

WED, 10/26 @ 9:00 AM

2601. Symposium 3. Health-515(Woochol Joseph Choi)
2602. Symposium 4. Info - 679 (Ahyoung Lee)
2603. Symposium 4. Info - 999 (Moon Choi)
2604. Oral 1. Housing -(Assistive Tec)507,523,697,711
2605. Oral 3. Health - (Monitoring) 573, 686, 706, **726**
2606. Oral 3. Health - (Care) **604, 650, 653**

<In-Person>

MON, 10/24 @ 2:30 PM

Session ID:2401

Symposium 7. Others

578

Current trends in Gerontechnology. Recent findings from the Austrian-German-Swiss Chapter

B. Klein, S. Merkel (Convener)

Relationships between ICT use and subjective well-being among the oldest-old in Germany: Findings from the NRWBO+ study

Older persons and the domestication of smart speakers

A. B. Kucharski, S. Merkel

“Computer, how do smart speakers support aging in place?” – Smart Speakers and Images of Ageing

S. Merkel, A. B. Kucharski, S. Schorr

Smart Speakers and Chatbots in Care Consultation – Evaluation of Use Cases and Challenges

J. Bleja, S. Neumann, U. Grossmann

AI for Simplifying the use of an assistive robotic arm for people with severe body impairments

A. Baumeister, M. Pascher, Y. Shivashankar, F. Goldau, U. Frese, J. Gerken, E. Gardó, B. Klein, P. Tolle

Evaluation of design options for an assistive robot in augmented reality

M. Ringwald, J. Sehrt, B. Klein, H. Solis, J. Umansky, P. Nauth

Session ID:2402

Symposium 7. Others

774

ICT-Medical convergence Patient Transfer Assistant Robot system

K.W. Jung, B.W. Lee, B.H. Lim, J.H. Yoon, S.H. Kim, M.W. Moon, Y.J. Cho

Evaluating the Smart Transfer Assistive Robot with Dual Arms in Health care Workers

H.R. Shin, H.J. Yoon, S.W. Ban, Y.G. Kim, S.R. Um, W.C. Shin, Y.S. Kim

Technology Applied Recipe Development to Increase Fruits Intake of the Elderlies with Decreased Chewing and Swallowing Function

H.S. Lim, Y. Park, J.W. Han, Y.J. Sung, D. Kim, Y.S. Kwon

What bibliometric and scientometric analysis tells about the international research trends of smart home for older adults?

Y.K. Hong, Z.Y. Wang, J.Y. Cho.

Session ID:2403

Symposium 3. Physical and Mental Health

818 (Moo-Kwon Chung)

Interventions to promote health and mental health among older adults

M.K. Chung

How do communication skills influence older patients' satisfaction of health care services? - Empirical evidence from Korea

J.N. Hwang, J.S. Kang, K.S. Moon, J.H. Kim, H.S. Woo, S.J. Park

The Impacts of Physical Health and Social Networks on Depression Symptoms of Middle and Old Ages of the Korean Urban and Rural Complexity City

M.K. Chung, T.S. Shin, J.Y. Park, M.H. Kim, K.J. Lee, J.K. Lee, S.W. Hwang, J.H. Lee, H.S. Lim, U.Edrenebayar

The mental well-being of the elderly through mindful storytelling and physical activity

H.Y. Hwang, S.J. Seo, H.T. Kim, H.K. Kim, H.J. Kim

Session ID:2404

Oral 3. Physical and Mental Health – (Fall/Balance)

506

Muscle activation pattern to distinguish balance recovery from falls at loss of balance

J. Park, S. Kim, W.J. Choi

536

Potential negative effects of neuromuscular electrical stimulation: Does it affect static balance and proprioception?

J.W. Je, W.J. Choi

733

Use of mobile devices and their functionalities by Brazilian older people

T. M. Raymundo, M. S. Bernardes, W. R. Boot, L. D. Bernardo

739

Development of an automated fall detection device specific to wheelchair users

L.A. Rice, L. Abou, A. Fliflet, P. Presti, J.J. Sosnoff, H.P. Mahajan, M.L. Frechette

Session ID:2405

Oral 7. Others – (Medical)

557

Quantum-classical software for drug prescription simulation in aging people

J. Alvarado-Valiente, J. Romero-Álvarez, E. Moguel, J. Garcia-Alonso, J.M. Murillo

655

Comparative Analysis of Satisfaction by Types of Medical Electric Beds

J.H. Jeong

665

Effects of Age and Familiarity on Visual Word Recognition in Korean: Evidence from a Web-based Large Scale Lexical Decision Task

H. Baek, P. C. Gordon, W. Choi

717

Effects of end-of-life care education on nursing students' knowledge, attitude, and self-efficacy

D. Lee, S.H. Tak, H. Choi

MON, 10/24 @ 4:30 PM

Session ID:2406

Symposium 1. Housing and Daily Living

541

Care robots and service model development

W.K. Song (Convener)

Translational research and service model development based on smart care space for people with severely disability

W.K. Song, K.J. Lee

Comparative study of physical care burden on caregivers for elderly excretion care between human manual care and robot-aided care based on hierarchical excretion care task model

J.B. Ko, H.J. Keom, C.K. Lee, B.H. Won, J.S. Hong

Comparison of physical burden of caregivers when using transfer devices

Y.M. Shin, Y.K. Kim, K.J. Lee, W.K. Song

Development of patient-transfer robot considering user convenience and patient safety

H. Kweon, K. Ha, J. Park, and C. Kim

Utilization of an artificial intelligence automatic urination handling device according to the aspect of the individuals with disorders

U.C. Lee

Design, control, and evaluation of a meal-assistive robot based on gravity compensation for elderly people with muscle weakness

K. Kim, J.H Kim, J.B Kim

Session ID:2407

Symposium 7. Others

721

WHO-ISG Collaboration on Assistive Technologies for Healthy Ageing-in-Place: A Round Table Discussion

E. Aspnes, J. Bergschold, N. Charness, M.L. Fang, G. Gutman, Y. Hsu, W. Kearns, H.S.M. Kort, T. Marquine, H. Nap, D. Zandi, W. Zhang

Session ID:2408

Symposium 3. Physical and Mental Health

750

Delivery of health and social care for lower-income older adults in communities: Does technology help?

