

Information Needs of Israelis on Citizen-related Information: Results of a Survey

Judit Bar-Ilan, Shifra Baruchson-Arbib, Sheizaf Rafaeli, Gilad Ravid, and Eti Yaari

Dr. Judit Bar-Ilan, Professor and Head of Department, Department of Information Science, Bar-Ilan University, Ramat Gan, Israel
Email: barilaj@mail.biu.ac.il

Dr. Shifra Baruchson-Arbib, Professor, Department of Information Science, Bar-Ilan University, Ramat Gan, Israel
Email: baruchsl@mail.biu.ac.il

Dr. Sheizaf Rafaeli, Professor and Head of the Graduate School of Management, and Director, Sagy Center for Internet Research, University of Haifa, Haifa, Israel
Email: sheizaf@rafaeli.net

Dr. Gilad Ravid, Senior Lecturer, Department of Industrial Engineering and Management, Ben-Gurion University of the Negev, Beer Sheva, Israel
Email: rgilad@bgu.ac.il

Dr. Eti Yaari, Doctoral Fellow, Department of Information Science, Bar-Ilan University, Ramat Gan, Israel
Email: yaariet@mail.biu.ac.il

Abstract

In this paper we report the results of an offline survey of the information needs of members of the Israeli public about public and governmental services and entitlements. This survey was conducted as part of a research project on public use of online information: usage analysis of the Israeli Citizens Advice Bureau (SHIL) on the Web. The questionnaire was distributed in public places to a random selection of 437 Israeli citizens aged 18 and above, in the second half of 2008. Research assistants handed out the questionnaires and the participants filled in the surveys on the spot. If necessary the assistants provided help in the process. The questionnaire included questions on the information needs and major sources of information for fulfilling these needs. The respondents were mainly concerned about health,

transportation and education related issues, but work relations were also of primary concern. The preferred sources of information were family and friends, followed by the Internet. There was very low awareness to the Israeli Citizen Advice Bureau – SHIL, that maintains physical offices throughout the country, telephone hotlines and an extensive Web site, and its aim is to provide citizen-related information. An interesting question that can be addressed in future research is the fact that while the SHIL service is relatively unpopular in Israel, respective Citizen Advice Bureaux (CABx) have much higher visibility and popularity in other countries. What are the dimensions of similarity and difference in the service and the populations served that might account for this difference?

Introduction

Citizens are often puzzled with choices of where to turn to when they have problems related to public and government services. In several countries CABx or Information and Referral services have been set up that serve as intermediaries between the citizens and the available services (e.g. Marcella and Baxter 1999a; Saxton, Naumer and Fisher 2007). In Israel, the Citizen Advice Bureau is called SHIL. SHIL was established in 1957 and has more than 50 offices in Israel, a telephone hot-line, an Internet site (<http://shil.info>) and almost 1,000 volunteers (Tractinsky, Rafaeli and Pliskin 1998; Ministry of Social Affairs and Social Services 2009). SHIL is operated by the Israeli Ministry of Social Affairs and Social Services in collaboration with municipal (local) governments.

SHIL operates with very low budgets, and almost no marketing or advertising support. Ravid *et al.* (2007) found that the majority of the current users, who do reach the SHIL website, do so through submitting specific queries to popular search engines, and thus it seems that they are not fully aware of the source that provides answers to their queries. Thus in order to better understand the information needs of Israeli citizens in the area of public and gov-

ernmental services, we conducted a survey of citizens that are not necessarily aware of SHIL's online or offline services.

Literature review

Theoretical foundations

Information seeking studies tend to focus on well-defined, constrained and controllable work and study environments rather than on everyday life information seeking (ELIS). Nevertheless, we were able to locate a considerable number of studies related to ELIS. Savolainen (1995, 266–267) defines “everyday life information seeking” (ELIS) as “the acquisition of various informational (both cognitive and expressive) elements which people employ to orient themselves in daily life and solve problems not directly associated with the performance of occupational tasks.”

