

“Go With the Flow”: Independent Older Adults and Their Information-Seeking

Don A. Wicks, Ph.D.,

School of Library & Information Science

Kent State University, Kent, OH 44242

dwicks@slis.kent.edu

ABSTRACT

Those in the growing older population in Canada and the United States deal with significant changes in their lives which complicate their information seeking. Work and social roles, technology and other factors in their lives change, requiring older adults to make adjustments in their information seeking behaviour. In this study the researcher extended the work reported to the CAIS 27th Annual Conference in 1999. In that initial report, he applied role and social network theory to a study of the information-seeking behaviour of older seniors living in retirement and nursing homes. The current project extended the study to older adults living independently (i.e., non-institutionalized) in the community and asked whether the “young-old” (many just entering retirement) seek information differently than the “oldest-old” who were the subject of the earlier project. The paper reports on findings from interviews with 14 participants about recent information-seeking activities related to community work, social involvements and personal decisions, and to the use of computers and the Internet. It was found that this group of older adults was younger, better educated, and more computer literate than those studied in the earlier project. Interpersonal and verbal sources are preferred for medical and financial information needs, while print materials are preferred for travel and hobby information needs. Both print and verbal sources were used for community organizational involvements and for government information needs. Newspapers and magazines were preferred over radio and television for current events.

RÉSUMÉ

La population grandissante des personnes âgées fait face à des changements importants dans la vie, ce qui complique la recherche d'information. Le travail, les rôles sociaux, la technologie et d'autres aspects de la vie changent, exigeant une nouvelle façon d'aborder la recherche d'information. Pour cette étude le chercheur a étendu l'oeuvre présenté au 27^e Conférence Annuelle de ACSI en 1999. Dans ce premier rapport il a appliqué les théories de rôle et de réseau social à l'étude de la conduite de recherche d'information des personnes âgées qui habitent dans les maisons de retraite et des maison de repos. Le project actuel étend la recherche à inclure des personnes âgées dans la communauté qui sont independants des établissements specialisées. Cette étude a cherché à découvrir si “les plus jeunes personnes âgées” (beaucoup d'entre eux viennent de prendre leur retraite) cherchent l'information d'une façon différente “des personnes les plus âgées”, les sujets de la première étude. Ce papier fait rapport sur les résultats de 14 interviews concernant des activités de recherche récentes ayant rapport au travail d'intérêt général, aux intérêts sociaux et aux décisions personnelles et à l'emploi des ordinateurs et de l'Internet. On a découvert que, en comparaison des sujets de la première étude, ce groupe d'adultes est plus jeune, mieux instruit et ils ont de meilleures connaissances en informatique. Ils préfèrent des sources verbales et interpersonnelles pour l'information médicale et financière, tandis que les sources imprimées sont de préférences pour les besoins d'informations sur le voyage et les passe-temps. Quant à l'information qui touche sur les activités de la communauté et le gouvernement, ce groupe choisit à la fois les sources verbales et imprimées. Pour l'actualité, ils préfèrent les journaux et les magazines plutôt que la radio et la télévision.

Statistics Canada says that in just fifteen years seniors will outnumber children fourteen and under, and by 2026 the senior population will have grown to 21 per cent of the total (compared to 13 per cent in 2000). (CBC 2001) The United States, too, has an aging population. There, the elderly population is projected to more than double by the year 2050. Currently, those age sixty-five and over account for 12.6 % of the total population. By 2010 this number will be 13.2% and by 2030 19.99%. In Ohio, the number of people sixty-five or older will rise from 1.5 million in 2000 to 2.3 million in 2025.

People in this age group are faced with many obstacles when it comes to acquiring the information they need to function effectively in society. They often face significant changes in their lives which complicate their information seeking. For example, many leave the workforce and lose touch with previous colleagues and mechanisms for information gathering which were present in the workplace. Many begin new associations and pursue new career, hobby, or social service opportunities. Others face limitations forced on them by declining health. All, like citizens belonging to other age categories, encounter changes in technology and society which affect (both positively and negatively) their ability to gather and disseminate information. As roles, technology and other factors in their lives change, not only do older adults have to make adjustments in their information seeking behaviour, but also the organizations which serve this population must ask whether there is a need to alter information delivery mechanisms.

