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Introducing Older Persons to Benefits of Technology - Report Series # 2

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Report Series - # 2

Introducing Older Persons to Benefits of Technology

Project Team

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About SERC (Sheridan Elder Research Centre)

Through applied research the Sheridan Elder Research Centre (SERC) will identify, develop, test and support implementation of innovative strategies that improve the quality of life for older adults and their families.

1. Wherever possible, older adults participate in the identification of research questions and contribute to the development of research projects at SERC.

2. We conduct applied research from a psychosocial perspective which builds on the strengths of older adults.

3. Our research is intended to directly benefit older adults and their families in their everyday lives. The process of knowledge translation takes our research findings from lab to life.

4. SERC affiliated researchers disseminate research findings to a range of stakeholders through the SERC Research Report Series, research forums, educational events and other means.

5. A multigenerational approach is implicit, and frequently explicit, in our research.

6. To the extent possible our research is linked to and complements academic programs at the Sheridan College Institute of Technology and Advanced Learning.

EXAMPLES OF SERC RESEARCH

The Built Environment	Information & Communication Technology (ICT)	Human Communication	Public Policy	Other research interests
- Indoor/Outdoor Design - Graphic Design	- Accessible computing - Age appropriate games	- Hearing/low vision - Vision - Language	- Elder Abuse - Ageism	- Self image/self esteem - Care-giver support

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Social isolation is an often-cited deterrent to a high quality of life for older persons. This qualitative study, conducted in the fall of 2003, attempted to link generations and decrease social isolation by providing seniors with instruction on computer and Internet use. Eight participants aged 65-73 met weekly to participate in computer classes facilitated by a teacher and a peer. Evaluation methods included self-evaluation, questionnaires, and research field notes. Barriers to computer use identified by older adults in this study included: lack of access, intimidation, lack of training, and lack of time. All participants rated themselves as somewhat skillful following the training provided and all identified computer skills as being indispensable to older adults. Participants rated the training provided in this pilot as useful and identified hopes that further training would be provided at the Sheridan Elder Research Centre (SERC). The pilot successfully demonstrated the areas that require further research in the area of technology applications for older adults while providing hands-on training to a small sample of interested seniors.

1. Purpose

There have been many new improvements in technology over the last few decades and, as a consequence there has been an increase in the number of older persons using computers. It has been noted in a variety of projects that computer use may decrease social isolation, a common deterrent to a high quality of life for seniors. Specifically, Internet access can help narrow the gap between isolated seniors and the rest of society. Computer use and instruction provides mental stimulation as well as the opportunity for seniors to acquire new knowledge and skills. Many seniors report a desire for new learning[1], but wish to do so in a supportive and non-competitive environment. This type of environment promotes a positive learning experience by acknowledging fears and anxieties and helps to pave the way for increased self-esteem and risk taking. SERC provided computer instruction for seniors within the educational group model. This method of instruction has a number of benefits including providing a safe learning environment as well as an opportunity to socialize with others. The technology-training program also included a peer role model working with the instructor, thus providing the opportunity for leadership and increased cohesiveness within the group.

The aim of this particular program was to provide seniors with opportunities for socialization and the acquirement of new skills related to technology use. A secondary goal was to gather data from the participants for use in future research. This technology group had two primary goals. The first goal was to simply provide basic knowledge and skills to older persons to enhance their computer use, including familiarizing participants with the actual computer and its terminology. In this process, the facilitators hypothesized that communication via the Internet fosters independence, provides a social context and motivates participants to continue learning.

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[1] SERC Report Volume #1, published September 2005

2. Methodology

2.1 Research Design
This study was qualitative in nature and involved eight female participants who gathered together for computer and Internet instruction once a week for a period of six weeks.

2.2 Respondent Sampling
Given that this particular study was a pilot technology group, the sample participants were seniors from the Oakville area able to easily access the research centre. A group of only eight "well" seniors were recruited, as this was a pilot study. All eight participants were female, between the ages of 65-73, with an expressed interest in learning for to use computers.