The ELIS model elaborates “the role of social and cultural factors that affect people's way of preferring and using information sources in everyday settings” (Savolainen 2005, 143). This model combines social and psychological factors. The context within which ELIS takes place is called “the way of life” defined as “the order of things” and operationalized by the individual's structure of time budget, models of consumption of goods and services and the nature of hobbies. The second central concept “mastery of life” or “keeping things in order” is associated with pragmatic problem solving. The ELIS model of problem solving is comprised of three stages: evaluation of the problem, selection of information sources and channels and seeking of orienting and practical information.

Sonnenwald (1999) introduced the notion of “information horizon” that constrains and enables the information seeking behaviour. An individual's information horizon consists of all information sources, including people, that the individual consults to solve his/her information problem. A graphical representation allows analyzing what sources are near and far from the individual, and what sources are missing entirely. Savolainen and Kari (2004) conducted eighteen interviews with Internet users, concluding that human sources such as friends and colleagues were the preferred source, followed by print media, while the Internet was ranked only third, followed by broadcast media, organization sources

and other sources. Thus the “information horizon” model allows for a deeper understanding of the “selection of information sources” step in the ELIS model.

McKenzie's work (2003) relates to the information-seeking step in the ELIS model. Four information seeking modes for everyday life problems were identified by McKenzie: active seeking, active scanning, non-directed monitoring and by proxy. Active scanning means identifying an information source or browsing and non-directed monitoring covers serendipitous encounters with unexpected information.

A large ongoing project on ELIS behaviour is IBEC (Information Behavior in Everyday Contexts) (IBEC Project n.d.). IBEC carries out studies, mostly in North America, examining how people seek and use different information sources as part of their everyday living. Two basic theoretical concepts have emerged from the IBEC studies: the key distinction is between “information grounds” (Pettigrew 1999) and “information communities” (Fisher, Durrance and Unruh 2003). An information ground is an environment, where people come together for some reason and the social atmosphere is such that it encourages information exchange (IBEC n.d.) While information grounds come about spontaneously, information communities are purposefully formed around people's need to get and use information (Fisher, Durrance and Unruh, 2003).

Johnson *et al.* (2006) discussed two concepts: the “fields” and “pathways” for information behaviour in context. They view the “information field” as the static context that is closely related to information horizons, information grounds and communities. Information fields contain resources, carriers and constraints and are relevant to the source selection step in the ELIS model. Information pathways are the route individuals follow in their attempts to solve information problems. The information field reflects individuals' preferences, while pathways are the actual chain of actions. Thus “information pathways” show in great detail both the source selection and the information seeking steps of the ELIS model. Unlike the results reported by Savolainen and Kari (2004), Johnson *et al.* (2006) found that respondents seeking health information were most likely to turn first to the Internet, then to the physician, followed by the library and family members.

Information on public and government services and entitlements can be considered an instance of

everyday life information seeking. In the current study, our aim was to discover the preferred sources, fields and horizons and the chains of actions individuals pursue in order to solve their information problems. In addition we were interested in the specific topics with which respondents were concerned. Our literature review covers a number of previous studies that aimed to answer similar questions.

Results of citizen surveys

In a large survey conducted in the UK in 1997 as part of the Citizenship Information research project, respondents reported on their preferred sources of information (more than one option was allowed) (Marcella and Baxter 1999b). The sources that were chosen by more than 50% of the respondents were in decreasing order: public libraries, family and friends, offices of government departments and agencies, the Post Offices and CABx. The survey participants were also asked about the preferred methods of obtaining information. The most popular methods (again in decreasing order) were: face-to-face, reading a book, looking through the collection without help from the staff, reading a newspaper and talking to someone over the phone. Rather interestingly, as early as 1997, 40.6% of the respondents below the age of 19 chose computers as the preferred method of obtaining information. In the second stage of the project, doorstep interviews were conducted with 898 members of the UK public (Marcella and Baxter 2000). The participants were asked whether or not they encountered problems related employment, education, welfare and housing. At least 84% gave a positive answer in each of the areas. Almost 60% thought that computers have potential for providing government information. The most preferred sources for government information, in decreasing order were: public libraries, post offices, citizen advice bureaux.

