

# PAPER

## Technology for Health

G. SECKIN, T. DEGREVE, J.S. WYATT, J. LALJER. *Digital route to successful aging: Promoting health through information technology. Gerontechnology 2018;17(Suppl):138s*; <https://doi.org/10.4017/gt.2018.17.s.134.00> **Purpose** Achieving health and maintaining quality of life in late life through proactive adaptations is an important concern for researchers who seek to explicate the pathways that support increasing longevity and successful aging in the 21<sup>st</sup> century. The rapid developments in e-health information technologies and the growth of the aging population are accelerating a shift in medicine by which older patients are now better equipped with the knowledge to become informed and empowered health consumers. We examined the following subjectively reported health management experiences among online health information seekers: (1) empowerment in managing health, (2) better self-care (3) improvement in quality of life, and (4) improvement of health, and (5) satisfaction with perceived changes in quality of doctor-patient encounters. We used selective optimization with compensation theory and corrective and proactive model of successful aging, as our conceptual frameworks in proposing that positive health management experiences can contribute to successful aging even when coping with a health concern. **Method** Our respondents (N= 499) were drawn from the largest national probability-based research panel for online surveys maintained by the Knowledge Networks, which employs an address-based sampling frame derived from the U.S. Postal Service Delivery Sequence File. We performed subsample analyses of middle-aged (45≤age≤59, n = 233) and older respondents (age≥60, n= 194). We conducted independent samples t-tests and multivariate regression analyses. Structural equation modelling was performed in separate analyses for both subsamples in order to examine mediational associations among research covariates and to estimate the direct, indirect, and total effects. We used confirmatory fit index, normed fit index, Tucker-Lewis Index, and root mean square error of approximation to report model fits. **Results & Discussion** Provider-patient communication informed by Internet resources was associated with more satisfaction with perceived changes in medical encounters and imparted a greater sense of empowerment, both of which in turn, were associated with reports of better self-care, increased health-related quality of life, and perception of improvement in health status. The subsample of middle-aged respondents reported a greater feeling of empowerment (M=3.31 vs. M=3.05;  $\chi^2=5.709$ ,  $p<.001$ ) and perceived improvement in their health status (M=2.99 vs. M=2.82;  $\chi^2=5.594$ ,  $p <.028$ ). Older respondents reported significantly lower averages when inquired about whether they asked their health care provider where to find credible information on the Internet (M=2.06 vs. M= 1.80;  $\chi^2 = 2.59$ ,  $p < .001$ ). They also had lower averages for positive health perception (M=3.12 vs. M= 2.95;  $\chi^2=.762$ ,  $p < .012$ ). Older adults who reported higher levels of satisfaction with perceived changes in medical encounters indicated a greater contribution of online information seeking to their ability to provide better health-care for themselves, their health related quality of life, and their health status as compared to middle-aged adults. If individuals feel empowered through information acquisition, they may be more likely to take action to improve their health, which in turn may lead to perceptions of better health. This is also consistent with the literature that older adults with a higher sense of empowerment have significantly slower rates of health decline over time.

### References

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*Keywords:* internet, information, doctor-patient interaction, health experience

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