H. Kim (Convener)

ICT use promoting integrated health and social services through multi-disciplinary research efforts: cases from Korea

H. Kim

Development of needs-resources prediction model using integrated case management big data

Y. Kim, H. Kim, T. Lee, S. Min, S. Park, W. Lee

Development and validation of a mobile app-based interRAI CUSR for older adults in urban, low-income communities

T.H. Lee, S. Chun, E. Kim, H. Kim

A Smartphone application-based communications tool for the care management of community-dwelling older adults: Findings from the HWePS

E. Kim, T.H. Lee, S. Chun, H. Kim

Session ID:2409

Oral 4. Information and Communication – (Intervention)

531

Adaptation and evaluation of the digital elder abuse intervention “VOICES” in the primary care-based setting

F. Abujarad, C. Edwards, B. Vander Wyk, P. Ellis, K. Kraemer, R. Marottoli.

544

Improving the Assessment of Older Adults using Feature Selection and Machine Learning Models

J. Rojo, J. García-Alonso, Juan M. Murillo, S. Helal

732

The utilization of IOT technology in the study of communication between people with dementia and their caregivers

D. Kim, S. Jeong

Session ID:2410

Oral 6. Governance and Social Policy – (Perspectives)

538

An Introduction of the Assistive Technology R&D for Older People with Disabilities in Korea

M.J. Lim, A.J.Kim, E.J.Kim, and S.D.Eun

576

Gerontechnology for who? A responsible framework for diversity and inclusivity for health technology

R.A. Søråa

724

The importance of a worker's perspective on digital technology

A. Spånt Enbuske

746

Happiness IT Platform for Active & Happy Ageing(AHA)

Y.H Ro, Ph. D.

TUE, 10/25 @ 10:30 AM

Session ID:2501

Symposium 3. Physical and Mental Health

527

Multidisciplinary perspectives on care burden and social value of care robot

G.R.S. Hong (Convener)

Care Difficulty of Activities of Daily Living among Formal Caregivers: Suggestion for Developing Caring Robot

G.R.S. Hong, E.M. Oh, D. Chung, R.N. Choi, S.H. Moon

Analysis of social value for nursing robots with the estimates of demand functions

K. Park, H. Ryu, J. Kim, J. Lee, Y. Lee

Effects of transfer assistive robots on care burden, burnout, and self-esteem in caregivers

M.J. Kim, Y.S. Shin

Biomechanical effects of a mechanical lift on the risk of low back injury during transfers from bed to wheelchair

W. J. Choi, S. Lee, K. Lim

Session ID:2502

Symposium 3. Physical and Mental Health

757

Effects of Companion Robots for Socially Isolated Older Adults

O. Lee (Convener)

Socially Assistive Humanoid Robots for Home Care: Investigating depressive symptoms and quality of life among impoverished and isolated older adults in South Korea

O. Lee, I. Nam, H., Lee, Y. Chon,

Verification of the Effectiveness of a Social Robot According to the Cognitive function of the older adults

J. Jang, Y. Hwang, K. S. Kim, H. Jo

What Hinders Robotic Care? Towards Situated Understanding of Elder Care Robots and Their Uses

H. Shin, C. Jeon

Session ID:2503

Symposium 2. Mobility and Transport

793

Technology use for assessing mobility among older adults

M. Choi (Convener)

Do older people drive differently? analysis of driving characteristics of taxi drivers on urban roads

J. Lee, K. Jang

Analysis of dangerous driving behavior per driver age with taxi driving log data

A. Son, J.G. Lee

Mobility evaluation system based on anomaly detection using an exercise exoskeleton robot

C. Lee, B.M. Kang, S. Joo, Y. Kim, D.E. Kim, G.J. Kim, Y.M Lim

Evaluation method using muscle activation of resistance exercise with wearable robot

B. Kang, C. Lee, S. Joo, J. Y. Kim, D.E. Kim, G.J. Kim, Y.M. Lim

Session ID:2504

Oral 1. Housing and Daily Living – (Smart Home)

566

Building personalized virtual networks of care with the ADel electronic home assistant for older adults

A. Moreno, J. Bernier

574

Engaging citizen stakeholders on the topic of social robotics in healthcare

R.A. Søråa, Y. Cheng, M. Kharas, S. Moratti

577

Automated Modeling and Reasoning Approach for Context in Smart Homes based on Stochastic Analysis of Sensory Data

J. W. Lee, A. Helal

769

Residents' perception of the use of smart-home technologies in a retirement community

A. P. Aguilera-Hermida

TUE, 10/25 @ 2:30 PM

Session ID:2505

Symposium 3. Physical and Mental Health

777

Care coordinator application to manage chronic disease in primary care

B.L. Cho

Information technology-supported integrated health service for older adults in long-term care settings: A cluster randomized controlled study

K.I. Kim

Technology based frailty prevention model with an eCBT application and a multisensor device

H.Jung, S.Yoon

Session ID:2506

Symposium 3. Physical and Mental Health

789

Application of artificial intelligence and digital technology to overcome dementia

J.K. Kim. (Convener)

PET-validated EEG-Machine Learning Algorithm Predicts Brain Amyloid Pathology in Pre-dementia Alzheimer's Disease

N.H. Kim, U. Park, S.W. Kang

The Role of Neuroimaging: Quantitative Approach for Prognosis/Staging/Analysis in Dementia Study

D. Kim, EY. Kim

SUPERBRAIN (The SoUth Korean study to PrEvent cognitive impaiRment and protect BRAIN health through lifestyle intervention in at-risk elderly people.) : a randomized controlled feasibility trial.

