



Evidence Summary

Older Adults' Internet Use Is Varied, Suggesting the Need for Targeted Rather Than Broadly Focused Outreach

A Review of:

van Boekel, L.C., Peek, S. T., & Luijkx, K.G. (2017). Diversity in older adults' use of the Internet: Identifying subgroups through latent class analysis. *Journal of Medical Internet Research*, 19(5:e180), 1-10. doi: 10.2196/jmir.6853

Reviewed by:

Ann Glusker
Research & Data Coordinator
National Network of Libraries of Medicine, Pacific Northwest Region
University of Washington Health Sciences Library
Seattle, Washington, United States of America
Email: glusker@uw.edu

Received: 28 Feb. 2018

Accepted: 24 Apr. 2018

© 2018 Glusker. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 4.0 International (<http://creativecommons.org/licenses/by-nc-sa/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one.

DOI: 10.18438/eblip29420

Abstract

Objective – To determine the amount and types of variation in Internet use among older adults, and to test its relationship to social and health factors.

Design – Representative longitudinal survey panel of households

Setting – The Netherlands

Subjects – A panel with 1,418 members who were over 65 years of age had answered the survey questionnaire that included Internet

use questions, and who reported access to and use of the Internet.

Methods – Using information about the Internet activities the respondents reported, the authors conducted latent class analysis and extracted a best-fitting model including four clusters of respondent Internet use types. The four groups were analyzed using descriptive statistics and compared using ANOVA and chi-square tests. Analysis and comparisons were conducted both between groups, and on the relationship of the groups with a range of social and health variables.

Main Results – The four clusters identified included: 1) practical users using the Internet for practical purposes such as financial transactions; 2) social users using the Internet for activities such as social media and gaming; 3) minimizers, who spent the least time on the Internet and were the oldest group; and 4) maximizers, who used the Internet for the widest range of purposes, for the most time, and who were the youngest group. Once the clusters were delineated, social and health factors were examined (specifically social and emotional loneliness, psychological well-being, and two activities of daily living (ADL) measures). There were significant differences between groups, but the effect sizes were small. Practical users had higher psychological well-being, whereas minimizers had the lowest scores related to ADLs and overall health (however, they were also the oldest group).

Conclusions – The establishment of four clusters of Internet use types demonstrates that older adults are not homogeneous in their Internet practices. However, there were no marked findings showing differences between the clusters in social and health-related variables (the minimizers reported lower health status, but they were also the oldest group). Nevertheless, the finding of Internet use heterogeneity is an important one for those who wish to connect with older adults through Internet-based programming. The different patterns evidenced in each cluster will require differing outreach strategies. It also highlights the need for ongoing longitudinal research, to determine whether those who are currently younger and more technologically savvy will age into similar patterns that these authors found, or whether a new set of older adult Internet use profiles will emerge as younger generations with more Internet experience and affinity become older.

Commentary – For this evidence summary, methodologies were systematically assessed using Glynn’s critical appraisal checklist (2006). The authors used secondary data from a large randomized sample, collected in a rigorous manner. Along with their appropriate use of methodologies and proportionate statements of findings relative to

effect sizes, there are few concerns about this study’s data quality.

Nevertheless, there are limitations of note, several of which (mostly technical) were mentioned by the authors. Among those they did not mention was the question of whether the researchers only including respondents who had Internet access and who also had completed the “social integration and leisure” questionnaire may have introduced bias. Also, while they note a survey drawn from Dutch citizens is “considered to be comparable to other Western populations in terms of Internet use”, they cite information that Internet use in the United States is 14 percentage points lower than that in the Netherlands, and some Internet activities among older adults are higher in the Netherlands than in the rest of Europe, leaving some question of the representativeness of the population studied. There is also no mention of the potentially lower percentages of Internet use in households with low income and disabled older adults (Choi & DiNitto, 2013).

Most importantly, however, the authors note that there was no information available about the supports available to the respondents for using technology in general and the Internet in particular. Information about whether older adults were living alone (which relates to lower percentage uptake of the Internet (van Deursen & Helsper, 2015)), whether they had ever had jobs requiring Internet use (Chang et al., 2014; Hargittai & Dobransky, 2017), and what their cognitive status was (Freese et al., 2006), could be very illuminating to their results.

At the same time, the potential for future studies on the topic of heterogeneity of older adult Internet use is vast and fascinating, since the topic is such an important one for those who wish to engage older adults in order to promote programs and activities such as those related to eHealth. The authors call for a longitudinally-focused replication of their study, which would demonstrate whether currently younger adults will age into a similar profile to that now seen, or into a more Internet-intensive use profile, given their

deeper Internet experience. Additionally the authors suggest research on how older adults overcome physical and mental (specifically, cognitive) barriers to Internet use, whether there are any direct associations between declining health and Internet use, and how older adults expand and contract their choices of activities in general. Hargittai and Dobransky (2017) also suggest that research include the Internet use skill levels of older adults: “understanding how the Internet and online services work is something that can be taught and is thus open to intervention, [so] it is an important factor to examine in work on digital inequality” (p. 208).

Finally, the phenomenon of eHealth is referred to repeatedly in this article, and it would help the reader to have a clearer definition of how that is experienced in the Dutch context.

References

- Chang, J., McAllister, C., & McCaslin, R. (2015). Correlates of, and barriers to, Internet use among older adults. *Journal of Gerontological Social Work, 58*(1), 66-85. doi:10.1080/01634372.2014.913754
- Choi, N.G. & DiNitto, D.M. (2013). The digital divide among low-income homebound older adults: Internet use patterns, eHealth literacy, and attitudes toward computer/Internet use. *Journal of Medical Internet Research, 15*(5:e93), 1-25. doi: 10.2196/jmir.2645
- Freese, J., Rivas, S., & Hargittai, E. (2006). Cognitive ability and Internet use among older adults. *Poetics, 34*(4-5), 236-249. doi: 10.1016/j.poetic.2006.05.008
- Glynn, L. (2006). A critical appraisal tool for library and information research. *Library Hi Tech, 24*(3), 387-399.
- Hargittai, E. & Dobransky, K. (2017). Old dogs, new clicks: Digital inequality in skills and uses among older adults. *Canadian Journal of Communication, 42*(2), 195-212. doi: 10.22230/cjc.2017v42n2a3176
- van Deursen, A.J. & Helsper, E.J. (2015). A nuanced understanding of Internet use and non-use among the elderly. *European Journal of Communication, 30* (2), 171-187. doi: 10.1177/0267323115578059