The study is a continuation of previous research.² Both my dissertation research (reported in Wicks, 1999a) and the 1998-99 project involving seniors looked at information-seeking in relation to both work roles (and everyday life roles) and social networks. The study of seniors was restricted to seniors living in two residences, one of which provided a low level, and the other a high level, of care. For the most part, it looked at the "oldest-old". The recent study, reported here, extends my examination of seniors and their information needs to the "young-old" and "old-old", and to those who live independently (i.e., on their own, outside of an institution). Both bodies of research consider whether the information sources used by participants vary with the role they are performing. The initial study led me to conclude that there were several questions awaiting future research: Do "young" seniors just entering retirement seek information differently than the "oldest" old who were the subject of the earlier project? Do seniors not living in an institutional setting have similar or different information needs than those who live in an institutional setting? In other words, does the degree of independence of the older adult influence the types of sources chosen? Furthermore, are participants using computers and the Internet in their quest for information and, if so, to what degree do they find these sources fulfil their information needs? And, does the trend to disseminating government information via the world wide web reflect an effective form of communication with this age group?

² This study was funded by a grant from the College of Fine and Professional Arts, Kent State University. Besides encouraging faculty research, the grant was designed to allow an undergraduate student the opportunity to experience a research project first-hand. The author gratefully acknowledges the helpful assistance of Margaret Watson in various aspects of this project. Ms. Watson is a student in the Honors College, Kent State University, where in 2001 she will complete requirements for a B.A. (German) and B.F.A. (Crafts major, Music Performance minor).

LITERATURE REVIEW

Literature Reporting Sources & Services

As reported in the earlier study (Wicks 1999b), much of the attention given in the library literature to older adults concerns specific types of services provided for this age group. This approach continues in the literature. For example, Cassner (2001) offers evaluative comments on a number of web sites devoted to older adults which she has organized around seven headings.³

Literature Reporting Research and Trends

Other studies place older adults in a context. Pettigrew (1999) considered situational factors and their role in communication processes among nurses, older people, and community clinic personnel. Williamson (1999) reviewed the way seniors had been studied in the context of public library needs assessment research.

There are studies that suggest that the elderly are not as well-integrated into the technological society as younger people. Such was the conclusion of Oestlund in a large Swedish study which explored the meaning of information and communication technology in the daily life of elderly people (Oestlund 1999). Other studies counter this suggestion. Ansley and Erber, as early as 1988, in a study of sixty assisted living older adults, found that the stereotype of the older adult as resistant to computer technology was not supported. They also cautioned observers not to treat older adults as a homogeneous group. (Ansley and Erber, 1988) Also, *Business Wire* last year reported that older users had "made remarkable strides in embracing the new technology," with very little difference, for example, found among age groups in the use of e-mail. This trend towards increasing Internet use by the elderly, predicts the editor of the journal *CyberPsychology & Behavior*, "will continue and accelerate as the baby boom generation matures." (Business Wire 2000) ⁴

New interface designs (Hawthorn 2000) and successful training programs in the use of computers have been documented, along with the indication that as the elderly use computers short-term memory is enhanced. (Lawhon, Ennis & Lawhon, 1996) Educators

³ The headings are "Starting Points", "Associations and organizations", "Government and government-related sites", "Statistical information", "Electronic journals/newsletters", "Discussion lists", and "Other sites of interest"

⁴ Not only will the aging of the baby boom generation contribute to increased computer use by the elderly, but also the development of new technologies. Researchers at Georgia Tech are designing systems which are intended to enable seniors to live independently in their homes for a longer time than they might otherwise. This technology alerts monitors to problems in which the elderly resident finds himself or herself, and contributes to memory augmentation, or cognitive support, to help people in their everyday needs. (*Poptronics* 2000)

have also proposed practical ways to overcome some perceived theoretical limitations to learning computers which it is believed that older adults face. (Jones & Bayen, 1998) ⁵

THEORY

Role theory and social network were used as a basis for the study. Role theory suggests that conduct grows out from certain “roles” or positions a person occupies, as much as from the “players” who act those parts. The implication for the seniors who formed the basis for this study was that different everyday roles performed would lead to some variety in information sources and channels used for those roles. It should be added that role is best understood in a social setting, and Hirsch & Jolly (1984) have suggested that combining role and network is a profitable way to investigate various behaviours. It was thought that a different social setting (independent living in one’s own home) than that of the previous study (an institutionalized setting) might produce differences in information-seeking behaviour.