In Ireland the "information and referral" (CABx equivalent) services are called Citizen Information Services (CIS). A detailed report from 2008 (Citizens Information Board 2008) shows that 71% of the CIS contacts were face-to-face and 29% through telephone, although sending in queries by email was also possible, but this option was almost never utilized. Almost all of the clients (86%) made queries on their own behalf. Client queries were categorized into thirteen categories. About 39% of the queries

were related to social welfare, followed by employment rights (9%), health services (7%), housing (7%) and health services executive payments (7%). In the largest category, social welfare, invalidity/disability payments proved to be most popular. In employment rights, the largest portion of the queries related to holiday/leave entitlement. In order to answer the citizens' queries, the most frequently used source was the service website, (<http://www.citizensinformation.ie>). The main reason for client awareness for the service was "word of mouth", and about a quarter of the clients used the service before. More than 90% of the respondents stated that the CIS service was their first point of contact.

Chivhanga (2005) studied the information needs of immigrants to Finland, with an emphasis on needs related to citizen information. The major information sources identified by the respondents were websites, friends and relatives and relevant authorities. As the respondents were immigrants, it is not be surprising that most of the information related problems were due to language difficulties.

In a "listening survey" of rural citizens of Sri Lanka (Seneviaratne, Gunawardene and Siddhisena 2006) the most pressing information needs were recorded in decreasing order as: government, political, local government, health and nutrition, financial, infrastructure related, industrial, employment/labour, weather and natural disaster, self-employment/training, educational, agricultural, legal and recreational/religious information. It was also found that rural citizens encounter geographic, structural and personal barriers when trying to access information.

Saxton *et al.* (2007) studied the 2-1-1 telephone information and referral service in Washington. The data were derived from 30 calls to citizens who had previously used the service. Their problems were categorized in decreasing order of frequency: as utility, housing, health services, employment, food and other.

Of specific relevance are studies conducted in Israel of local populations. In 2002, an extensive telephone survey of the citizens of the city of Herzliya was conducted (Shemesh, Baruchson-Arbib and Shoham 2003; Baruchson-Arbib *et al.* 2006) to understand the community information needs of the citizens. Fourteen problem areas were defined and each respondent was allowed multiple choices. The most frequently chosen problem areas were (in decreasing order): neighbourhood matters, education,

transportation, matters related to government/ministry, and leisure and entertainment. The preferred information sources were (again in decreasing order): the municipality, newspaper, the Internet, government agencies and personal connections. In terms of information channels, the most preferred channel was the telephone, followed by face-to-face meetings and printed materials. Rather interestingly the Internet was least preferred, because it was not ranked by all the participants. However among those who did include the Internet in their rankings, for 64% it was the preferred information source.

In 2006, 300 residents of the city of Rishon LeZion in Israel (Leshem 2006) participated in a telephone survey on their citizen information needs and information seeking patterns. The results show, that when in need for municipal information, most respondents used the municipality's hotline. Only about 7% consulted the municipality's Web site. The major municipal topics of interest, in decreasing frequency were: welfare, education, culture, registering businesses, health and environmental issues and engineering. The preferred modes of receiving the information were over the phone (63.5%), followed by face-to-face consultation (47.4%), email (7.4%), regular mail (5.1%) and fax (4.1%). Most of the surveyed residents (92.9%) were unaware of the existence of face-to-face SHIL services in the city.

The current study intended to explore further the specific information problems and the media of choice in solving the problems by Israeli citizens at the beginning of the twenty-first century. The previous Israeli studies were confined to single cities and put an emphasis on citizen information provided by the municipalities. Our study covers social and government related information in general.

In a recently released report (Smith 2010) the PEW Internet and American Life Project reports on the usage of the Internet by American citizens for receiving information and interacting with government services. The results show that the majority of the American citizens looked for information or completed a transaction on a government website during 2009. Smith (2010) found that high-income and well-educated Internet users are more likely to use online government services. A very large percentage of them reach the government websites through the use of search engines, and the majority of the users reported that their interaction with the government website was successful. Even though

the Internet is utilized heavily, offline methods, like phone calls or sending a letter are not abandoned, and often a mixture of online and offline methods are used. Among the population as a whole, telephone contact is still most preferred; however, Internet users prefer online contact over offline contact.