S. Han

Session ID:2507

Symposium 3. Physical and Mental Health

821

Early Prediction and Diagnosis of Alzheimer's Disease Based on Gwangju Alzheimer's and Related Dementia (GARD) Cohort

K. H. Lee (Convener)

Prediction of Amyloid β and Tau Pathology Using Deep Learning Based Artificial Intelligence System

K.H. Lee, J. Y Park, E. H. Seo, S.H. Won

Classification of Alzheimer's disease stages by analyzing prefrontal near-infrared signals during olfactory stimulation with machine learning

J.G. Kim, J.W. Kim

Converging multi-modal evidences for the primary prevention of Alzheimer's dementia

J.S. Gim, S.Lee, Y.T. Kim, K.H. Lee

Session ID:2508

Symposium 3. Physical and Mental Health – (The Korean Society for Gerontology)

808

Convener: Joong-Jean Park (Korea University College of Medicine, President of The Korean Society for Gerontology)

Protein dynamics-based control of proteotoxicity in neurodegenerative diseases

S.B. Lee (DGIST)

Targeting cellular senescence in adipose tissue: a potential treatment for type 2 diabetes

H.B. Jung, E.C. Kim, H.K. Sung, J.R. Kim, S.Y. Park(**Yeungnam University College of Medicine**)

Drug repositioning for a potential drug to prevent muscle wasting in aged mice

Y.I. Lee (DGIST)

Session ID:2509

Oral 4. Information and Communication – (Digital Divide)

522

Building on trusted relationships to overcome resistance to ICTs

P. P. Freddolino, F. Sun, D. Wishart, H. Kim, E. Godek, D. Parrett, M. Bentley, M. Huber

584

Knowledge against indebtedness: financial education mediated by digital technologies

J. Doll, L. Hollerweger

806

Technology anxiety and technology enthusiasm vs digital ageism (Digital equity brought to the attention for sustainable and global aging).

J. Berner, A.L. D. Moraes, P. Andersberg, J.S. Berglund

Session ID:2510

Oral 3. Physical and Mental Health

553

The exercise load of the elderly with different physical capacity based on PCA and K-means clustering

C.C. Lin, T.S. Cho, Y.S. Lin, JJ Lien, L.C. Kuo, F.C. Su

658

A Study on the Factors Affecting Intention to Work Out in the Gym Among Middle-aged and Older People

C.S. Lin, C.H. Wen

728

Engagement in leisure activities: changes mediated by technologies

T. M. Raymundo, R.G. Ferreira, F.M.S. Ribeiro, L.D. Bernardo

TUE, 10/25 @ 4:30 PM

Session ID:2511

Symposium 3. Physical and Mental Health

542

The multifaceted construct of attitudes: Age- and gender-related perspectives on AI, robotics and their users

S. Baisch (Convener)

Attitudes towards artificial intelligence: An ageing and gender perspective

T. Kolling (University of Siegen)

Negative attitudes towards robots in the young and old

M.F. Damholdt, J. Seibt, C. Vestergaard

Stereotyping the user: How elders and formal caregivers perceive elder users of companion-type robots.

S. Baisch, J. Klasen

Stakeholder perspectives on care robot users at the intersection of age and gender: Empirical-ethical analysis.

M. Weßel, N. Ellerich-Groppe, F. Koppelin, M. Schweda

Session ID:2512

Symposium 4. Information and Communication

587

HAAL: a healthy ageing eco-system for people with dementia

H.H. Nap, D.R.M. Lukkien, C.C. Lin, C.J. Lin, H. F. Chieh, Y.T. Wong, F.C. Su, R. Bevilacqua, G. Amabili, N. Morresi, G.M. Revel, S. Casaccia

The co-design of an AI-driven healthy ageing eco-system: User requirements from dementia formal carers

P. Koowattanataworn, N.E. Stolwijk, H.H. Nap, S. Ipakchian Askari, B.M. Hofstede, R. Bevilacqua, G. Amabili, A. Margaritini, C.C. Lin, C.J. Lin, H. F. Chieh, Y.T. Wong, F.C. Su

Technical development of a holistic platform to monitor people with dementia and measure their well-being.

N. Morresi, G.M. Revel, S. Casaccia

A cross-cultural study on responsible AI innovation in the homecare of people with dementia

D.R.M. Lukkien, H.H. Nap, N.E. Stolwijk, P. Koowattanataworn, W.P.C. Boon, E.H.M. Moors

Session ID:2513

Symposium 6. Governance and Social Policy(Chair : Young-Ran Park(Kangnam University))

744

Ageing and Welfare Technology : Policy, Practice and Business in South Korea

Y.R. Park (Convener)

Local government-led care services for older adults using technology in community: current trends, issues, and implications

S. W. Kim

Evaluating Effectiveness of Safety and Care Services for Older Adults Living Alone using Living Lab

J.W. Lim

Ageing and Welfare Technology Industry Ecosystem for Small and Midsized Enterprises (SMEs)

Y.H. Ro.

Session ID:2514

Symposium 3. Physical and Mental Health

822

Development of Multi-target therapy for Alzheimer's disease using human neural crest-derived stem cells

J.Y. Lim, J.E. Lee, S.H. Yang, H.K. Lim, S.W. Kim

Impact of transcranial direct current stimulation on cognitive function, brain functional segregation, and integration in patients with mild cognitive impairment according to amyloid-beta deposition and APOE ϵ 4-allele

D.W. Kang, S.M. Wang, T.Y. Kim, D.H. Kim, H.R. Na, N.Y. Kim, C.U. Lee, H.K. Lim

Plasma Oligomeric Beta-amyloid is Associated with Cerebral Beta-amyloid Deposition in Cognitively Normal Older Adults.

