

SYMPOSIUM PRESENTATION 4: INFORMATION AND COMMUNICATION

Digital inclusion for intergenerational solidarity

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ISSUE Digital inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of information and communication technology (National Digital Inclusion Alliance, 2016). South Korea is one of the digital pioneer countries with outstanding digital infrastructure. However, the digital divide is an issue, especially for older generations and it can exacerbate the social isolation of older adults in this era of digital transformation. Therefore, digital inclusion is necessary to ultimately achieve intergenerational solidarity. **CONTENT** This symposium is designed by the Ewha Institute for Age Integration Research (EIAIR) to present our recently conducted research on older adults' digital use. EIAIR aims to find novel ways to connect the young and the old to prevent the social isolation of older generations and achieve intergenerational solidarity. Digital inclusion is necessary to realize intergenerational solidarity in this rapidly changing society. The presentations show various attempts to improve older adults' digital literacy and promote intergenerational exchange in the digital world. **STRUCTURE** Hajin Lee and colleagues first present the development process of a mobile application 'Welsh' and the effect of the use of the application in improving older adults' digital literacy. The application was developed for improving older adults' access to senior welfare centers information that was initiated during the COVID-19 pandemic. Second, Hannah Lee and co-authors examine the benefits of using mobile instant messaging to express negative emotions among older adults using a national data. Finally, So-Young Park and co-author present eHealth literacy in South Korea. **CONCLUSION** To achieve intergenerational solidarity, we need to try a variety of attempts including digital literacy training, developing applications, and online content designed to encourage participation and collaboration across all age groups. Through active participation in the exchange of information and opinions in the digital world, people can understand each other more and a sustainable aging society can be realized.

Keywords: digital literacy, digital divide, digital inclusion, intergenerational solidarity, technology adoption

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

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Purpose With COVID-19 pandemic, social distancing has been implemented to prevent infection, making it difficult to meet people in person. Therefore, most social welfare service providers have switched from face-to-face services to non-face-to-face services. The population group that suffers the most from these changes is older people (Yoo & Lee, 2021; Lee & Yoon, 2021), who already experience loneliness and isolation due to social distancing. They are complaining of difficulties in using social welfare services since most information was provided online. This study was conducted for the purpose of developing a mobile application that provides information necessary for older adults who use a senior welfare center. **Methods** First, we searched for apps designed for older adults and conducted a comprehensive literature review to analyze the problems of existing app-based services. Second, based on the analyses, we attempted to develop a mobile application that provides information and services necessary for older adults who use the senior welfare center services during the COVID-19 pandemic. After development of 'Welsh', seniors in five senior centers who voluntarily participated in the study used the app for two weeks and evaluated the app (n=376). The level of digital literacy was also measured with standardized questions before using the app and after two weeks to test the effectiveness of the app. **Results and Discussion** A mobile application "Welsh" was developed in this study, and it has the following characteristics. First, users can receive comprehensive information from senior welfare centers using the app. Second, people can register with many agencies using the app. Third, two-way communication is possible through chat functions. Older people can also share useful information with each other. Fourth, service providers can release information and communicate with the seniors as well. Ultimately, "Welsh" is expected to help older people to reduce loneliness by maintaining social connections. The results of the pre- and post-test revealed that it improved the level of digital literacy of the participants ($t=-3.715$, $p < .001$).

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Keywords: senior welfare centers, mobile applications, older adults, social connectedness, social isolation

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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

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Purpose In Korea, every 35 minutes someone takes their own life. The suicide rate was particularly high among the elderly population over the age of 60, with 49.2 deaths per 100,000 population (World Health Organization, 2021). Suicidal ideation is one of the strongest predictors of suicide attempts (Nock et al., 2008); it's known that a majority of people who attempt suicide often communicate their intent to others in advance of this (Hawton, Houston, & Shepperd, 1999; Isometsa, 2001). People's responses to others' symptoms of depression or suicidal ideation play an important role in preventing suicide and providing the appropriate help in a timely, supportive manner (Van Orden et al, 2006). This study explores the benefits and barriers of disclosing feelings of depression or suicidal ideation to others. In addition, this research investigates how the elderly react to expressing their mental health issues online, particularly those interactions via mobile instant messaging. Mobile instant messaging (MIM) has become a dominant form of everyday communication among the Korean elderly population (KISDI, 2021). As expressions of suicide-related feelings via social media are associated with seeking peer support, it is important to examine how the elderly communicate and respond to suicidal ideation or their fluctuating mental health state in digital spaces. **Method** An online survey was conducted in Korea. In order to obtain representative samples, data was gathered by a team from professional research company. The participants were assigned to read one of three vignettes, and then asked to complete a questionnaire assessing their reaction to target, health literacy, mental health/suicide stigma, digital literacy, mobile media usage, and expressive depression. **Results and Discussion** It became apparent that the participants felt that they were burdening the other person when expressing their negative feelings in a face-to-face context. On the other hand, they believed using MIM was preferential because it removed the need for the other person to experience this pressure, so that they were able to express themselves more freely. This study presents how the potential for MIM can be best harnessed, as well as some key learning points for its use. It examines the way in which Korean elderly people typically express their negative emotions and suggests that a practical use of MIM is through helping users regulate their feelings of negative emotions. In addition, this research confirmed that emotional expression via MIM is a powerful factor influencing emotional recovery. Barriers to expressing feelings of depression in face-to-face communication were observed, while benefits of using MIM were revealed. Meanwhile, the results found that when the elderly were confident in expressing negative emotions or suicidal ideations via MIM, then this higher health literacy helped reduce the stigma associated with mental health/suicide. In turn, this led to a greater willingness to recommend professional help. This study highlights the benefits of utilizing MIM as a channel to disclose feelings of depression which may then lead enhancing emotional well-being.

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Keywords: mobile media, social connectedness, digital communication, mental health, suicide prevention, elderly

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

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Purpose E-health literacy refers to the ability to search, locate, and evaluate health information from electronic resources to address or solve a problem. Despite the importance of e-health literacy on health, there is little knowledge on the associated predictors with e-health literacy in Korean adults. The purpose of this study was to explore the extent to which e-health literacy is associated with social relationship (e.g., social connectedness, social support), psychological factors (e.g., anxiety, depressive symptoms), and access to health information factors (e.g., internet news, SNS, the importance of internet access to health information) among younger, middle-aged, and older Korean adults. This study also examined the moderating effects of age on these associations. **Method** We used a cross-sectional survey of 2,400 Korean adults aged 20 years or older. Major constructs were measured by: (1) e-health literacy (Paige et al., 2017); (2) social connectedness scale-revised (Lee & Robbins, 1995); (3) MOS-Social support survey-6 (Holden et al., 2014); (4) the Generalized Anxiety Disorder-7 (GAD-7) (Spitzer et al., 2006); and (5) the Center for Epidemiological Studies Depression-10 (CESD-10) (Andresen et al., 1994). Descriptive statistics, ANOVA, chi-square test, and hierarchical multiple linear regression were used for data analyses. **Results and Discussion** Findings of this study demonstrated that access to health information factors predicted e-health literacy better than social relationship and psychological factors across all three age groups. However, there were age group differences in the associations of internet news, SNS, and social connectedness with e-health literacy among Korean adults. This study emphasizes the importance of identifying e-health related risk factors leading to health disparities according to different age groups.

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