Research setup

We conducted an exploratory survey of the information needs of the Israeli public. The exploration was guided by research questions, not hypotheses. As pointed out before previous studies in Israel were mostly concerned municipal information. Descriptive statistics are reported to gain a better understanding of the needs and the problem solving methods employed when the citizens come across a problem related to public and governmental services. Where available, the results were compared with results of previous surveys in Israel and around the world. The survey sought to answer the following major questions:

- What are the individual's information needs in the area of public and governmental services and entitlements?
- What sources and/or information channels do citizens consult in order to solve their problems?

A questionnaire was designed to address these questions and to gather demographic and background data on the participants. The questionnaire was comprised of 16 questions. After a small pilot study with six users, a few questions were rephrased to ensure that the potential participants understand all the phrasings.

The questionnaire was distributed in public places all over the country to a random selection of 437 Israeli citizens aged 18 and above, in the second half of 2008. Research assistants handed out the questionnaires and the participants filled in the surveys on the spot. If necessary the assistants provided help in the process. As a small reward and incentive for taking part in the survey, a small amount of money was donated to a volunteer organization, chosen by the participant from a predefined list.

The questionnaires were encoded using Microsoft Excel. The data were analyzed using SPSS and Excel.

Table 1: Distribution of the current occupation of the respondents in absolute numbers and percentages

Occupation	# respondents	% respondents
Salaried employee	203	47.2
Student	66	15.3
Self-employed	50	11.6
Retired	38	8.8
Unemployed	32	5.8
Homemaker	13	3.0
Other	35	8.3

Results and discussion

Demographic information

The number of respondents to the survey was 437. The majority (57.2%) were females; 50.8% below the age of 40. The distribution of the current occupation of the respondents appears in Table 1. In terms of education, 200 (45.8%) had a university/college degree, another 74 (16.9%) received some post high school education, 110 (25.2%) were high school graduates, 30 (6.9%) had completed only elementary school education and the rest of the participants (23; 5.2%) did not provide information on their education. The high percentage of university/college graduates indicates that the sample was somewhat biased towards more educated citizens. Israel is a country of immigrants and minorities, and thus it is not surprising that even though 85.1% (372) of the respondents reported that their mother-tongue was Hebrew, 6.6% (29) reported Russian, 2.3% (10) Arabic, 1.8% (8) English as their mother tongue. Eighteen respondents reported other languages or failed to answer the question. Statistical data about Israel in 2008 can be found in (Central Bureau of Statistics 2009). According to the Central Bureau of Statistics only 20.4% of the population aged 15 or above has completed more than 16 years of education, and 43.0% completed 13 years or more of education. The Arab population in Israel as of 2008 was 20.2%, thus our sample of participants is somewhat skewed.

Internet usage is high; only 71 respondents (16.2%) do not use the Internet at all. Among the 366 Internet users, 48.4% reported that they use it daily, and another 19.4% reported that they use it a number of times a week. According to (Central Bu-

reau of Statistics 2010), in 2008, 59.4% of the general population aged 20 or above used the Internet, and the usage was 85.3% among those with academic degrees,

The respondents were also asked to assess their Internet expertise. Here 43.2% of the users responded that their expertise was high, and only 17.3% chose to answer that their expertise was low. Most Internet users (81.1%) have been using it for a number of years already. They were asked to assess the importance of different Internet services and applications. They were asked to rate each service as very important, important, of medium importance, low importance and not important at all. The list of these services and applications in decreasing order of importance, taking into account the percentage of users who rated the specific service as "very important" and "important" out of the participants who answered the specific questions (the number of responses varied between 340 and 318) is as follows: searching for information (73.8%), email (68.3%), reading news online (54.0%), financial activities (40.3%), instant messaging/Skype (28.6%), downloading content (music, videos, games etc.) (28.3%), listening to music (24.0%), watching videos (23.5%), purchasing goods and services on the Internet (14.1%), social networking (12.7%), participating in forums/chats or writing comments (10.5%), reading blogs/forums (10.5%), writing blogs (5.8%). These patterns are comparable to other Internet usage surveys by Israelis (e.g. Institute for Internet Studies 2006; Shalev 2009).

