## **PAPER**

## **Technology for Health**

G. SECKIN, J.S. WYATT, J. LALJER, T. DEGREVE. E-Health literacy, trust, and online health information consumerism among technogenerians: A question of empowerment. Gerontechnology 2018;17(Suppl):137s; https://doi.org/10.4017/gt.2018.17.s.133.00 Purpose The health technologies have produced a revolutionary change in availability and amount of health and medical information accessible to patients, enabling them decide on the content and amount of information delivered. Sometimes referred to as the informaticization of medicine, a new field of knowledge around medical information and communication technologies has emerged. There is an estimated over 14,000 health applications available for user download in Apple's application store. The number of people who downloaded health-related smartphone applications reached over 247 million around the globe. Eight in ten people browse the Internet for health information, which makes it one of the most common online activities. Among them, people aged 50 and older lead technology use for health purposes. This widespread use of the Internet and mobile health applications provides a new technology-based platform for interactive health service provision. This research examined the extent to which older adults trusted electronic sources of health information (e-health trust) and whether e-health trust had significant associations with electronic health literacy (e-health literacy), consumption of electronic health information (e-health consumerism) and sense of empowerment. Method Our sample is a subsample of a larger study of middle aged and older adults (age≥ 60; n=194) who used the Internet as a resource for health information. They were randomly drawn from the largest national probability-based panel maintained by Knowledge Networks, which employs an address-based sampling frame derived from the U.S. Postal Service Delivery Sequence File. We employed ordinary least squares regression analyses to examine the significant associations. Structural equation modeling was performed in separate models 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** Sense of empowerment had significant positive associations with e-health literacy ( $\beta$ =.326, p<.0010) and e-trust ( $\theta$ =.252, p<.001). However, there was no significant association with e-health consumerism ( $\theta$ =.134, p=.115). However, e-trust had a significant positive association with e-health consumerism ( $\theta$ =.551, p <=.001), which suggests that there is an indirect mediational association between ehealth consumerism and empowerment. These results led us to examine structural equation modeling of the hypothesized associations. Recognizing the interaction between health literacy and patient empowerment has a number of implications for gerontological research and education. In health promotion context, health information literacy supports informed decision-making and enhances control over one's health. From a health care services perspective using information technology provides patients with the knowledge needed to play a greater role in their own health care, which could not only be beneficial health wise, but also seen as a way to contain high and ever rising healthcare costs in ageing populations. As there is a growing discussion about the Internet to transform both personal and public health, and the strong relationship between health literacy and health outcomes, it is critical to empower older patients to become informed users of e-health information and to develop educational interventions to improve their health outcomes.

## References

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