M.L. Fang, J.S. Sixsmith, R. Woolrych

Session ID:2515

Oral 3. Physical and Mental Health – (Care/Technology)

513

A multifeatured mobile application to support paid and family caregivers

A. Miguel-Cruz, H. Perez, C. Daum, A. Comeau, E. Rutledge, S. King, L. Liu.

520

Informal caregiver burden of disabled residing in a community according to use of care device

G.R.S. Hong, D.H. Won, E.J. Lee, D. Chung

554

Biomechanical benefits of a mobile lift in reducing mechanical loads at the lower back during transfers

S. Lee, K. Lim, W. J. Choi

558

Older peoples' attitudes toward technology (TechPH), digital ageism and assistive technology devices

J. Berner, A. Moraes Dallora, P. Anderberg, J. Sanmartin Berglund

Session ID:2516

Oral 7. Ohters - (Policy)

605

Screen-based home care visits, care work and old age in the Scandinavian welfare state - the case of Denmark

K. Gr nenberg, L. Hillersdal

636

Perceptions of older adults about the concept of privacy and in terms of video-based AAL technologies.

T. Mujirishvili, M. R. Martinez, J. C. Garcia, F. F. Revuelta

725

A governmental programme to support well-being, ageing and care at home with new technologies

H. Anttila, M. Anttila, M-L. Luoma

WED, 10/26 @ 9:00 AM

Session ID:2601

Symposium 3. Physical and Mental Health

515

Current understandings and technologies for prevention of fall-related hip fracture in older adults

W. J. Choi (Convener)

Science of falling and injury in older adults – Do all falls lead to death?: Literature Review

W. J. Choi, K. Lim, S. Kim, S. Lee

Associations between Fall Characteristics and the Occurrence of Hip Fracture among Older Adults in Long-term Care

Y. Yang, V. Komisar, A. Korall, S.N. Robinovitch

Biomechanics of the trochanteric soft tissue during a fall and hip fracture in older adults

K. Lim, W. J. Choi

Promoting user compliance with wearable hip protectors in older adults through education and technology

C.Y. Ho, X. Song, H. Mo, Y. Yang

Session ID:2602

Symposium 4. Information and Communication

679

Digital inclusion for intergenerational solidarity

S. Chung (Convener)

Mobile application development for older adults to provide information on senior welfare centers: A case study

S.D. Chung, A.Y. Lee, H.J. Lee

Understanding the benefits and roles of mobile instant messaging use for the Korean elderly's mental health: An exploratory study focusing on emotional recovery and suicide prevention

H.N. Lee, S.T. An, S.D. Chung

E-health literacy and associated factors among Korean adults: Three age group differences

S.Y. Park, S.D. Chung

Session ID:2603

Symposium 4. Information and Communication

999

Session ID:2604

Oral 1. Housing and Daily Living – (Assistive Technology)

507

Technologies to age in place in community-dwelling older adults and family caregivers: A systematic review

A. Moreno, K. Acevedo, H. Sun

523

ICT and unpaid carers of people living with dementia: addressing engagement, detachment, and unmet needs

J. Damant, D.King, M.Dangoor, P.Freddolino, B.Hu, K.Lorenz-Dant, R.Wittenberg

697

GUARDIAN: An Assisted Living Social Robotics Eco-System

H.H. Nap, D.R.M. Lukkien, Stal ter, M., R. Bevilacqua, G. Amabili, N. Morresi, G.M. Revel, S. Casaccia, J. Alberts, J. de Koning, A. De Masi, A. V. Naveira, K. Wac, B.M. Hofstede

711

What´s in it for me? A retrospective cost-consequence study of a digital assistive technology

K. Baudin, A. Sundstrom, C. Gustafsson, J. Borg

Session ID:2605

Oral 3. Physical and Mental Health - (Monitoring)

573

The challenges of multi-disciplinary research in the design and adoption of self-managing technologies

A. Eccles

686

The Effect of Smart Health Care Systems as remote monitoring on Health-Related Quality of Life in the Elderly with Chronic Diseases

C.H. Oak, H.K. Choi, K.Y. Lee

706

Remote Monitoring and AI for Detecting Tardive Dyskinesia and Improving Patient Outcomes

A.A. Sterns, L. Larson, B. Grimm, O.S. Muir

726

Well-being and care at home with new technologies: perspectives of home care personnel

M. Anttila, H. Anttila, M.L. Luoma

Session ID:2606

Oral 3. Physical and Mental Health - (Care)

604

Assistive technology for older persons – analyses of data from WHO's Rapid Assistive Technology Assessment

A.H. Eide, S. Müller, C. Khasnabis, J. Borg, M. Blakstad, H. Mannan, Antypas, K., M. Loeb, W. Zhang

650

A Study on the Scooping and Serving Korean Food using Meal Assistance Robot

J. S. Kim, W.-K. Song, S. R. Han, J. E. Heo, K. J. Lee

653

Usability Evaluation of the Excretion Assist Care Robot for Caregivers and Experts

J. E. Heo, K. Y. Cho, K. J. Lee, W.-K. Song, J. W. Hwang

<Online>

MON, 10/24 @ 10:00 PM

Session ID:2421

On-Symposium 1. Housing and Daily Living – (Dementia Care)

530

Living at home with dementia beyond care; a perspective on the day and night situation

C.A.M. Huisman (Convener)

Available technology applications to support sleep for people with dementia and their informal caregiver

C.A.M. Huisman, H.S.M. Kort

A multi-stakeholder perspective on challenges during the night for people with dementia and their carers

A.A.G. Sponselee, M.E. Nieboer, R.G.A. Brankaert

Visual functioning and home modifications at home

M.A. van Tilborg

Brazilian initiatives aimed at the prevention and care of dementia

T.M. Raymundo, L.D. Bernardo

Session ID:2422

On-Oral 4. Information and communication – (Dialogue)

