

ONLINE GROUP EXERCISES FOR OLDER ADULTS: RANDOMIZED CONTROLLED TRIALS TO STUDY ADHERENCE AND EFFECTS

F. Casati¹, M. Baez¹, S. Nikitina^{2,1}, 1. *University of Trento, Trento, Italy*, 2. *Tomsk Polytechnic University, Tomsk, Russian Federation*

Intervention programs to promote physical activity in older adults, either in group or home settings, have shown equivalent health outcomes but different results when considering adherence. Group-based interventions seem to achieve higher participation in the long-term. However, there are many factors that can make of group exercises a challenging setting for older adults. A major one, due to the heterogeneity of this particular population, is the difference in the level of skills. In this paper we report on the physical, psychological and social wellbeing as well as on the adherence outcomes of a technology-based intervention that enable online group exercises in older adults with different levels of skills.

A total of 122 older adults over 65 followed a personalized exercise program based on the OTAGO program for fall prevention, for a period of eight weeks. Participants could join online group exercises using a tablet-based application. Participants were assigned to study groups corresponding to technologies enabling different degrees of virtual group exercising and social interactions, and equipped with sensors detecting physical activity. Pre- and post- measurements were taken to analyze adherence, behavior change, and the physical, psychological and social wellbeing outcomes.

After the training program there were improvements in all groups in terms of physical outcomes, but the group with technology for virtual group exercising showed a significant and large positive difference in terms of adherence to the training program. In addition, this group showed a higher use of the process of behavior change, suggesting an effect of the persuasion strategies.

NEW COMMUNICATION TECHNOLOGIES FOR ENGAGING OLDER PATIENTS, FAMILIES, AND CAREGIVERS IN HEALTHCARE

L. McDonald¹, R. Burton¹, A. Lombardo¹, R.M. Mirza¹, V. Iafolla², C. Klinger¹, B. Hollister¹, 1. *University of Toronto, Toronto, Ontario, Canada*, 2. *University of Alberta, Edmonton, Alberta, Canada*

New communication technologies—such as the Internet, social media applications, mobile and “smart” phones—can facilitate patients, families and caregivers’ access and use of health information and navigation through the healthcare system. This scoping review mapped the literature on new communication technologies to engage older adults, their caregivers, and families in the healthcare system. The review identified types of technologies, how they are used, outcomes, strengths, weaknesses, and challenges. Peer-reviewed and grey literature was searched for empirical studies published between January 2002 and December 2014. Three reviewers reviewed the abstracts for inclusion. Articles were included if they focused on older adults (55+ years of age) and involved a “new” communication technology that facilitated an engagement with the healthcare system. 69 articles were identified as appropriate for inclusion. Overall findings indicate that various new communication technologies (i.e. e-health records, email and smartphone apps) can be used to improve engagement with the healthcare

system, even amongst frail older adults. Users’ concerns with using new communication technologies included design, usability, and lack of experience. There is a gap in the literature concerning social media applications and how technology might influence and/or improve the caregiving experience. These findings suggest that training is an important component for introducing technology use in older patients, caregivers and families. While new communication technologies are a viable option for improving engagement with healthcare systems, older adults’ particular health needs must be considered for effective uptake and usage of these technologies.

SESSION 5255 (SYMPOSIUM)

RESOURCE CENTERS ON MINORITY AGING: STATE-OF-THE-ART RESEARCH

Chair: S.P. Wallace, *RCMAR National Coordinating Center @ UCLA, Los Angeles, California*

Health disparities between elders of color and non-Hispanic whites are well documented and their elimination continues to be a public health and policy priority. Promoting state of the art research in reducing these disparities is the goal of the the Resource Centers for Minority Aging Research (RCMAR) network, a NIH/NIA-funded program that provides mentoring and career support for junior faculty (RCMAR Scholars) engaged in minority aging research. This session highlights recent research from selected RCMAR Scholars that is pushing the field forward in identifying sources of disparities and interventions to reduce them.

PSYCHOPHYSIOLOGICAL WELL-BEING AMONG AGING AFRICAN AMERICANS: A LATENT CLASS ANALYSIS

C.S. Thomas¹, K. Whitfield², R.J. Thorpe³, 1. *University of California, Los Angeles, Los Angeles, California*, 2. *Wayne State University, Detroit, Michigan*, 3. *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland*

Psychopathology and chronic physical health conditions often co-occur among aging populations. Yet African Americans generally report more physical than mental health problems. This study examined social patterns in psychophysiological well-being among African Americans. Analyses were based on 697 individuals ages 22 to 92 in the Carolina African American Twin Study of Aging. Outcomes assessed include depressive symptoms (CES-D), life satisfaction, hypertension, and body mass index. Analyses identified three latent classes (Entropy²=0.65; AIC=136.12; Adjusted-BIC=176.43): (1) good physical/poor mental health (34%), (2) fair physical/good mental health (50%), and (3) poor physical/mental health (16%). Health status varied significantly by sociodemographic characteristics; younger African Americans had higher risk of poor mental/good physical health ($p<0.001$), while poor mental/physical health was associated with older age ($p<0.001$). Study findings demonstrate social patterns in psychophysiological well-being and suggest that the co-occurrence of physical/mental health problems are more prevalent in later life among African Americans.