Eat M Up!
Studying the Link between Game Experience and Eating Behavior

Karolien Poels
Eindhoven University of Technology
Game Experience Lab, HTI Group
Den Dolech 2, 5600 MB, Eindhoven
The Netherlands
k.poels@tue.nl

Yvonne de Kort
Eindhoven University of Technology
Game Experience Lab, HTI Group
Den Dolech 2, 5600 MB, Eindhoven
The Netherlands
y.a.w.d.kort@tue.nl

Wijnand IJsselsteijn
Eindhoven University of Technology
Game Experience Lab, HTI Group
Den Dolech 2, 5600 MB, Eindhoven
The Netherlands
w.a.ijsselsteijn@tue.nl
Playing games is often associated with unhealthy eating habits like meal skipping and consuming high calorie snacks. Online players are repeatedly huddled behind their PC with soft drinks and snacks to help them through long sessions of game play. Social gaming often takes place with friends hanging on the couch while consuming beer, and eating chips. Related to this, researchers have proposed the “couch-potato” hypothesis that connects electronic media use with obesity and overweight. According to this hypothesis, both TV viewing and playing digital games replace active leisure time and facilitate a sedentary lifestyle leading to an increase in obesity and overweight. To date, most empirical evidence in this area is based on large scale surveys linking a media use variable (e.g. daily hours of gaming) to an eating (e.g. amount of snacks a day) or weight (e.g. BMI) related variable. In the present study we examined the relation between playing digital games and eating behaviour in a lab setting. We specifically focused on the interplay between game experience or emotions evoked during game play and eating behaviour. The objectives were twofold. First, we wanted to investigate how having the possibility to eat contributes to the game experience. Second, we wanted to test how specific game experiences (e.g. pleasure, immersion, boredom) and specific game events (e.g. winning vs. losing) are related to eating behaviour. Individual eating habits and patterns are very much influenced by the type of eater a person is. Restrained eaters continuously control their food intake, while unrestrained eaters do not monitor the amount of food they eat. This variable was included as a moderator in our study. Concretely, we set up a between subjects design with an experimental ($n=28$) group who was offered M&M’s while playing a digital game and a control group ($n=24$) who did not get snacks. We compared how game experience differed between the two groups. Within the experimental group we further tested how the frequency of eating and the amount eaten was related to game experience and game events. Preliminary analyses show that positive affect is higher in the experimental compared to the control group. With respect to eating, results reveal large gender differences. Men are generally less restrained in their eating, and, on the same line, results show that men eat significantly more than women when playing a game. Looking at the results for men and women separately, the relation between game experience and eating did seem to differ. For
men, we found a positive correlation between boredom and eating. For women, results show a positive correlation between immersion and eating. Being immersed in a game might have impeded women to control their food intake. More in depth analyses are underway and will be available at the time of conference. To the best of our knowledge, this study is the first to link game experience to eating behaviour. Given the increased prevalence of obesity and overweight, it is very important to investigate how and through which mechanisms playing games influences eating behaviour.