497

A Summary Report through Home Experiment on a Dialogue System for Older Adults

S. Tokunaga, K. Tamura, M. Otake-Matsuura

552

Integrating multiple dialogue agents using WebRTC for facilitating elderly mutual-aid at home

S. Chen, M. Nakamura

575

Supporting Home- and Community-Based Organization Activities through a Customized Videoconferencing Platform

G. Mois, S. Shende, R. A. Mudar, D. Myers, W. A. Rogers

696

Printed digital storytelling for older audiences

D.M. Frohlich, L. Ferraz, P. Castro

Session ID:2423

On-Oral 3. Physical and Mental Health – (Robots)

691

A social robot to promote intergenerational interaction in community service during coronavirus (COVID-19) pandemic

Y.J. Mao, D.K.H. Lai, A.K.Y. Cheung, A.Y.C. Tam, D.S.K Cheung, J.C.W. Cheung

730

A functional approach to measuring acceptance of social robots among elderly singletons in hong kong and singapore: protocol review of a purposeful sampling study

C.K.Tan, W.Q. Lou, C.Y. Man, Y.Y. Mor

759

Can telepresence robots empower people with mental health conditions and intellectual disabilities in everyday life?

L. Küsters, M. Schmidt, B. Klein

760

Development of a design framework to support pleasurable robot interactions for older adults

S.A. Olatunji, W.A. Rogers

MON, 10/24 @ 11:00 PM

Session ID:2424

On-Symposium 7. Others – (Soci-Gerontechnology)

571

Critical Engagements With Ageing and Technology – Why we need Socio-Gerontechnology.

V. Gallistl, A. Peine (Conveners)

Resourceful DIY solutions of older people as input for design

L. Neven, J. Berschöld

‘What’s the limit?’ Technologies for aging in place as imagined by young adults

N.K. Dalmer, K. L. Ellison

Why Care of all things? A critical analysis of Robotics in Care Settings

A. Bischof, P. Graf

The interrelatedness of digital practices and social connectedness: A study on older people’s smartphone use

A. Peine, M. Fernández-Ardévol, E. Loos, A. Rosales, D. Blanche

Session ID:2425

On-Oral 3. Physical and Mental Health – (VR/Medical)

563

VR exercise game to keep the shoulder self-exercise going

N. Takahashi, K. Ishihara

607

VR & AI-based Mobile Apps in Enhancing Independence of Daily Function in Older Adults

D.W.K. Man, F.H.Y. Lai

618

Healthcare workers’ expectations of the Dyna-Form SMARTresponse application (HESA): A qualitative study

J. Slob, C.T.M. van Houwelingen, H.S.M. Kort

Session ID:2426

On-Oral 7. Others – (Active aging)

532

Active Aging Learning through Virtual Platform among the Middle-Aged and Older Adults in Taiwan: A Preliminary Finding

H.C. Wei, A.T. Lin, G.L. Chen, S.T. Lin

562

Decision Support System for the Fair Contribution of Efficiency Gains in the AAL Sector

J. Bleja, S. Neumann, U. Grossmann

749

The Effects of the Volunteering Characteristics and Social Support on Successful Aging of Older Adults: With a Focus on Mediating Effect of Volunteer Satisfaction and Gender Differences

S.W. Lee

775

Volunteering Characteristics, Social Support, and Successful Aging: Mediation Effects of Volunteer Satisfaction and Gender Differences

S. Lee, J. Lee

TUE, 10/25 @ 9:00 PM

Session ID:2521

On-Symposium 4. Information and Communication

560

Artist by technology: experiences of mature and older adults in Brazil during the pandemic

J. Doll (Convener)

CineSênior: stop motion films created by the older person

B.K. Slodkowski, L.R. Machado, P.A. Behar

Podcast Sexagenarte - A Vida Não Para: audio drama creations with old people in the pandemic

R. Teixeira, S. Weber

Some technology contributions to music as a serious leisure activity for mature and older adults

E. Kohlrausch, J. Doll

Session ID:2522

On-Oral 3. Physical and Mental Health – (AI)

509

Monitorization of Frailty and Dependence with wearables and machine learning

M.J. Rodríguez-Fórtiz, F. García-Moreno, M. Bermúdez-Edo, J.M. Pérez-Mármol, J.L. Garrido-Bullejos

556

Co-creating a conceptual AI model to promote personalized communication and engagement for people with dementia

N. Hird, S. Palaniappan, S. Ghosh, Y. Shimizu, R. Ramanathan, V. Karunanidhi, E. Miura, Y. Tsubono

634

Dual Depth Camera System for Bed exit and Fall Prevention of Hospitalized Elderly Patients

T.K. Shea, Y.C. Tam, P.H. So, T.C. Chan, H.Y. Mak, K.H. Lai, M.W. Wong, Y.P. Zheng, C.W. Cheung

713

Cognitive Behavioral Assistive Technology (CBAT) as AI for Super Aged Society

M. Otake-Matsuura, M. S. Abe, T. Sekiguchi, S. Tokunaga, H. Sugimoto, T. M. Rutkowski, K. W. Miura

Session ID:2523

On-Oral 4. Information and Communication – (Robot)

510

Development of RobotHub: Integration of External System to Group Conversation System for Older Adults

S. Tokunaga, K. Fukumori, K. Tamura, K. Inoue, T. Kawahara and M. Otake-Matsuura

582

Reflections about design principles of environments for elderly people living with dementia

M.B. Dario, C.S.S. Castro

614

Evaluating Technical Viability of a Loneliness Detector System for Older Adults from Rural Areas

M. Jesús-Azabal, L. Mariano, J. Galán-Jiménez, J. García-Alonso

673

Can a communication robot contribute to the good relationship between the elderly with dementia and the staff?

