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NTIA and NSF NATIONAL BROADBAND RESEARCH AGENDA: Comments

Projections show that the United States will experience strong growth among its older adult population during the next several decades. In 2050, the US population aged 65 and older is projected to be 83.7 million, almost double the 2012 level.¹ Internet use may provide older adults with increased access to social, health and financial resources. Studies have described the major benefits of Internet use to older adults: enhanced communication with family and friends, expanded opportunities for lifelong learning, improvement of delivery of health care services, support for independent living and more options for entertainment.² However, in 2015, according to the Pew Research Center, only 61 percent of U.S. older adults used the internet.

Researchers have identified two levels of the digital divide: the first-order digital divide refers to those who access the internet (or not); the second-order digital divide refers to the breadth, depth, frequency and variety of internet use.

Various studies have examined reasons for the higher level of internet non-use among older adults. Financial reasons, anxiety, and lack of skills have been among the reasons identified, as well as the belief that there is “no need” for a computer and the internet.³

Historically there has been a gap between the percentage of older men and older women using the internet, with male older adults accessing the internet more than their female counterparts. Although this digital divide regarding internet access between older men and women has narrowed in recent years, studies show that a gender divide continues with respect to the intensity and variety of internet use. Older women lag behind older men with respect to the richness and frequency of internet use.⁴ Men have been found to be more frequent broad and more frequent narrow users than women.⁵ Further across all age groups, men have been found to be more likely than women to engage in diverse internet uses such as banking/ financial management, downloading software, news, music and web authoring.⁶

¹ Ortman, Velkoff and Hogan (2014). An Aging Nation: The Older Population in the United States. US Census

² Rosenthal (2008). Older Computer Literate Women; Their Motivations, Obstacles, and Paths to Success; Choi and Dinitto (2013). Internet Use Among Older Adults: Association with health needs, psychological capital, and social capital.

³ Whitacre and Rhinesmith (2016). Broadband un-adopters.

⁴ Internet Users in the UK: 2016. (2016) Office for National Statistics; van Deursen and Helsper (2015). A nuanced understanding of Internet use and non-use among the elderly.

⁵ Selwyn, Gorard and Furlong (2005). Whose Internet is it Anyway; Yoon (2016) Computer Use and Computer Anxiety in Older Korean Americans.

⁶ Lee, Park, and Hwang (2015). A new dimension of the digital divide :Exploring the relationship between broadband connection, smartphone use and communication competence; Hargittai2005

It would be desirable for the NTIA's broadband research agenda to include research on strategies to increase internet use among older adults, and in particular women. Research and training programs should include an agenda to increase older women's internet use, because they (1) lag behind men in the frequency and variety of use and (2) at age 65, have a greater life expectancy than men.

An interesting and relevant question is whether the higher rate of internet non-use and under-use among older adults will gradually be reduced and perhaps even erased over time. Computer and internet skills are required for many jobs today, and for various personal and commercial activities. The new cohort of older adults will bring these computer skills into retirement and will therefore have a higher level of internet use than the predecessor cohort of older adults. To some extent, this may be true. However, internet technology is on a fast track for dynamic and evolving development. As today's younger adults, who are comfortable using today's fixed and mobile internet technology, advance to older age, they may not readily adopt newer internet technologies and functionalities. Comfortable with obsolete technology and modalities, psychological factors, anxiety, and the belief that there is no need to adapt to new technology may cause these "new" older adults to be frozen out of fully accessing the internet. The "switching costs" of adopting new technology are psychological as well as financial and studies suggest that older adults may have higher psychological switching costs.⁷

An interdisciplinary approach to increasing older adult internet use is recommended, because both economists and psychologists can contribute to the issue of motivating older adults to use the internet. The internet training for older adults that I recently conducted under a BTOP grant found that connecting internet use to some activity in which an older adult currently participates, such as knitting or woodworking, helps to generate interest. Small group training is preferable to large group training in addressing the anxiety that non-users, especially women, have about internet use. Finally, for immigrant groups that tend to live in extended rather than nuclear families, older adults' interest in the internet can be piqued by promoting internet use as a way of communicating with the younger generation.

At U Mass Lowell, we are currently working with older adults from different ethnicities (Burmese and Vietnamese in Lowell, Hispanics in Lawrence, mostly Caucasians in Andover and Amesbury, MA) to develop training programs to increase the breadth and depth of internet use among these diverse groups. We are currently seeking funding for this program.

⁷ McDonough and Kingsley (2015) The Impact of Mobile Technology on the Digital Divide Affecting Older Adults.