What are the major citizen-related problems on which the respondents seek help?

This issue was addressed by a number of questions. In one question a number of problem areas were listed. The areas were listed were the top-level topics on shil.info, the Website of SHIL, the Israeli Citizen Advice Bureau. The current top-level topics are almost identical. The respondents were asked to mark all the subjects for which they needed information in the six months prior to answering the questionnaire. The aggregated answers appear in Table 2.

The table clearly shows that the major concerns of the citizens are related to health, transportation and education. Rural citizens from Sri Lanka were also concerned with issues related to health, but this was not the most pressing issue for them (Senevia-

Table 2: Major citizen/social issues for which the respondents needed help in the six months prior to answering the questionnaire

Major topic	# respondents	% respondents
Health	204	46.7
Transportation	202	46.2
Education	161	36.8
Consumer issues	135	30.9
Social security	128	29.3
Taxes and fees	123	28.1
Economics	110	25.2
Work relations	101	23.1
Law and legislation	81	18.5
Welfare	81	18.5
Housing	77	17.6
Army and defence	69	15.8
Environmental protection	60	13.7
Family affairs	53	12.1
Registrars	50	11.4
Senior citizens	34	7.8
Immigration and absorption	16	3.7
Other	13	3.0

Table 3: Categorization of specific issues that the respondents were concerned about lately

Major topic	# times mentioned	% out of total (N=264)
Work relations	38	14.4
Health	26	9.8
Housing	23	8.7
Social security	22	8.3
Education	20	7.6
Transportation	18	6.8
Economics	17	6.4
Taxes and fees	16	6.1
Consumer issues	9	3.4
Army and defence	9	3.4
Environmental protection	8	3.0
Family affairs	8	3.0
Law and legislation	6	2.3
Senior citizens	6	2.3
Welfare	1	0.4
Registrars	1	0.4
Immigration and absorption	1	0.4
Other	35	13.3

ratne, Gunawardene, and Siddhisena 2006). In Ireland, (Citizens Information Board 2008) and in the 2-1-1 study (Saxton *et al.* 2007) health was the third most frequent topic. The citizens of the Israeli city Herzliya were also concerned about transportation and education. Health was ranked only 7th on their list (Baruchson-Arbib *et al.* 2006).

In an open-ended question the participants were asked to describe a social/citizen issue with which they were recently concerned. We received answers to this question from 233 survey participants. The answers were coded, using the SHIL top-level categories and the additional category "other." The data was coded by two coders independently, and there was full agreement between the coders on 92% of the categorizations. Some users described more than one topic. Altogether 264 issues were mentioned, and the major categories appear in Table 3.

It is interesting to note that welfare was almost never mentioned in the open-ended answers, even though a considerable number of respondents reported concerns in this area (see Table 2). On the other hand, issues related to work relations were mentioned much more often in the open-ended question. Note that for the open-ended question almost all of the respondents described only one issue, whereas the data for Table 2 were drawn from a question where multiple answers were allowed. This might explain the differences in the distributions displayed in Tables 2 and 3. An additional explanation could be that perhaps the respondents felt embarrassed to mention welfare related problems specifically, and thus it is possible that among those who did not respond to this question (46.7%) the percentage of people concerned with welfare issues was much larger.

Table 4: Information sources favoured by the participants in percentages

Source	Not at all	Low prob.	Medium prob.	High prob.	Always	No answer
Family/friends	3.9	4.6	22.7	32.5	35.7	0.6
Experts	8.2	17.4	32.0	32.7	8.0	1.7
Government office	25.2	28.6	29.3	14.0	2.3	0.6
Pamphlets/books	23.3	26.1	28.6	16.2	3.0	2.8
Internet	26.3	13.5	17.2	22.9	18.3	1.8
TV/Radio	43.0	23.1	22.2	7.3	2.1	2.3
Printed press	39.8	25.9	23.8	6.6	1.9	2.0
Public library	51.5	25.6	15.6	3.7	2.1	1.5

We also categorized the top 25 queries based on log analysis of the SHIL site (Ravid *et al.* 2007) in the same manner. The results show that four of the most popular queries were in the housing and work relations categories, three each in army and defence and transportation, two in social security, and one each in health, consumer issues, law and legislation and registrars. Finally four queries were categorized as “other.” Of course specific queries are of a different granularity.

