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# Positive Gaming: Workshop on Gamification and Games for Wellbeing

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## Abstract

Gamification and games have been used and studied in a variety of applications related with health and wellbeing. Nevertheless, there are very few studies aimed at designing games (whether serious games or recreational games) or gameful applications for improving wellbeing or flourishing – the pursuit of a happy and meaningful life, rather than the avoidance of illness. Therefore, this full-day Workshop aims to form a community, discuss theoretical and practical considerations, and promote the development of research projects focused on “Positive Gaming” – the use of gamification and games as tools for realizing Positive Computing objectives. This will create the opportunities for interested researchers to form a common understanding, develop methods and procedures, and establish a roadmap for future research in Positive Gaming.

## Author Keywords

Gamification; Games; Wellbeing; Health; Positive Computing; Positive Gaming; Gameful Design.

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI); Miscellaneous; J.4. Computer Applications: Social and behavioral sciences. K.8.0. Personal Computing: Games.

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*CHI PLAY'17 Extended Abstracts*, October 15–18, 2017, Amsterdam, Netherlands.

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DOI: <https://doi.org/10.1145/3130859.3131442>

## Topics

Workshop topics include, but are not limited to:

- Theoretical considerations or practical applications of using gamification and games to promote flourishing or wellbeing;
- Frameworks for developing positive gaming applications;
- Design, implementation, or evaluation methods of gamification and games for positive computing;
- Personalization of positive gaming applications;
- Implementation of positive psychology interventions (e.g., gratitude, empathy, mindfulness) using games or gamification;
- Challenges to developing gameful applications, serious games, and recreational games for positive gaming;
- Participation of end users or wellbeing experts in the design process of positive games;
- Case studies of positive gaming.

## Objectives

Gamification [2] and games have been used and studied in a variety of applications related to health and wellbeing [3,7,9]. Nevertheless, their application in the domains of wellbeing and flourishing (the pursue of a happy and meaningful life rather than the simple inexistence of illness) remain considerably less studied than other more common application areas, such as physical health, fitness, or nutrition.

On the other hand, Human-Computer Interaction (HCI) research has recently begun to apply Positive Psychology [8,10], focusing on promoting positive psychological changes. Positive Computing [1] is the use of digital technology to foster flourishing with both hedonic and eudaimonic approaches. Games have been cited as one of the promising approaches to Positive Computing; yet, there are very few studies aimed at designing games or gameful applications for flourishing [3,7] or even understanding how serious or recreational games can lead to flourishing. Notable exceptions are the works of Vella et al. [11–13] and Johnson et al. [4], which have proposed conceptual frameworks and tested wellbeing promotion in recreational games, as well as McGonigal's work [5,6], which aims to promote mental health and wellbeing.

Therefore, this Workshop aims to provoke research and discussion in this direction by bringing together a community of interested researchers to discuss theoretical and practical considerations and promote the development of research projects focused on "Positive Gaming" as a technique for realizing the Positive Computing objective. Thus, the workshop will be majorly focused on gamification and games for flourishing and wellbeing, including the topics listed on the box on the left.

## Outcomes

This will be the first Workshop focused on gamification and games for wellbeing rather than general health. Therefore, it will create the opportunity for researchers interested in the topic to come together and discuss methods, procedures, and research opportunities. As such, this Workshop will provide interested researchers with a chance to form a common understanding of what are the best approaches to researching in this area, and to develop a roadmap for future research.

Furthermore, we plan to propose several challenges related to the application of gamification and games to positive computing, which participants will have the opportunity to discuss during the second part of the Workshop. Therefore, we expect that at least some of the discussed ideas might become real projects to be carried out by the researchers after the Workshop.

## Format

The Workshop will be divided in two parts (sidebar next page). In the morning, the organizers will coordinate a discussion panel aimed at establishing a common understanding on the topic and identifying research opportunities. Next, participants will have the chance to present the accepted works in the technical section.

In the afternoon, we will articulate and present challenges to designing and evaluating games and gameful application for positive psychology interventions (such as fostering gratitude or empathy). Participants will work in teams to propose and create a low fidelity prototype (e.g., a paper prototype) of a potential solution. Participants will then present these prototypes to the group for feedback and discussion regarding the application potential of the proposed solutions.

## Schedule

09:00 – 09:30

Opening and introduction

09:30 – 10:30

Positive Computing principles and their realization with games and gameful apps (panel coordinated by the organizers)

11:00 – 12:30

Presentation of the work submitted by participants

12:30 – 14:00

Lunch

14:00 – 14:30

Challenge set up

14:30 – 16:00

Team work discussing and prototyping potential solutions for the challenge

16:00 – 17:00

Presentation of the proposed solutions and playtesting

17:00 – 17:30

Closing and future action plan

The Workshop will conclude with a collective construction of plans for future action, aiming to establish new collaborative projects or continue some of the ideas that were generated during the group discussions.

## Participants

The Workshop will be publicly advertised through a dedicated website and social media. Participants will be invited to submit a written contribution to be presented at the Workshop. Contributions must have between 4 and 8 pages using the SIGCHI paper format and focus on one of the Workshop's topics. The organizers will form a Program Committee with researchers from the fields of HCI, games, positive computing, and psychology. All submissions will be peer-reviewed by at least two members of the Committee before acceptance. Submissions will be evaluated by their relevance and their potential to contribute to the overall Workshop objective and stimulate valuable discussions. Potential participants include researchers and practitioners in any of the abovementioned fields interested in the topic. We expect to accept at least eight or ten submissions to foster a rich exchange of ideas. The Workshop proceedings will be published on the CEUR-WS.org for online open access and wider reach.

## Organizers

*Gustavo F. Tondello*, M.Sc., is a Ph.D. student at the University of Waterloo with a main interest in gamification and games for health, wellbeing, and learning. He is currently working in projects related to the design and personalization of gameful apps for wellbeing.

*Rita Orji*, Ph.D., is an Assistant Professor at Dalhousie University, Canada. Previously, she was a Banting Postdoctoral Fellow at the University of Waterloo. She

has research expertise in personalization, persuasive technologies, and games for health and wellbeing. Dr. Orji has successfully co-organized many workshops on personalizing persuasive technologies and games.

*Kellie Vella*, Ph.D., is a Postdoctoral Fellow at the Queensland University of Technology interested in playful, social technologies and their impacts on wellbeing. She is currently working on the MindMax project, a gamified wellbeing mobile application developed in collaboration with the Australian Football League Players Association.

*Daniel Johnson*, Ph.D., is an Associate Professor at the Queensland University of Technology. His research interests include the wellbeing impact of videogames, videogames' motivations for play, and gamification. He is the head of the Games Research and Interaction Design Lab and has worked in the games industry for companies such as NextGen Videos and The Binary Mill.

*Marierose M. M. van Dooren*, M.Sc., is a Ph.D. candidate on the Persuasive Game Design group at the Delft University of Technology. Her research focuses on personalization and gamification to improve implementation and support therapy in youth mental healthcare. Her research interests focus on topics such as gamification, personalization, and (youth) mental healthcare.

*Lennart E. Nacke*, Ph.D., is an Associate Professor for HCI and Game Design at the University of Waterloo and head of the HCI Games Group. He has many years of experience serving on SIGCHI program and steering committees. Dr. Nacke has co-organized many workshops for CHI and CHI PLAY; he also chaired CHI PLAY 2014 and Gamification 2013, and served as technical and subcommittee co-chair for CHI and CHI PLAY.

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