T. Yamaguchi, Y. Saito, F. Nakamura, C. Maeda

TUE, 10/25 @ 10:00 PM

Session ID:2524

On-Symposium 3. Physical and Mental Health – (Tech Innovations)

593

Health Technology Innovations

R.F.L. Azevedo (Convener)

Exploring the Effects of Indoor Air Quality on Sleep and Sleep Quality of Older People

H.S.M. Kort, M.G.L.C. Loomans

A technology innovation to improve hypertension medication adherence for older adults

J.K. Lee, K.C. Insel, J.S. Nicholas, R.F.L. Azevedo, W.A. Rogers

Socially assistive robot-based alerts on indoor and outdoor air-quality for patients with chronic obstructive pulmonary disease

Y.S. Hwang, H.S. Jo, W.J. Kim, S. Sin

Understanding the Application of Socially Assistive Robots in the Home to Support Healthy Aging

G. Mois, L. G. L. Vergara, A. F. Afsar Ali, V. Rakshe, H. Mahajan, W. A. Rogers

Session ID:2525

On-Oral 3. Physical and Mental Health – (Movement)

545

Development of a PC game to support expiratory muscle training

K. Ishihara, K. Uekado, T. Fukuoka

568

Development of rehabilitation training system for spatial recognition and upper limb movement

T. Iwasaki, K.Ishihara, S.Ishihara, K.Matsuura

570

An electronic musical instrument approach to training of expiratory and hand muscle movements.

S. Mitsumasu, K. Ishihara

684

Influence of cardiovascular risk, hypertension and diabetes in accelerometry features

P. Bet, M.M. Chiudo, P.C. Castro, G.F. Costa, M.A. Ponti, M.S.M.P. Simões, V. Z. Dourado

Session ID:2526

On-Oral 4. Information and Communication – (Digital Use)

547

Connected: Mobile technologies and online music-making facilitate learning and a sense of belonging in older adults

A. Lynne, A. Creech

567

Digital engagement and quality of life of participants at a University of the Third Age

L.J. Lorenzi, P.A.R. Alvarez, P. Bet, P.C. Castro

585

Elder's ICT device usage / not-to-use: Survey comparison in Japan, Germany, Sweden, and the US

S. Ishihara, K. Ishihara

734

Role of technology in the relationship between grandparents and grandchildren in Asia

C.K Tan, Coco Liu

TUE, 10/25 @ 11:00 PM

Session ID:2527

On-Symposium 7. Others – (Gerontechnology)

517

The Role of Centers in Advancing Gerontechnology

N. Charness (Convener)

CREATE: Center for Research and Education on Aging and Technology Enhancement

S. J. Czaja, W. Boot, N. Charness, W. A. Rogers, J. Sharit

Enhancing Neurocognitive Health, Abilities, Networks, & Community Engagement

W.R. Boot, S.J. Czaja, N Charness, S.J. Czaja

TechSAge: Rehabilitation Engineering Research Center Technologies to Support Aging-in-Place for People with Long-term Disabilities

J.A. Sanford, W. A. Rogers, T.L. Mitzner

The Institute for Successful Longevity (ISL) at Florida State University, USA

N Charness

CHART: Collaborations in Health, Aging, Research, and Technology

W. A. Rogers, A. Stanfield

Session ID:2528

On-Oral 1. Housing and Daily Living – (Community)

537

Optimal numbers and locations of wearable sensors to enhance the performance of classification models that differentiate injurious versus non-injurious transfers

K. Lim, S. Lee, W. J. Choi

649

Multi-criteria evaluation of senior housing, based on their future needs

A. Ptak-Wojciechowska, H. Kort, D. Kasraian, A. Gawlak

689

Human-Computer Interaction in Analyzing Neighborhood Safety

E. Hwang, A. J. Park, G. Han, E. Song

755

Technology for Home-Delivered Meal Service for Rural Seniors Living Alone: Designing a Mobile App for the Meal Delivery Workers

A. S.Y. Chang, S.T. Young, M.J. Yang, Y.Y. Lin

Session ID:2529

On-Oral 7. Others – (Health)

569

Influence of Gender on Accelerometry Patterns

P.C. Castro, M.M. Chiudo, P. Bet, M.A. Ponti, M.S.M.P. Simões, V. Z. Dourado

586

Developing and selecting images to facilitate comprehension of hypertension educational materials for older adults

R.F.L. Azevedo, M.T. Harris, Q. Nie, S.A. Al-Saleh, C. Smith, R. Maguire, W.A. Rogers

708

Looking Back at Looking to the Future: Revisiting the 1983 NATO Symposium on Aging and Technological Advances

H.L. Sterns, R.S. Sterns, A. Sterns

762

A Pioneering Case Study That Applies Complementary and Alternative Medicine to Menopausal Women's Self-health Management

H. O. Ma, C. J. Chang

POSTER Session

- Type indicates your participation & presentation type. Please contact us if there is something wrong.
- Please prepare the pdf file for the online poster session which will upload all the poster file as well as in-person authors must bring your printed poster. (5minute long presentation record is optional)
- If you made the files, please upload(drop) the file at the below link.