METHODOLOGY

Fourteen older adults in northeast Ohio were interviewed, seven women and seven men. The interviews made use of an instrument which collected information about the individual's normal activities, then about their information-seeking habits and sources used in those activities. (See Appendix A) The instrument used is essentially identical to that employed in the 1999 study, with some additional questions about computer use and government sources added. Participants were asked to describe their background and current interests in order to identify areas for further questioning. Questions were asked about such activities as involvement in community organizations, travel, their role as a patient seeking medical information, or as an investor seeking financial information, and their role as a hobbyist. They were also invited to discuss their reading habits, their use of libraries, the sources used for needed government information, and their use of computers. Finally, they were encouraged to identify any frustrations they had experienced in seeking information. The interviews were recorded, transcribed, coded and analyzed. *The Ethnograph v. 5.0* software was used to aid in the analysis. The similarity of the instrument with that of the previous study allowed for direct comparisons of findings.

In any study such as this, the term, “older adults” requires definition. Allen & Wilkinson (1990), in a survey of public library users found that 40 per cent of respondents identified 65 as the age at which one becomes a senior; however, answers varied with ages suggested from under 50 to over 80. Landon (1998) preferred 65 but pointed out that the ages of 50 and 55 were also used in some settings. Griebel (1998), in

⁵ Theories which suggest why older adults take longer to learn computers than others include: (1) cognitive slowing (slowing perceptual speed), (2) limited cognitive resources (loss of attentive and working memory), (3) lack of inhibition (tendency to become distracted by non-essential interferences in the environment), and (4) sensory defects (such as diminishing visual acuity).

an article on libraries and "the age wave", called for libraries to differentiate segments of the seniors portion of the population, dividing seniors into four subgroups, as follows: World War II (51-57 year-olds), Depression (58-67 year-olds), World War I and Roaring Twenties (68-82 year-olds), and Pre-World War I (the over-80s). For the purposes of this study, an "older adult" was defined as someone who was retired *or* who had reached the age of 65. Thus, participants were found to be in their 50s (1 person), 60s (5), 70s (4), and 80s (4).

FINDINGS

Demographics

Fourteen interviews were conducted with older adults (seven women and seven men) living in their own house or apartment. Four of the fourteen were widowed at the time of the interview and the others were living with a partner. Ages of the women ranged from 57 to 84, and of the men from 61 to 87, with the overall mean being 72.4 and the overall median 73.

Four of the participants had a high school education, usually with some job-related courses afterwards. Four had attained to a bachelors degree, three to a masters degree, and three to a doctorate (one in dentistry and two PhDs). A summary of this data is found in Table 1. For comparison purposes, wherever possible, data from the previous study (Wicks, 1999) are included in parentheses.

Table 1. Demographics

	Female	Male	Combined
SEX:	7 (8)	7 (7)	14 (15)
AGE:			
Mean	72.7	72.1	74.4 (83.35)
Median	75	71	73 (86)
EDUCATION			
Grade School	-	-	- (4)
Some High School	-	-	- (4)
High School only	-	-	- (1)
High School + courses	2	2	4 (3)
Teacher's college or Bachelors	2	2	4 (3)
Masters	2	1	3 (-)
Doctorate	1	2	3 (-)
MARITAL STATUS:			
Single/Separated/Widowed	2	2	4 (11)
Married/Partner	5	5	10 (4)

Careers

Participants had engaged in a variety of work during their careers. One, a professor, was still working full time (at age 65). All thirteen others had retired. Of the thirteen others four had worked in education as teachers, professors, or administrators; two had worked in librarianship; two in the medical or dental professions; one had been a homemaker; one had been a labourer; and three had held white collar jobs (parole officer, mechanical draughtsman, engineer). Besides the one who worked full time, three held part-time, paying jobs different from the positions they had held during their full-time careers (one as a driver, one as a consultant in educational programming, one as a consultant in higher education).

