Predictors of Accuracy on an Online Health Information Search Task Among Older Adults M. Alger[1], S. Rahman, M.S., and M. Schmitter-Edgecombe, PhD. *Gerontechnology* 25(s)

Purpose Internet navigation skills are critical for digital health literacy, defined as the ability to accurately evaluate health-related information from digital sources. Older adults often face barriers that limit effective use of internet resources for making informed health decisions, yet few studies have compared young-old (ages 50 to 69) and old-old adults (ages 70+) on health information search performance. This study investigates how age, self-efficacy, health literacy, and website credibility predict accuracy on an online health information search task. We hypothesized that individuals in the young-old age group would perform with greater accuracy on the health search task compared to those in the old-old age group. We also expected that website credibility, self-efficacy, and health literacy would predict search performance beyond age. **Method** Participants (N = 189) were community-living older adults (age: M = 69.06, SD = 8.59; education: M = 16.83, SD = 2.05; 71.4% female) who completed an adapted performance-based online health search task (HST) [1]. The HST measures one's ability to navigate the internet to efficiently find and evaluate health information. Participants also completed a cognitive screener (MoCA) [2], a health literacy measure (Newest Vital Sign) [3], and a questionnaire evaluating self-efficacy in using trustworthy online sources to answer health-related questions. Website credibility was determined for each website used to answer the five HST questions using specific criteria [4], which were then summed to get a total score. **Results and Discussion** The young-old adults (N = 98) demonstrated higher HST accuracy (t = 2.39, p = .02), self-efficacy (t = 2.92, p = .004), and health literacy (t = 2.72, p = .007) than old-old adults (N = 91). The groups did not differ in website credibility or MoCA scores (ps > 0.05). A hierarchical regression was conducted predicting HST accuracy. In Step 1, age, education, sex, and number of HST questions answered were entered, accounting for significant variance in accuracy, R^2 = .289, $F(4,184)$ = 18.67, p < .001. Younger age (β = −.20, p = .002, 3.8% unique variance) and higher education (β = .14, p = .024, 2.0% unique variance) were significant predictors. In Step 2, MoCA, website credibility, self-efficacy, and health literacy were added; this did not significantly improve model fit, ΔR^2 = .010, $\Delta F(4,180)$ = 0.65, p = .63. None of these variables significantly predicted HST accuracy (ps > .05). Age remained the only significant predictor (β = −.17, p = .014, 2.4% unique variance). Findings indicate age-related decrements in online health information search performance. Website credibility, self-efficacy, health literacy, and cognitive status were not unique predictors of search accuracy in multivariate analyses. The results suggest that age accounts for significant variance in performance on the health search task, while psychosocial and cognitive skills may contribute to other important aspects of online health search performance not fully captured in accuracy-based outcomes alone, such as search strategies, persistence, and application of information to health decisions. Future research might explore how skills-based supports, including credibility evaluation strategies, may enhance search performance among older adults.

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