Upload link : <https://www.dropbox.com/request/QmWg7HtafHpTKve4Vw8f>

Type	Abstract ID	Title / Author
	499	Digital competences model for elderly m-learning <u>L.R Machado</u> , P.A. Behar
	501	Feasibility Study of a Robot-Assisted Complex Upper and Lower Limb Rehabilitation System in Stroke Survivors <u>JH Cho</u> , YM Choi, SY Lee, KT Kim
offline	508	An interactive guideline to mitigate the risks associated with getting lost among persons living with dementia <u>N.A. Neubauer</u> , L. McLennan, E. Leung, Daum, C., L. Zhang-Kennedy, L. Liu
online	514	Visuomotor control of 3D circular tracking movement in a virtual reality space <u>W. Choi</u> , L. Li, J.H. Lee
offline	524	IoT based health monitoring system - Recent trends and directions <u>C.M.B Ho</u> , J.Hana, S.J Park
offline	525	Real-time Sleep Monitoring System for Nursing Hospitals <u>C.M.B Ho</u> , J.Hana, S.J Hwang, S.J Park
offline	526	Caregiver's experiences in caring for disabled persons using feeding assistive robots <u>N. HIRAYAMA</u> , Y.S. Shin
offline	533	Enhanced Behavior System of Service Robots based on BERT, CNN and DQN <u>Y. Zhang</u> , Y. Sung
offline	534	Development of a Leisure Aids Rental Service for Elderly through Service Scenario Analysis <u>Y.S. Shin</u> , J.S. Hong, J.H. Kim
online	540	Development of a Fall Prevention Device for Older Persons <u>K. Abdul Rahman</u> , S.A. Ahmad, C. Wada, A. Ashari, A. Che Soh, A. A. Gopalai, S. Murugasen
offline	543	Older cancer survivors' acceptance and compliance to web-based psychological interventions <u>M. Mehlsen</u> , E. Nissen, M.F. Damholdt
online	555	[omitted]: Pedagogical Strategies for Older Person Digital Inclusion <u>L.R. Machado</u> , B.K. Slodkowski, C.B Sigal, D.F. Sampaio, T.F. Grande, J.S. Mendes, G.P. Meira da Silva, P.A. Behar
offline	559	Companion Robot can be a Health Keeper for the Elderly: the Effects of Daily Use of Companion Robot on Medication Compliance <u>J.C. Yun</u> , S.H. Yu, E. Yi, D.H. Park
online	572	Developing Decision Support Algorithms for Use in a Digital Therapeutic System <u>J.K. Lee</u> , J.S. Nicholas, A. Albadawi, K.C. Insel
	579	Older Adults Perspectives on the Potential for Technology to Enhance Care in Academic Medical Centers <u>C. VandeWeerd</u> , E. Sappington, M. Roberts, L. Poon
online	583	A Comparative Usability Testing between a Web-based and Non-immersive VR Reminiscence Therapy for Persons with Dementia <u>W. Sun</u> , R. Akhter, A. Quevedo, R. Liscano, D. Presas, S. Hornsburch, R. Shewaga
	596	Cyberschool for grandparents: an innovative crowdfunded intergenerational educational program. Grandparents' baseline features according to web access <u>M. Colombo</u> , A. Guaita, E. Rolandi
online	598	Development of a web-based memory check tool using js Psych <u>J. Maruta</u> , K. Uchida, S. Akada, S. Nogi, H. Kurozumi, K. Inoue.

	609	Security vulnerability analysis for an improved anonymous authentication protocol for wearable health monitoring system in an aging society G. Eom, H. Byeon, Y. Choi
online	610	Cantonese-speaking Smart Doll for Institutionalized Elderlies with All-cause Dementia at Severe Stage Y.T. Ling, M.C. Law, M.Y.M. Chan, P.Y. Wan, H.Y. Mak, Y.P. Zheng
	611	Security vulnerability analysis for an improved anonymous authentication protocol for wearable health monitoring system in an aging society G. Eom, H. Byeon, Y. Choi
	612	Development of the Best Ensemble-based Machine Learning Classifier for Distinguishing Hypokinetic Dysarthria Caused by Parkinson's Disease from Presbyphonia and Comparison of Performance Measures H. Byeon
offline	615	A Study on Factors Affecting the Outcomes of Information Use by the Elderly - Focusing on the Digital Support J.H. Ko, Y.M. Kim
offline	616	Differences in Digital Capital according to Socio-demographic Characteristics of the Elderly. J.H. Ko, Y.M. Kim
offline	620	Chronic Disease Self-Management Interventions using Digital Health Technologies for Community-Dwelling Older Adults: A Systematic Review S. Lee, M. Hwang, G. Kim, Y-H. Park
online	624	Exploring the value of a proactive telecare system in older adults: a qualitative study L.Fothergill, C.Holland, N. Hayes.
offline	625	Emotion Analysis using the interaction with Companion Robot in the depressed elderly in the community H. Hong, D.E. Shin, T.H. Kim.
online	626	Two-year Longitudinal Relationships between Frailty, Cognitive Function, and Fall in Community-Dwelling Older Korean Adults N. Kim, G.S. Kim, M. Park, M. Shim
offline	632	Barriers and Facilitators of Self-management Using Digital Technology in Older Adults Living Alone G. Kim, M. Hwang, S. Lee, Y.H. Park
offline	635	The Impact of Social Capital, Economic resources and Health Behavior on Self-assessed Health of older people in South Korea. S.Y. Lee, M.H. Cha, B.R. Hwang
offline	639	A Study On The Formation Of The Elderly Life-Historical Sense Of Place In Urban Poverty J. Oak, K.M. Kang
online	641	Designing Smart Display Table for Senior Care Service based on Service Design Research Y.W. Jeong, C.H. Kim, S.J. Jeong, J.E. Song, B.R. Hwang
online	648	ICT Usage and Health Behavior Among Korean Middle-Aged Men and Women: The Mediating Role of Self-Efficacy Y.S. Cha, K. Kim, G. Han
offline	651	A Descriptive Study of Digital Health Literacy and Internet Use of Older Adults Living Alone M. Hwang, G. Kim, S. Lee, Y.H. Park
offline	652	Study on Middle Aged People's Use of and Attitudes toward Kiosk M.J. Kim, Y.A. Hong, Y.S. Kim, Y.J. Lee, G.R. Lee
online	656	sEMG-based Hand Posture Recognition and Visual-Feedback Training J.M. Kim, B.M. Koo, S.M. Yang, Y.J. Nam, Y.H. Kim
offline	657	The Effects of the Solitray Deaths and Suicide Prevention Project on Emotional Vitality among Older Adults Y. Kim, S.R. Noh
online	661	Relationship between Body Positions, Body Mass Index and Pressure Injury among Elders: Using Artificial Intelligent J. Wang, C.K. Chen, D.F. Shih
offline	663	The effect of intervention using an emotional recognition coaching companion robot on the depressive elderly K.M. Kim, B.H. Yoon, Y.H. Sea, S.H. Park, J.H. Song, H.J. Yun
offline	664	Improvement of the second NRC Smart Care Space based on stakeholders' participation Y.-Y. Cho, K.J. Lee, J.E. Baek, W.-K. Song
offline	665	Effects of Age and Familiarity on Visual Word Recognition in Korean: Evidence from a Web-based Large Scale Lexical Decision Task H. Baek, P. C. Gordon, W. Choi
online	669	Comparative literature review of assistive technology for dementia care in South Korea, Japan, and Thailand C. Thawisuk, M.J. Kim, K. Inoue