Thirteen of the participants volunteered. In fact, the level of voluntarism was very high. The time commitment for these volunteer activities ranged from occasionally making arrangements for a monthly bridge club meeting to a regular thirty-hour per week unpaid position as a church administrator. The youngest and oldest participants were among the most active volunteers. The list of activities these people were involved in on this basis is shown in Table 2.

Some of these involvements were casual (for example, attending and sometimes planning a monthly meeting). Some involved formal research (such as preparing a speech or a brief to present to a government body). Some required meetings, letter-writing, and public relations work (raising funds to assist needy citizens, advocating government participation in a community need). Participants in the study were asked what sources they used to prepare for these volunteer, community-based activities, as well as to find out what they needed to know about travel, medical, financial, hobby, or government matters. "Sources" was used broadly to refer to the means by which the data was conveyed (a printed publication, a person), a place (a library, the web), or a medium or format (verbal announcement, e-mail, video, software).

Table 2. Career activities

Careers Represented	Female	Male	Total
Education			
School teacher, professor, principal, dean	3	2	5
Educational consultant (post-retirement)	-	2	2
Librarianship (library technician, librarian)	2	-	2
Medical/Dental (nurse, dentist)	1	1	2
Homemaker	1	-	1
Labourer			
Utility company worker	-	1	1
Driver (post-retirement job)	-	1	1
White collar			
Parole officer, mechanical draughtsman, engineer	-	3	3

Volunteer Activities

Church

- Various committees
- Church administration

Social & recreational

- Bridge Club
- Scandinavian Club
- Hiking club
- Garden club
- Computer Club
- Theatre board

Education and Health:

- Headstart
- Elementary school reading programme
- Oral health education in the schools
- Dental society (provides free dental care for the needy)
- Alumni association (university department)
- Health club (newsletter)

Seniors organizations:

- AARP (American Association for Retired Persons)
- Senior citizens' retirement home
- Mobile meals

Civic & self-help

- Board of a professional services organization (specializing in behavioural counselling)
- League of Women Voters
- Guide at historic mansion in community
- City planning committees

For organizational involvements, most people commonly relied on verbal information shared in meetings, usually through announcements. Next were interpersonal contacts such as telephone calls or other one-to-one communication in person or at meetings. Internal publications like newsletters and bulletins were similarly relied upon. E-mail and printed publications of the organization they were part of were also mentioned by more than one person, along with a few other less-used sources. Table 3 summarizes these findings.

Table 3. Sources for Community-based Volunteer Activities

	Number Who Mentioned Source
Group announcements	9
Interpersonal, one-to-one	8
Internal publications	8
E-mail	3
Printed publications of the association	2
Magazines, journals	1
Books	1
Associations mailings	1
A library	1

For travel information the people interviewed stated a preference for printed publications of associations such as the American Automobile Association and Elderhostel International, followed by government publications. For medical information, participants relied on their physician or pharmacist, then on family members and friends, and lastly, books and magazines. When wanting financial information, the older adults surveyed strongly relied on professional financial counsellors, then on family members. To pursue their hobbies, these older adults relied on books, magazines, and their own experience with the activity. Government information was sought from printed government publications, interpersonal contacts (in this case, telephone calls or visits to government offices), and the World Wide Web. The web was mentioned as a source in five of the information areas covered, and mostly for government, travel and medical information. As with community organizational involvements, verbal information sources were preferred when it came to acquiring medical and financial information for decision making.

Overall, the most popular sources were interpersonal, professionals, family members and friends, magazines and journals, books, the web, printed association publications, and newspapers. Table 4 reports these results. The "Total" includes sources used for community-based organizational involvements (reported above in Table 3).