2.3 Method
Forty invitation letters were delivered to seniors in the Halton area who had   previously been participants in a focus group at SERC. Eight seniors expressed interest in being involved in the technology group. A background questionnaire was administered to the participants in order to identify what they wished to gain from the technology program. The group met once a week for six weeks for approximately an hour and a half each session. Participants were given a break to refocus attention as well as a quasi-social debriefing at the end of each session to promote socialization between group members. The participants were encouraged to cooperate with one another to maximize learning potential and to address any questions or concerns that would aid the whole group in overcoming obstacles. A variety of topics were covered within the curriculum, including recognition, navigation and functions of various computer components.

2.4 Data Collection Measures
Several measures were used in order to evaluate the participants'   experiences with the technology program. Researcher observations and short questionnaires administered to the older adults provided feedback regarding the program. Field notes were taken by both researchers throughout various stages of the program in order to quantify data and identify success of the program.

2.5 Data Analysis Process
The researchers evaluated the program based on feedback from the participants through questionnaires as well as by informal observation. Field notes taken by the researchers helped to determine the success of the program based on the following categories: participants' increased skill level, comfort using the computer/Internet and self-reported feedback on the program's success.

3. Results

3.1 Data Analysis Findings
Data collected through this pilot study allowed the researchers to identify several areas that deter older adults from engaging with technology. The main reason given for low

use of computers by seniors was lack of access to a computer. Other issues identified included intimidation (being "afraid" of breaking the computer, et cetera), lack of training, and lack of time. Some participants identified significant anxiety or fear as the central reasons for not previously using a computer. Despite these barriers, all participants viewed technology use by older adults as an advantage that was indispensable. After only a two-week time period, nearly all participants rated themselves as somewhat skillful using the Microsoft Word program. Overall, the Internet was a very successful application in this program, with participants reporting excitement over the realm of possibilities available to them through email, access to on-line games and retrieval of news and current information. Participants did however, report feeling less skillful at using the Internet than applications such as MS Word.   When the program ended, all participants felt that the program was useful and the facilitators well prepared. When discussing any possible difficulties with the program, participants mentioned troubles with remembering material covered in previous weeks and stated that the program was not long enough. All participants expected to continue using the computer in the future. Facilitators observed considerable improvement in skills and increased facility and use of specialized computer terminology among this group over time.

3.2. Limitations
Difficulties with the program: (as expressed by participants)
- Trouble with remembering material covered in previous weeks;
- Program was not long enough for significant change in skill level and comfort using the computer and Internet.

Difficulties with the program: (as expressed by program facilitators)
- Small sample lacked diversity;
- Lack of written material provided to the participants;
- Participants were not separated by skill level; it was harder to administer appropriate instruction.

4. Implications for Policy and Research

Future research can improve upon what has already shown to be a successful pilot program. Based on elicited data, the unwillingness of older adults to use new technology is NOT a barrier to its use. Rather, it is the accessibility of technology (e.g. computers) and the lack of training opportunities that were identified as significant obstacles. Based on the findings of this pilot, future research involving technology group programs catering to older adults should include:
- Larger and more diverse population samples may yield more accurate findings;
- Providing written description and instructions for every lesson could help those expressing difficulty with remembering material from previous weeks e.g. visually appealing "screen shots" of the programs accompanied by easy-to-understand captions;

- Separating participants by level of experience early on in the program may make it easier to respond to individual skill levels and guide the development of appropriate lesson plans.

5. Conclusions

Overall, the program generated many positive experiences for the participants. By allowing interaction between the participants, socialization was encouraged and helped to foster friendships between the participants. The program seemed to serve a secondary purpose as well, acting as a support group for some participants. Self-reports indicated that the program gave participants a sense of purpose and provided encouragement to acquire new skills. Self-determination and independence were encouraged but facilitators were available if there were any concerns or problems. By providing appropriate instruction, this program helped older adults acquire new computer skills in an ever-advancing technological age. It allowed them to reap the benefits the computer and Internet have to offer by reducing social isolation and providing older adults with the skills needed to facilitate intergenerational communication.