

# The Travelling Rose: A Persuasive Game to Stimulate Walking Behaviour of Older Persons in Low SES Neighbourhoods

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## EXECUTIVE SUMMARY

*The persuasive game, Travelling Rose, aims to enhance walking activities of elderly residents living in neighbourhoods characterized by a low socioeconomic status. The game consists of a wooden pass-on box containing user-reports and instructions on how to find a companion, how to generate a surprise together, how to give this surprise a fellow neighbourhood member, and how to pass on the Travelling Rose box. The persuasive catch of the Travelling Rose is present when the companions are generating the surprise and are instructed to take a walk in the neighbourhood for easing social communication and flourishing creative ideas. In this chapter, the design process leading to the final version of the Travelling Rose is described, involving user studies, concept testing, and iterative prototyping. Secondly, the final prototype is presented and framed using the theoretical Persuasive Game Design model.*

## **THE TRAVELLING ROSE PROJECT**

### **Introduction to its Authors**

The Travelling Rose project is initiated as a collaboration between the faculty of Industrial Design Engineering of the Delft University of Technology and the Department of Public Health of the Erasmus Medical Center in Rotterdam. The Travelling Rose is embedded in the larger research project 'NEW.ROADS', coordinated by the fourth author Richard (Rick) Prins. This encompassing project aims to enhance walking behaviour of elderly by social and physical interventions in four neighbourhoods of Rotterdam, which are characterized by a low socioeconomic status (SES). The Erasmus Medical Center already developed some interventions, but Rick was also interested in seeking collaboration with designers, which is the reason he contacted the faculty of Industrial Design Engineering. In this faculty we not only focus on product engineering but also on designing products and services for specific user experiences, emotions, or behavioural change. For instance, the second author, Ingrid Mulder, is working in the field of design for social interactions and societal impact, and the first author Valentijn Visch is working in the area of persuasive game design. To design a creative intervention for the NEW.ROADS project, we searched for a good graduate student who was found in the person of the third author, Wessel Bos. Despite the interest and energy of the authors on developing the Travelling Rose, the project would never have been succeeded without the interest, support and collaboration of its end users, i.e., the residents of the Rotterdam Afrikaanderwijk.

## **SETTING THE STAGE**

### **The Importance of Physical Activity**

Being physically active is considered by the World Health Organisation to be a main factor for healthy aging. Physical activity is positively associated with the experienced quality of life in terms of self-efficacy, physical-, mental-, and social health. This effect is even enhanced when performed in companionship (e.g. sport clubs, friends). In terms of its societal impact, being physically inactive has been estimated to cause a burden of disease, which is as high as the burden of disease caused by smoking (Lee, Shiroma, Lobelo, Puska, Blair & Katzmarzyk, 2012). Although the benefits of physical activity are clear for individuals, healthcare professionals, and society, not everyone is physically active. Social healthcare research among densely populated neighbourhoods showed that especially elderly (55+) living in low SES

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