13TH ANNUAL MEETING AND 8TH CONFERENCE OF HEPA EUROPE

15 – 17 NOVEMBER 2017, ZAGREB, CROATIA

Conference theme:

MODERN APPROACHES TO PHYSICAL ACTIVITY PROMOTION AND MEASUREMENT

FINAL PROGRAMME AND BOOK OF ABSTRACTS

University of Zagreb, Faculty of Kinesiology

Co-sponsored by: World Health Organization Regional Office for Europe

55. "Quartier Agil" – Feasibility of Combined Physical and Cognitive Activities in the Neighborhood with Smartphone Support for Stimulating Social Participation in the Elderly Social Participation in the Elderly

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Introduction: Few programs use a combination of physical and cognitive exercise with digital support to promote participants' social participation and connectedness within their neighborhood. As a multidisciplinary effort to fill this gap, "Quartier agil" (literally: agile quarter) is currently being developed and tested for feasibility, including a first estimate of possible effects. **Activities undertaken** : This exploratory, small-scale program aims at elderly community-dwelling adults living in a neighborhood of Bochum (Germany). In the first of two six-month development cycles, 19 participants (72 ± 7yrs) met once weekly with two instructors for a 90 -minute training session targeting physical and cognitive functions. In addition, participants were invited to join, as well as create their own physical and cognitive activities related to meaningful locations ("hot spots") in their neighborhood. Additional training was stimulated and social gatherings were announced via smartphone (specifically designed app). Various indicators of feasibility were collected. **Results**: Preliminary results show that the instructors invested 6hrs/week. Despite technical difficulties and some participants being hesitant of proactively self-organizing activities, they deem the program highly feasible. Attendance rate was 76 ± 15%. Two dropouts occurred and four participants partly missed post-assessments. Thirteen of 13 participants reported high overall satisfaction and 9 out of 13 agreed that the program helped them to promote social contacts. Satisfaction with smartphone support and the smartphone app was mixed. Considering first trends, physical performance (n =13) slightly improved from baseline to post (e.g. Berg Balance Scale: 46 - 56 to 51 - 56 points, p =.028; 6 -minute walking: 500 ± 50 to 519 ± 71 meters, p =.100), while physical activity (Actigraph GT- 3X accelerometer) remained unchanged (light: 144 ± 44 to 152 ± 56 minutes/day, p =.877; moderate to vigorous: 35 ± 23 to 32 ± 25 minutes/day, p =.608). There was an overall trend toward more efficient cognitive functioning in at least one parameter, e.g. verbal fluency switching (n = 16; 65 ± 22 to 72 ± 20 percentile rank, p =.05). **Conclusions**: "Quartier agil" is a feasible program able to facilitate social connectedness and improve some physical and cognitive functions in community-dwelling adults. A number of participants showed reasonable physical and cognitive function and adherence to physical activity guidelines at baseline. Lessons learned have been used to select participants and improve the program for the second cycle.