychological model of how gamification affects behaviour.