In this study, participants were asked about their use of computers for everyday information searching. Twelve people owned a computer. Of these, three chose not to use the computer in the home. One owner did not have an Internet connection, but occasionally made use of one at the public library. This person had used a computer at work, as had one non-owner. Both of these individuals said they had not kept up to newer programmes. The three non-owners/no Internet persons had access to computers through family members and one specifically said he sometimes asked a family member to find information on the web or to send or receive e-mail on his behalf. For the three non-users who had a computer at home, two relied on a spouse or other family member to use it for them, and one planned to disconnect her Internet connection in the near future. This woman had tried to use the computer at the library but without success, and was disappointed with library staff who failed to help her learn how to navigate on the monitor. Two of the three non-owners/no Internet people had high school degrees only

and were in their 80s. The three owners but non-users had high school, masters, and doctoral degrees, and were in their 70s and 80s.

Table 4. Sources Used

Source	Travel	Medical	Financial	Hobby	Gov't	Total*
Interpersonal	2			1	4	15
Professional	2		11		1	14
Family/friend	2	4	6	1		13
Magazines/journals	2	4	3	3		13
Books		4	1	6	1	13
World Wide Web	3	3	2		3	12
Printed assn. pub.	8	1				11
Newspaper	1	2	4	2	2	11
Gov't publication	4		1		5	10
Library	2	3	1	2	2	10
Internal pub.			1			9
Group announcement						9
Physician/pharmacist		9				10
E-mail					1	4
Personal experience			1	3		4
Commercial brochure	1			2		3
Training session			2	1		3
Association mailing	1					1
Videos	1					1
Bookstore	1					1
Software			1			1

* NOTE: "Total" includes community-based organizational activities (see Table 3 for details).

Among the eight owner-users, one had a high school diploma, two had bachelor degrees, three had masters, and two had doctorates. Five of the owner-users were male and three female. Four of the non-users and non-owners/no Internet persons were female and two male. Six of the eight owner-users were in their 50s or 60s. All of the owner-users had Internet access. Three of the participants had had some formal training such as a course offered at a local high school, but two of these people felt the instruction was of little value. "I learned what I knew," said one lady who uses her computer a lot. Table 5 summarizes participant computer use.

Table 5. Computer Use

	Sex	Education				Age Range		
		HS	Bach	Mast	Doct	50s/60s	70s	80s
Doesn't own/No I	2F, 1M	2	1	-	-	-	1	2
Owens/doesn't use	2F, 1M	-	1	1	1	-	2	1
Owens and uses	3F, 5M	1	3	3	2	6	1	1

NOTE: "No I" = No Internet connection at home

Use of the Media

Thirteen of the participants read at least one local, daily newspaper, and five read two or more dailies. Four people regularly read national newspapers such as the *New York Times*, *USA Today*, or the *Christian Science Monitor*. Only three read a magazine which was specifically designed for older adults. Approximately thirty magazines or journals were mentioned as read. The list included magazines in such fields as religion, travel and camping, nature, science, computers, news, decorating, and general readership (*New Yorker*, *Atlantic Monthly*).

On the question of radio use, people listened to National Public Radio (NPR) stations for news (6 people), plus some syndicated talk shows (3 people), and a local Christian station (2 people). None claimed to listen to the radio extensively.

For television news and public affairs programming, participants mentioned watching a local, supertime newscast (3 people), the "Jim Lehrer Report" on PBS (4 people), and select other news shows. Cable news channels were mentioned by five people.

Table 6. Use of the Media

Daily paper	13
Radio news, talk shows	7
Local TV News	3
Cable news networks	5

Library Use

Nine of the participants stated that they use the public library, at least occasionally. Four use an academic library, three a church library, and two other special libraries or archives. Four of these library users sometimes ask a reference librarian for assistance, three use in-house materials (such as newspapers and magazines or the reference collection), three borrow mainly videos, and two attend programmes the library offers (for example, travel programmes). For the three respondents who do not use the library themselves, one relies on family members to get what he needs, one uses the web, and two referred to the adequacy of their personal libraries. Library use statistics are found in Table 7.

