

is a multifactorial problem encompassing many factors affecting adherence such as socioeconomic status, education, physical fitness, and mental and health status. Improving exercise adherence could have a significant impact on longevity, quality of life, and health care costs. This symposium brings multiple perspectives to closely examine promising technology approaches, both in the form of models and programs. We will also discuss gaps regarding adherence to physical activity (PA) and exercise prescription for OA and the application of current publicly available technologies to boost PA adherence and compliance accordingly to the U.S. Department of Health and Human Services national standards for promoting health and preventing disease. The symposium includes five novel presentations addressing several key factors related to successful implementation of technology approaches to exercise program delivery and adherence for OAs. In addition, we will have one presentation highlighting the key factors that impact exercise prescription, compliance, and adherence. The speakers will present and address important components related to technology use with the goal to increase older adult's PA participation. The exercise programs will target key areas affecting older adult's health such as cognitive function, falls, obesity, gender, environments, and self-efficacy. Technology usability perspective will be presented. Current challenges and recommendations for future research will be comprehensively discussed to properly address the exercise adherence and compliance needs of our OA populations.

PROMOTING ADHERENCE TO EXERCISE PRESCRIPTION USING MOBILE HEALTH TECHNOLOGY: LESSONS LEARNED FROM OLDER ADULTS

Zvinka Zlatar, and Camille Nebeker, *University of California, San Diego, La Jolla, California, United States*

We will present the implementation approach used to evaluate a novel mobile health (mHealth) exercise intervention designed to improve older adult's fitness and brain health. A randomized controlled trial design evaluated if the use of mHealth strategies improved walking speed in real world environments to help participants achieve current physical activity guidelines. Cognitively healthy older adults were randomized to a 12-week, unsupervised, exercise prescription condition or to a healthy aging education condition. Participants used a heart rate tracker programmed to provide haptic feedback when they fell outside of their prescribed heart rate target during an exercise session. Participant's perceptions regarding the mHealth technology device, as well as their feedback regarding the privacy of their data when using mHealth devices will be presented. Recommendations to improve the design of future mHealth exercise trials will be discussed.

TECHNOLOGY IN EXERCISE INTERVENTIONS FOR OLDER WOMEN: ACCEPTABILITY, ADHERENCE, AND SPECIAL CONSIDERATIONS

Shannon Halloway, *Rush University, Chicago, Illinois, United States*

Women aged 65 years and older participate in less moderate-vigorous physical activity (PA) than men of this age

group, which increases the risk for a myriad of chronic health problems. Interventions that utilize a lifestyle approach to increase PA in everyday life are preferred by women compared to structured exercise, but long-term adherence is a challenge. Technology (e.g., wearables, social media, computers) can be efficiently leveraged as motivational tools in lifestyle PA interventions. However, the unique needs of older women must be considered. Thus, the purpose is to examine the: (a) types of technology that were successfully integrated into existing PA intervention studies designed for older women; (b) acceptability and adherence to technological approaches by older women; and (c) additional considerations needed for special populations, including older women with chronic health problems. The efficiency and scalability of technological approaches with clinical and public health implications will also be discussed.

PHYSIO-FEEDBACK AND EXERCISE PROGRAM (PEER) FOR SHIFTING MALADAPTIVE FALL RISK APPRAISAL

Ladda Thiamwong, *College of Nursing, University of Central Florida, Orlando, Florida, United States*

We aimed to examine the effectiveness of Physio-feedback and Exercise pROgram (PEER) for shifting maladaptive to adaptive fall risk appraisal and determine the feedback and acceptability of the program. Forty-one older adults were assigned to either PEER intervention or attention control (AC) group. The 8-week PEER intervention consists of a visual physio-feedback, cognitive reframing, and combined group and home-based exercise led by a trained peer coach. The AC group read fall prevention brochures and continued their normal activities. BTrackS Balance Test and Fall Efficacy Scale were measured from pre- to post-intervention. About 11% of participants in the PEER group had positive shifting but none in AC group. Up to 32% of the participants in AC had negative shifting while 5.3% in the PEER group. PEER intervention facilitates a shift from maladaptive to adaptive fall risk appraisal. PEER group reported significant decreases in fall risk and high acceptability of the program.

THE EFFECT OF A PERSONALIZED AUTOMATED EXERCISE GUIDANCE SYSTEM ON THE IMPROVEMENT OF OBESITY

Yeonsik Noh,¹ Jae-Seung Chang,² Ki Chon,³ Hyungro Yoon,² In Cheol Jeong,⁴ and In Deok Kong,²
 1. *University of Massachusetts Amherst, Amherst, Massachusetts, United States*, 2. *Yonsei University Wonju College of Medicine, Wonju, Republic of Korea*, 3. *University of Connecticut, Storrs, Connecticut, United States*, 4. *Icahn School of Medicine at Mount Sinai, New York, New York, United States*

This study introduces a personalized automated exercise guidance system for the efficient reduction of obesity. The proposed system was composed of wearable biometric devices and exercise-machine control systems connected with the integrated database server. It was designed for providing customized exercise prescription (intensity, repetition, frequency, etc.) according to ACSM guidelines for obesity based on real-time biosignals feedback and an

individual's exercise capacity. Nineteen subjects participated in evaluating the proposed system, and we found that the risk factors (body composition, hemodynamics, blood enzymes, and exercise variables) related to obesity were statistically significantly improved. Other exercise prescriptions for chronic diseases and symptoms will be able to adapt to the proposed system so that we believe it would be substantially helpful to improve geriatric diseases and symptoms by using technology-driven exercise.

