

M.A. O'Brien, K.E. Olson, N. Charness, S.J. Czaja, A.D. Fisk, W.A. Rogers, J. Sharit. *Identifying age differences in technology usage. Gerontechnology 2008; 7(2):176.* Previous research has identified age-related differences in the use of computers and technology, with adoption mediated by cognitive variables and psychological factors<sup>1</sup>. Yet, the finding that younger adults used the Internet for significantly more activities than older adults suggests that other factors may be more important than ability differences alone. For instance, older adults may adopt different sets of technologies due to differential perception of costs and benefits<sup>2</sup>. There may also be identifiable subgroups of older adults whose adoption patterns mimic younger adults<sup>3</sup>. In this paper, we report findings on technology usage and frequency of use from data collected by the Center for Research and Education on Aging and Technology Enhancement (CREATE). This analysis provides a more in-depth assessment of usage patterns than is typically available in large surveys. Demographic and technology experience questionnaires were administered to 374 younger (ages 17-23) and 233 community-dwelling older adults (ages 65-87) over the past two years in three geographically separate and ethnically diverse areas of the United States as part of the CREATE research program. We conducted in-depth analyses of technology usage patterns across age groups, domains, and types of technology and assessed relationships between these variables and user characteristics such as income, education, and gender. **Results and discussion** The goal of the study was to identify age-related differences in technology use and possible mediating factors. We found that age differences depended on domain of use. For example, younger adults use significantly more technology for entertainment and leisure activities than do older adults, but older adults use significantly more technology for health care. In the shopping domain, younger adults use one set of technologies (e.g., Internet, in-store kiosk) whereas older adults use a different set (e.g., television, telephone; *Figure 1*). These technology sets differ in dates of marketplace introduction and level of technology sophistication, which may affect perceptions of costs and benefits. However, for Internet technology, usage was significantly higher for younger adults than older adults across all domains. We discuss results and possible implications for technology adoption decisions.

**References**

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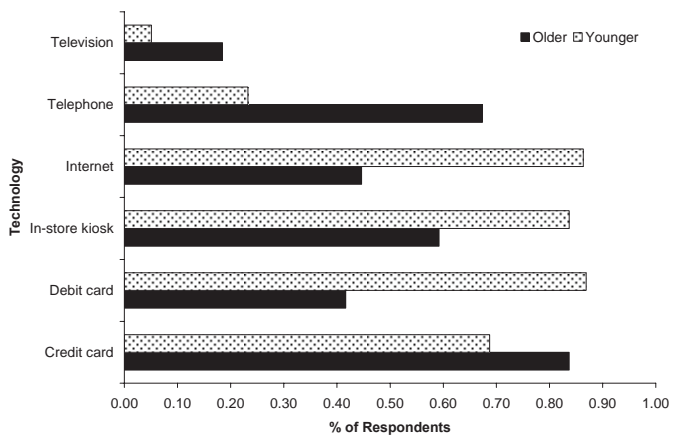


Figure 1 Age differences in technology usage for shopping domain