Two, one of whom was a former librarian, specifically mentioned their disappointment in the level of service their local public libraries offered. One spoke of being in the midst of preparing a talk on the electoral college for the League of Women's Voters. Her first trip to the library had yielded one book and a couple of articles which

she had found using the *Reader's Guide to Periodical Literature*. On a second trip the librarian had pointed to the computer when she asked for help, then reluctantly helped her get started before abandoning her in a state of confusion as to how to navigate the site. A third trip to another library was more successful, and a fourth trip to still another was planned. This user's problems were with her inability to use the computers and with the lack of assistance available. However, the views of these two participants were balanced by three others who spoke well of the help available at the library. One man who used an academic library stated that if he could not find material there was usually someone there who could. Another said, "If I'm really trapped for something, I'll go to the Akron library," and told a story of how he had called the public library recently and been given an answer to a question on the origin of the phrase "Bob's your uncle". A lady praised her public library staff, saying, "The library gals are nice and very helpful."

Table 7. Library Use

	Public	Academic	Church	Other Special/Archives
No. who use	9	4	3	2
Materials/Services Mentioned (other than books):				
Reference service	4	Programs		2
In-house materials	3	Audio tapes		1
Videos	3			

FRUSTRATIONS

Lastly, interview subjects were asked to identify any frustrations they have when it comes to gathering information for everyday life tasks. Eight participants either stated they could think of no frustrations or that they could find pretty much all they needed. A former professor-administrator expressed his state of settledness about the information he could obtain:

If you can't find it, you can't find it. You have a certain time frame you have to have something in, and if you don't have it, you just can't use it...I don't know that I've been frustrated...I'm usually able to get a sufficient amount of information to do what I want to do. And because almost nothing that I do, do I need an infinite amount of information. I need some...and usually can find that.

The former dentist said he was "very pleased" with what he could get and had no concerns except perhaps for some loss of privacy and the need for the government to regulate access to medical and financial records. A current professor said, "If I really want to find something, I think I can." Nonetheless she was concerned about sorting the volume of information she receives, especially that which comes to her via e-mail.

The difficulties people pointed out fell into one of six types, as listed in Table 8.

Table 8. Frustrations Experienced

	# Who Mentioned This Frustration
Incomplete/Inadequate	3
Dealing with the Volume of Information	2
Technology Problems	2
Evaluating the Information	2
Poor Quality of Library Service	2
Finding the Right Search Terms	1

Three people expressed concern about incomplete or inadequate information. One man said he could read volumes of manuals and not find what he needed. This, of course, could be a problem of inadequate content, or it could have been a problem related to searching or indexing or choosing the wrong source in the first place. Another person mentioned the "terse" nature of the information he was offered at government offices. The engineer reported that the daily newspaper was getting thinner and was offering "less and less information".

There were two who had the opposite problem - handling the volume of information. For the former librarian it was the World Wide Web. "When is it going to get organized?!" she exclaimed. And, as mentioned above, for the current professor the problem was in sorting the volume of information she faced.

Two individuals also mentioned that technology interfered with their ability to find out what they needed for everyday life activities. For the retired teacher-principal, his frustration was dealing with incompatible formats (for example, in e-mail attachments). For another former teacher, now active in many civic groups, it was computers in general. This woman said she had never been mechanically-inclined. In fact, she said that as a child she was taught not to touch mechanical devices, whereas today young people are told to go ahead and play with technology. "There's a big gap," she concluded between the way her generation and today's approaches technology.

For two others, the nurse and the former draughtsman, the challenge came in evaluating the quality of the information they faced. The nurse said she was looking for truth in politics and could not find it. She wondered what she could believe. The mechanical draughtsman asked,

Is it something real significant or is it just background? I think that's probably the biggest thing, especially in books. I think books are sometimes hard to judge. How do I weigh the value of this information? I think that'd be true on the Internet, too.

The other two frustrations identified, both discussed above, were poor library service and difficulty in finding the most effective search terms.

CONCLUSIONS

Several observations can be made about independent older adults and their information seeking. It is interesting and instructive to compare some of the findings of this study with the previous one on older adults who live in an institutional setting.

