An Analysis of the Impact of Cell Phone Use on Depressive Symptoms among Japanese Elders

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Abstract
Background: There has been increasing interest in the impact of information and communication technologies, such as the computer and Internet, on physical and mental health status, but relatively little is known about the health effects of using cell phones. Objective: This study investigates how cell phone usage is associated with levels of depressive symptoms among Japanese men and women aged 65 years and older. We focus on social relationships, particularly intergenerational relationships between older parents and adult children, as a possible mediator in the association of cell phone use with late-life depressive symptoms. We therefore hypothesize that using cell phones contributes to the psychological well-being of older adults primarily through encouraging social relationships. Methods: We used 4 waves of data from the Nihon University Japanese Longitudinal Study of Aging (2001–2009) to analyze the impact of cell phone use on depressive symptoms. Results are based on ordinary least squares regression analyses. Results: Although the use of cell phones was related to lower levels of depressive symptoms among elderly Japanese people, controlling for sociodemographic characteristics and physical health conditions wiped out the effects for men. In contrast, the protective effects of using cell phones persisted among women. Moreover, the impact of using cell phones was not explained by filial relationship measures, suggesting that cell phone use influences the mental health of older women independently of social engagement. Conclusions: Among the many advantages brought about by recent technological developments, cell phones appear to be an important contributor to the psychological well-being of Japanese elders. Researchers and policy makers should prioritize access to new technologies for older adults.

\textsuperscript{1} We use the terms ‘cell phones’ and ‘mobile phones’ interchangeably throughout the article.