What information sources/channels are consulted in order to solve citizen-related problems?

Several questions in the survey addressed the selection of sources and channels. The first of these questions listed eight different options as sources of answers. For each of these, participants were requested to report whether they will not consider it at all, at a low, medium or high probability, or whether they will definitely turn to this source. The distribution of the answers appears in Table 4.

It is well-known that friends and family are a major and preferred information source (e.g. for youngsters (Agosto and Hughes-Hassell 2005); for adults (Julien and Michels 2000) and for elderly people (Williamson 1998). Table 4 supports previous findings that friends and family are the most frequently consulted information sources (68.2% of the respondents consult members of family and friends at least with high probability).

The second most frequently consulted source was the Internet (41.2% chose high and above). Note, however, that 26.3% said they would never consult

the Internet. There seems to be a chasm between those who do not use the Internet to solve citizen related problems and those who use it with high probability. Interesting to note that among the 115 respondents who answered that they would not use the Internet to solve their citizen-related problems, 28 (24.3%) use the Internet frequently, and only 33 (28.7%) do not use the Internet at all; thus the large majority of those who do not utilize the Internet to solve their citizen-related problems still use it for other purposes. In the study carried out by Savolainen and Kari (2004), the Internet was third after friends and family and printed media. Johnson *et al.* (2006) found that people are most likely to turn to the Internet for health-related problems. The Internet is more and more becoming an integral part of our lives, thus it is not surprising that in more recent surveys its importance as a source of information for problem solving increases.

When looking at the types of problems the participants were concerned with lately (Table 3) for those who never use the Internet to solve their problems (115 participants) and those who turn to the Internet either always or with high probability (181 participants), considerable differences are observed, as can be seen in Table 5. The group of participants who do not use the Internet to solve their problems are mainly concerned (in decreasing order) with health, consumer issues, transportation, education and welfare. The group of participants who use the Internet with high probability to solve their problems are mainly concerned (in decreasing order) with transportation, health, education, taxes and fees.

Table 5: Comparison of the types of problems mentioned by those who never turn to the Internet to solve their problems and those who turn to the Internet with high probability

Major topic	% times mentioned – all respondents	% times mentioned – never solve problems using the Internet	% times mentioned – solve problems using the Internet with high probability
Health	46.7	42.6	54.7
Transportation	46.2	27.8	68.0
Education	36.8	24.3	49.7
Consumer issues	30.9	34.8	29.3
Social security	29.3	19.1	33.1
Taxes and fees	28.1	16.5	39.2
Economics	25.2	20.0	30.9
Work relations	23.1	19.1	23.8
Law and legislation	18.5	8.7	29.3
Welfare	18.5	21.7	13.8
Housing	17.6	14.8	19.3
Army and defence	15.8	11.3	17.7
Environmental protection	13.7	8.7	18.2
Family affairs	12.1	4.3	17.7
Registrars	11.4	13.9	7.7
Senior citizens	7.8	7.0	6.6
Immigration and absorption	3.7	3.5	3.3
Other	3.0	0.9	4.4

According to our respondents, the public library is the least preferred source to rely on for solving problems. This finding stands in contrast with the findings of Marcella and Baxter (2000) in the UK, where the public library was reported to be the most preferred choice for government information, picked by 43.2% of the survey participants or Johnson *et al.* (2006), where it was the third most preferred source. The third most preferred source in the UK survey was Citizen Advice Bureaux (12%). In the current survey, one of the striking findings is the extremely low awareness to the existence of SHIL: 49.0% of the respondents have never heard of it, and an additional 43.9% reported that they have vaguely heard about the service, but have never used it. Only nine respondents visited a SHIL office, six used the hot line and four respondents made use either of the telephone or the Internet service. In the Rishon Lezion survey (Leshem 2006) only 7.1% of the respondents were aware of the existence of SHIL.