The age level of those studied in the most recent project was lower than in the first study (average 72.4 years compared to 83.6). Education levels were higher with ten out of fourteen being university educated compared to only three out of fifteen in the first study. The younger age and higher education attainment of the second group no doubt contributed to their much greater involvement with computers (twelve owned computers compared to two in the first study). The ten years' difference in age meant that most, if not all, of the second group would have been exposed to computers in their workplaces while members of the first group may have missed that opportunity. Most of the second group had been white collar workers while half of the first group were either homemakers or labourers. Age, education, and job-type differences may contribute to a digital divide. It is important when discussing older adults and the role of computers and the Internet in their information worlds to distinguish between different stages of older age. Also, it is likely that in the next decade, as the young-old of today become the old-old and oldest-old of tomorrow - and the baby boomers of today become the young-old - that this divide will become less-pronounced than it is now.

With respect to computers, the most popular uses of this technology among participants in the current study were wordprocessing and e-mail. Some noticeable frustrations remain which affect use of electronic resources. While governments move ever more significantly into Web delivery of information, the older adults examined in this study still strongly prefer in-person contact and print resources over electronic delivery.

Interpersonal sources together with internally-produced print materials were relied on more than other types of sources for the information needed for participation in community clubs and organizations. Interpersonal sources by themselves were the preferred way to find answers to medical and financial questions, while printed resources were more commonly used for hobby-related information seeking. These findings were not unlike what was discovered when institutionally-housed older adults were examined in the earlier study. Older adults of all ages indicated interest in a variety of hobbies, but the subjects of the recent research project also engaged in activities (mostly volunteer) which closely resembled traditional jobs.

Participants in the second study were heavily inclined to use newspapers to keep current (thirteen read at least one daily paper compared to nine in the previous study). The second group were less reliant on local television newscasts (three mentioned regularly watching the supertime news on a local channel compared to eight in study number one). Both groups read magazines, but the younger-old surveyed in the current study used a wider variety than the older-old of the earlier one. Both groups had only a few members who read a publication specifically targeted at the senior audience.

In the 1998-99 study social network theory helped explain differences between subjects interviewed at the two residences (one with a low level of care and greater independence than the other). In the present study all participants lived independently and most shared a high level of education and white collar employment. Differences in social context were less-pronounced than for those in the first study making social network theory less useful as an analytical framework when trying to understand differences among subjects. However, employment of this theory is still useful for comparing the information seeking of older adults who live independently and those who live in a seniors residence. Certainly, sources based in-house were more commonly relied upon by persons involved in study number one than in the second study where people were free to go farther afield to satisfy information demands.

Role theory, as discovered in the 1998-99 research, is of limited value when examining information seeking for non-work activities (such as medical and financial information seeking). Some source preferences, though, still carry a noticeable connection to the role or task being performed. Interpersonal and verbal sources are preferred for medical and financial information needs, while print materials are preferred for travel and hobby information needs. Both print and verbal sources were used for community organizational involvements and for government information needs.

FURTHER STUDY

The majority of older adults questioned in this study used libraries in one way or another. The findings suggest a need for libraries to examine the way their collections, services and programmes affect this age group. Opportunities exist to study existing outreach efforts to senior populations in order to observe best practices and areas of need which libraries can address.

Organizations which communicate with seniors can also be the focus of future research. These include government departments, church and community groups, not-for-profit associations and web services devoted to the older population, and publishers and other commercial companies who market information products to older adults.

It would be beneficial to conduct a large, nationwide survey of older adults to explore information seeking behaviour, sources used, observed shortfalls in information delivery, preferred dissemination methods, and the place of digital information delivery in the older person's world.

The data from qualitative studies used for this paper show that it is essential for society to face the challenge of information exchange with this age group. The current study has addressed a national reality, is timely in its attention to this growing segment of society, and hopefully contributes important and useful data and analysis which will help both seniors and the organizations which serve them communicate more effectively one with the other.

Most older adults interviewed for this research project were busy seekers of information in a variety of areas that related to their everyday life activities. While experiencing some frustrations, for the most part these older adults were coping successfully with the information worlds around them. As one woman concluded, "I'm not overwhelmed - I just have to go with the flow!"