TECHNOLOGY, YOGA, AND HALLWAY WALKS TO MAINTAIN FUNCTION AND SELF-EFFICACY DURING THE HOME-BOUND MONTHS OF WINTER

Kim LeBard-Rankila, *University of Wisconsin Superior, Superior, Wisconsin, United States*

Winter months present individuals with a unique challenge, decreased daily movement that can lead to decreased physical and emotional health. Snow and ice cause hazardous walkways and driving conditions that can lead to falls and decreased travel out of the home. For those that live in states that have four seasons, when spring comes many of them have spent a large majority of their daily lives indoors for 3-5 months. This isolation can cause decreased daily movement, aggravate medical conditions, challenge healthy eating habits, and cause social isolation. Participants for this study live in a 32-apartment building, which all occupants are independent with daily living skills and are 60 years or older. The study assessed if motivational texting, yoga in the apartment's community center, and short hall-way walks can help maintain or increase self-efficacy. Flexibility, hand-grip strength, and perceived quality of life were assessed.

SESSION 7660 (SYMPOSIUM)

INSIGHTS GAINED FROM DEVELOPING ACADEMIC-COMMUNITY PARTNERSHIPS FOR MINORITY AGING, COMMUNITY-ENGAGED RESEARCH

Chair: Ronica Rooks

Discussant: Peter Lichtenberg

Increasingly community-engaged research, characterized by collaborations between researchers and community partners, is recognized as an important part of translating research into improved health outcomes and reduced health disparities for community participants. Training community participants to engage in some or all aspects of this research, particularly focusing on racial and ethnic minority older adults, highlights the need to understand its opportunities and challenges. With this symposium we will discuss and reflect on community-engaged and community-based participatory research approaches to community-academic partnerships with minority older adults. The first presentation addresses recruitment, retention, and training of a community advisory board of older African Americans in Michigan. The second presentation addresses a health education outreach and engagement program to improve health outcomes among older African Americans in California. The third presentation combines community engagement

with survey design methods for research with older Native Hawaiian and Pacific Islander adults to improve data collection and health outcomes in this U.S. population. The final presentation examines partnerships between a hospital memory clinic, meal delivery service, research university, and low-income health clinic to improve caregiver and dementia patient outcomes for minority older adults. The symposium discussant will address opportunities, challenges, and implications of community-academic partnerships promoting minority aging.

BUILDING AND SUSTAINING A COMMUNITY ADVISORY BOARD OF AFRICAN AMERICAN OLDER ADULTS FOR VOLUNTEER RESEARCH

Jamie Mitchell,¹ Tam Perry,² Vicki Johnson-Lawrence,³ and Vanessa Rorai,⁴ 1. *University of Michigan, Ann Arbor, Michigan, United States*, 2. *Wayne State University, Detroit, Michigan, United States*, 3. *Michigan State University-Flint, Flint, Michigan, United States*, 4. *Healthier Black Elders Center, Detroit, Michigan, United States*

Older African Americans' (AA) participation in health-related research is severely limited; they are not involved in sufficient numbers and for sufficient duration to ensure the applicability of advancements in medical and behavioral health. This research participation gap exacerbates older AAs vulnerability to poor health outcomes and disparities. The Michigan Center for Urban African American Aging Research employs a progressive community-based participatory model that utilizes a structured community advisory board (CAB) of older AAs in metro Detroit to oversee the research recruitment and retention of fellow AA older adult research participants. CAB members are provided ongoing training on social and behavioral health research, supported in acting as a consultancy to outside researchers where they can be compensated for their expertise and engagement, and empowered as gatekeepers of a participant research registry of over 1000 AA older adults. This model has broad potential for advancing community engaged research with AA older adults.

ADVOCATES FOR AFRICAN AMERICAN ELDERS: ENGAGING OLDER ADULTS IN EDUCATION AND RESEARCH

Karen Lincoln, *University of Southern California, Los Angeles, California, United States*

Advocates for African American Elders (AAAE) is an outreach and engagement program at the University of Southern California, providing culturally competent health education for older African Americans throughout Los Angeles County (LAC). Founded in 2012 to address racial disparities in health outcomes, AAAE partners with community-based agencies, government, and health plans to address the persistent growing needs of older African Americans. AAAE educates and disseminates information about healthcare policies and resources through fact sheets, educational forums, and the AAAE website. It