Gamified Messages and Intentions to Participate in Future Running Events

Inje Cho, University of Florida
Kyriaki Kaplanidou (Advisor), University of Florida

Facilities/Events - Event Marketing (Physical Activity) virtual asynchronous
20-minute oral presentation (including questions) Session: Facilities/Events
Abstract 2020-029

Running events have grown in popularity among communities across the USA. Specifically, 5K running participants have increased on average by 3% since 2001 (Andersen, 2019). The feasibility of setting a goal to participate in a 5K may have catalytic impacts among people who do not exercise and change their individual attitudes and behaviors (Karapanos et al., 2016).

Self Determination Theory offers a fundamental approach toward the optimal functioning of personal well-being in social environments (Deci & Ryan, 2008). Different social settings like competitive and cooperative environments can differently influence an individual's attitude toward physical activity (Zhu et al., 2017). Furthermore, the concept of gamification, defined as implementation of the game design in a nongame context, may motivate continued physical performance (Deterding et al., 2011). Gamification features (e.g., points, rewards, badges) have certain psychological effects such as social relatedness and perceived competence (Seiler et al., 2017). Specifically, these features can fulfill competence needs through rewards, and social relatedness through competition (e.g., running against others) and cooperation (e.g., running with others) (Ryan, Rigby, & Przybylski, 2006). These different types of gamification features might influence differently individuals’ likelihood to participate in 5K events (Ritcher et al., 2015). Therefore, this study aimed to test the following:

H1. Under competitive condition, people will show a greater intention to participate in 5K compared to the cooperating environment.

H2. Gamification elements will moderate the effect of social setting on intention to participate 5K event. Specifically, (a) in the cooperation condition, people are more likely to participate in 5K event if they are celebrated at an online bulletin board as compensation for goal accomplishment. Meanwhile, (b) in the competition condition, people are likely to participate in 5K event if they receive virtual goods (e.g., badges, points) as compensation for goal accomplishment.

This study will use a 2 (competing vs. cooperating) x 2 (virtual rewards vs. online bulletin board) factorial design. A total of 200 Amazon’s Mechanical Turk participants who are not currently exercising will be recruited from with $1.00 participation reward. In the competing environment condition, participants will be assigned to a certain step goal to compete against a fellow employee, while individuals in the cooperating environment condition will be asked to work with another employee to achieve the step goal collectively. The goal will be the same in each condition for the individual whether they work together or against others. For example, in competing condition the goal would be 20,000 steps weekly for the person as they work on their own. In the cooperating condition, the goal provided would be 40,000 weekly steps for the pair working together. Then, participants will be exposed to two different conditions, either in an online bulletin board or in virtual rewards. Manipulation checks will be performed about all conditions. Finally, participants will be asked to assess their intention to participate in a 5K race. For data analyses, analysis of variance will be used to test the main effects and one-way interaction effects controlling for age. Data collection and analysis are still in process.