APPENDIX A

Interview Instrument

1. Demographics: Please tell me about your background [education, work experience, interests].
2. Could you describe a typical week for you? In the past three months have you needed to find out something? What? [aim was to discover their activities so as to identify roles]
3. [Based on the roles identified, participants were asked questions such as the following.]
 - a. Think of the most recent occasion when you participated in a club/church event. Describe the event. How did you find out about this event? What information did you need to participate?
 - b. Think of the last trip you took or vacation you had. Where did you go? How did you plan your trip? What sources of information did you need to prepare for this trip?
 - c. Think of the last time you visited the doctor or hospital. To whom do you go for medical information (about health concerns, drugs, etc.)?
 - d. Think of the last time you did some banking or financial planning? What sources did you use to make a decision in this area (e.g., about an investment)?
 - e. Do you have any hobbies (e.g., reading, crafts, gardening, carpentry, movies)? How do you gather the information you need to remain involved in your hobby?
4. Do you have a computer? If not, do you access one outside of your home? (E.g., at a friend's place or relative's place; at a library; at an office)
 - a. Do you have access to the Internet? Do you use e-mail? Do you use the World Wide Web? If so, for what purposes?
 - b. With regard to the WWW what features (content, arrangement, font size, colour, graphics, etc.) do you like to see (or not see) on a web site?
 - c. What topics, content or presentation styles would you like to see on the web but cannot currently find?
 - d. Have you had formal training in the use of a computer? E-mail? The web? Would you like some training? What would you like to learn? Where would be a good place to learn?

5. How do you obtain government information which you need for your day-to-day life? (I.e., information about government programmes [including Social Security and tax information] that concern you; information about citizenship issues [such as voting or passports])
6. Do you regularly use any of the following information sources? If so, how often?
- a. newspaper(s), magazines (including ones aimed at older adults)
 - b. radio, TV (especially educational programmes, news and public affairs)
 - c. libraries (public, academic, special, other; for what services?)
6. Can you identify a frustration you have when it comes to gathering information you need?

REFERENCES

- Anslet, Jane and Joan T. Erber. 1988. Computer Interaction: Effect on Attitudes and Performance in Older Adults. *Educational Gerontology*, 14, 2, 107-119.
- Canadian Broadcasting Corporation (CBC). 2001. Seniors will soon outnumber young people in Canada. CBC News Online. Webposting, March 13, 2001. <http://cbc.ca/cgi-bin/temp1...w.cgi?/news/2001/03/13/population010313>.
- Cassner, Mary. 2001. Gerontology and the aging population: Online information for professionals and the public. *College & Research Libraries News*, 62, 3 (March), 299-303.
- Hawthorne, D. 2000. Possible implications of aging for interface designers. *Interacting with Computers*, 12, 5 (April), 507-528.
- Home - Phone for Help! (Home Computers for the Aged). 2000. *Poptronics*, 1, 5 (May), 21.
- Internet Used by Growing Number of Senior citizens Reports the journal, CyberPsychology & Behavior. 2000. *Business Wire*. Jan. 12. Online edition.
- Lawhon, Tommie, Demetria Ennis, and David C. Lawhon. 1996. Senior Adults and Computers in the 1990s. *Educational Gerontology*, 22, 2, 193-201.
- Oestlund, B. 1999. Images, Users, Practices: Senior Citizens Entering the IT-Society. *Swedish Transport & Communications Research Board Report #KFB-1999-9*. Stockholm: Swedish National Board for Industrial & Technical Development.
- Pettigrew, Karen E. 1999. Waiting for chiropody: Contextual results from an ethnographic study of the information behaviour among attendees at community clinics. *Information Processing and Management*, 35, 6 (November), 801-817.
- Wicks, Don A. 1999(a). The Information-Seeking Behavior of Pastoral Clergy: A Study of Their Work Worlds and Work Roles. *Library & Information Science Research*. 21, 2, 205-226.
- Wicks, Don A. 1999(b). Micro-Roles and the Information-Seeking Behaviour of Seniors. In James Turner, ed. *Where has it been, where is it going?* Proceedings of the 27th Annual Conference of the Canadian Association for Information Science, Université de Sherbrooke, Sherbrooke. Quebec, June 9-11, 1999
- Williamson, K. 1999. The role of research in professional practice: With reference to the assessment of the information and library needs of older people. *Australasian Public Libraries and Information Services*, 12 (December), 145-153.