online	670	Testing Reciprocal Relationships between Loneliness and Self-Control among Middle-aged and Older Adults: A Random Intercept Cross-lagged Panel Model Using Daily Diary Data <u>S.R. Noh</u>
online	671	How to Measure the Effect of Reminiscence Group Therapy on Mute People with Dementia?: A Trial using a Facial Emotion Recognition Method <u>X. Liu, R. Yamazaki, H. Kase.</u>
offline	674	What's Needed to Make 'Aging in Place' for Healthy Old Age <u>S. Han, S. I. Nam</u>
online	675	The Pre-impact Fall Detection using the Quantization based on ResNet <u>B.M. Koo, J.M. Kim, S.M. Yang, S.H. Lee, M.H. Hong, and Y.H. Kim</u>
offline	676	Moderating Effects of Supervision on the Relationship Between Job Performance and Their Geriatric Social Work Competency Among Social Workers in the Individualized Support Service for Older Adults <u>Y. Kim, S.M. Park</u>
offline	677	Investigating non-face-to-face service awareness and needs of family caregivers with dementia patients during COVID-19 pandemic <u>M. Park, B.B. Dlamini, T.T.T. Giap, J. Jung, J. P. Kim, J. Kim, T.T. T. Doan</u>
online	678	Determination of Gait Parameters based on Multi-Sensors <u>S.M. Yang, J.M. Kim, B.M. Koo, Y.J. Nam, and Y.H. Kim</u>
online	683	The home environment as fall risk factors among community-dwelling frail older people: A systematic review <u>M.K. Park, G.S. Kim, N. Kim, M.S. Shim, J.J. Lee</u>
offline	692	A Conceptual Exploration of Cognition-Motor Dual Task Training for Effective Application in Community-dwelling Older Adults <u>A. Lee, S.H. Park, S.S. Kim, J.H. Kim, Y.R. Koo, H. Kwon, S.H. Ho, Y.H. Bae</u>
offline	693	Development of Usability Evaluation Indicator for a Rehabilitation Exercise Enhancement Device Using Cognitive-Physical combined intervention among the Elderly <u>A. Lee, S.H. Park, S.S. Kim, J.H. Kim, Y.H. Bae</u>
online	694	Digital Reminders for Everyday Activity Memory (DREAM): Initial Results from a Needs Assessment Study <u>E.C. Sanders, S. Zhang, W.R. Boot</u>
offline	695	Conceptual Exploration of Service Delivery System to Activate Physical Health Promotion of the Elderly <u>A. Lee, S.H. Park, S.S. Kim, J.H. Kim, Y.R. Koo, H. Kwon, S.H. Ho, Y.H. Bae,</u>
online	703	Effect of resistance exercise training combined with plant-based protein supplementation on the prevention of sarcopenia in the middle-aged and elderly <u>P.C. Hsieh, C.J. Chang, C.Y. Lin</u>
online	707	Adapting smart supportive technology for hospital use: a case report <u>F. Knoefel, L. Ault, C. Wilson, C. Trudel, M. Hamza, R. Wallace, M. Jaana, R. Goubran, H. Sveistrup, P. Tan, N. Thomas</u>
offline	712	The effect of digital literacy in the elderly on life satisfaction: Focusing on depression and social participation <u>H. S. KIM, J. S. KIM, K. Y. LEE</u>
offline	714	Preliminary results from a technology-integrated health and wellness intervention for seniors in an urban low-income community in Korea <u>J.Y. Yi, E. Kim, H. Choi, Y.I. Jung, H. Kim</u>
online	719	Innovative Design of Transformed Assistive Tableware (TAT) for the Elderly <u>H. C. Y. Liu</u>
online	722	AGING IN PLACE COMMUNITIES: AN AFFORDABLE ALTERNATIVE TO POTENTIALIZE LONGEVITY <u>N.Mello, A. Portigliatti</u>
online	727	USE OF SMARTPHONES BY THE ELDERLY: DIFFICULTIES AND BENEFITS. <u>L.O.B.V. Cliguet, S.S.T. Batistoni, I. Zaine, K.R.H. Rodrigues, M.G.C. Pimentel, M. Cachioni</u>
online	729	Digital Communities for Older Adults Deploying Human-Centered Technologies for Super-Smart Society <u>Y.Nameki, N.Kurashima, K.Chin</u>
online	737	Technologies for health and wellness in later life <u>R.White, A.Flynn, A.Sixsmith</u>
offline	748	Developing Innovative Digitalized Community-Based Senior Exercise Program to Improve Older Adults' Cognitive and Physical Functions <u>K.E. Lee, Y.H. Ro</u>

online	754	Effectiveness Assessment of Patient-Centered Measures for Chronic Disease Management during COVID-19 Epidemic A.H. Yang, H.M. Chang, H.L. Chen, S.H. Hsiao
offline	771	Effect of VR/MR based Education Program for Managing Behavioral and Psychological Symptoms of Dementia J.A. Song, H. Cheon, J. Kim, S. Jung., I. Kim, Y. Yang, J. Kim