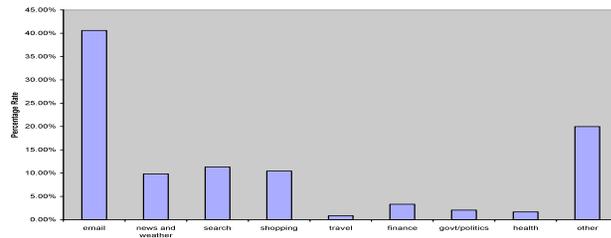


The Influence of Voice-Over Internet Protocol on Web-based Communications of Older Adults in Independent Living Communities

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- We investigated attitudes of older adults on web-based communications. We focused on a set of older adults, some of whom, when exposed to VOIP, preferred it over email, the preferred method of web-based communication among older adults in general. These older adults who use VOIP tend to experience greater life satisfaction and less depression.

Figure 1. Primary Use of the Computer by Older Adults



- Participants were older adults (aged 68-98) recruited from the Charlestown Retirement Community in Maryland. The 171 subjects completed paper questionnaires, and a smaller group (five subjects) participated in a month-long VOIP experiment.

Participants of Larger Group for General Assessment

- Retired older adults living in an selected retirement community located in Catonsville, Maryland
- 171 participants
 - (68.4% female, 31% male)
 - Age range - 68 to 98
 - mean age of 78.6 (SD = 18.24)

Participants of Smaller Group for In-depth Observation

- Retired older adults living in an selected retirement community located in Catonsville, Maryland
- 5 participants - all female
- age range - 69 to 86
- mean age of 80 (SD = 7.05)

- In the group of five, except for one participant who experienced abnormal life circumstances, 3 of the 5 preferred VOIP over email. Also, 3 of the 5 had improved Center for Epidemiological Studies Depression Scale (CED-S) scores at the end of the experiment. All five participants had increased computer, Internet and email usage. Overall and individual Satisfaction with Life Scale (SWLS) scores declined, which can be attributed to more time on the computer and less social interaction.

Computer and Internet Usage

- Overall increase in hours spent on the computer (Pre: M=4.6 Post: M=11) and Internet (Pre: M=14.4 Post: M=19.4) weekly, as well as number of emails (Pre: M=3.4, Post: M=11.8) sent out each week

Nature of the participant's Internet use

- Primary use of the Internet is sending and receiving emails (40%)
- Next most popular uses of the Internet were playing online games and following genealogies
- Results consistent with national data which found that 94% of all seniors who go online rated sending and receiving email as their most frequent Internet activity

- In the larger group of 171, men use the Internet and computers more than women. Overall SWLS scores indicate respondents are satisfied with their lives. Average CED-S scores show no indication of depression.

- Research showed links between computer use, age and life satisfaction or depression
- Research showed positive link between computer use and life satisfaction
- Sample size not large and/or diverse enough to reflect significant impact of computer use

Descriptive Independent Variables

- Men (52.8%) more likely to be married than women (21.4%)
- Women are more likely to be widowed (67.5% versus 39.5%)
- Little gender differences across education, race and income levels
- 96% of participants Caucasian
- Mean incomes between \$40,000 and \$49,000
- Men (86.8%) and women (70.1%) had some college or technical training

Technology Awareness

- 53.8% did not use computers
- Men (56.6%) use computers more than women (41.9%)
- More men (64.2%) had access to computers than women (53%)
- Most (94.7%) had never used VOIP
- Email preferred means of communicating over the Internet (45%)

Future Work: Our research advanced our understanding of how older adults use VOIP in comparison to email. Results indicate VOIP may have a positive impact and decrease depression of some older adults in independent living facilities. However, researchers suggest that online social networks mimic offline social networks and reflect real-life relationships. Therefore, we will conduct research to determine if older adults who are frequent online social network users have a perceived higher quality of life than their counterparts who use online social networks less often or not at all. Future research seeks to understand how online social relationships support and reinforce offline social relationships.