In a follow-up question to those who chose the Internet as a preferred source of information, the participants were asked to name the Web sites they turn to. Altogether 333 answers were given by 191 respondents (some listed several sites). Google and other search sites were most popular (32.7% of the answers), suggesting that the respondents did not know what site to turn to, or at least they do not know the URL of the site they are looking for. Other popular answers were: government and municipality websites (21.0%), general portals (16.5%), news sites (13.8%), forums/blogs (3.0%) and transportation websites (e.g. train or bus services and timetables, 2.7%).

In addition to identifying their preferred sources, participants were asked to indicate their preferred channel for receiving information. The responses are reported in Table 6. Tables 4 and 6 relate to the source selection step of the ELIS model (Savolainen 1995).

Table 6: Information channel preference in percentages

Source	Not at all	Low pref.	Medium pref.	High pref.	Very high pref.	No answer
Telephone	18.3	20.4	30.0	19.9	7.8	3.6
Face-to-face	6.6	8.9	24.0	32.5	24.7	3.3
In print	12.8	15.3	30.4	26.5	12.1	2.9
Through a computer	30.2	13.7	13.3	17.4	20.8	4.6

Table 7: First consulted and most useful source in percentages

Source	Source consulted first (N=210)	Most useful source (N=224)
Family/friends	35.2	28.6
Experts	17.6	25.9
Government office	11.0	10.3
Pamphlets/books	2.4	1.3
Internet	31.4	32.1
TV/Radio	1.0	0.9
Printed press	0.5	0.9
Public library	1.0	0.0

Even though we are in the electronic information era, users still have a clear preference for face-to-face information. When combining the very high and high preference categories, the second most preferred information channel is print (38.5%), closely followed by the computer (38.2%), while information over the phone is least preferred (27.7%). This is in contrast with the Herzliya (Baruchson-Arbib *et al.* 2006) and the Rishon LeZion (Leshem 2006) surveys, where telephone was the most preferred information channel for municipal information.

As mentioned above (see Table 2), the participants were asked to describe a citizen-related issue that they were concerned with in the previous six months. For the specific issue, they were asked to select the source they first turned to when trying to solve the specific problem. They were also requested to select the most useful source. Note that the most useful source is not necessarily the source whose advice they sought first. The answers to these two questions appear in Table 7. There were altogether 278 answers to the question on the first selected source, however quite a few respondents se-

lected more than one source. They were excluded from the analysis. The results are based on the answers of 210 participants. Almost the same number of participants selected the most useful source as well, but in this case too we took into account responses where only a single source was selected (224 answers).

The source that was consulted first is the source that is closest to the respondent in his/her information horizon (Sonnenwald 1999). This source was friends and family. However, the source consulted first might not have necessarily provided an answer and then the respondent had to turn to an additional source. In this case the information pathway that was followed (Johnson *et al.* 2006) consisted of more than one source. The results show that the source that was considered most useful by the largest group of respondents was the Internet. The second most useful source was friends and family, closely followed by experts.

There were 191 respondents who provided a single answer for both questions. Most of them (164 respondents, 85.9%) selected the same source for both questions. Eighteen of the 27 participants, who changed their selection, chose friends and family first, but it turned out that their close acquaintances could not solve the problem: eight of them selected experts and another eight selected the Internet, while the remaining two chose government offices as the best source for solving their problem.

Finally we asked the participants to rate their satisfaction with the help they received in solving their specific problem. There were 254 responses to this question: 54.9% were fully satisfied, 38.0% were partially satisfied, and only 6.3% per cent were unsatisfied. Two participants chose "other", but did not provide an explanation. From this we can conclude that most of the participants were able to solve their citizen-related problems.

Additional findings

We asked the participants whether they sometimes search for information about citizen related issues on behalf of others. The results show that a considerable percentage (35.0% of the respondents) serve as information search intermediaries for others. They look for information on behalf of their family (82.3%), assist friends (62.1%) and clients (27.1%). The participants were also asked whether and how often they rely on others in locating information on citizen-related issues. Only nine respondents (2.1%) always ask for help, and another 90 respondents (20.1%) answered that they often ask for help. Only 118 (27.0%) reported that they never ask for help in locating information. Thus it seems that users both provide and need assistance of others in locating information related to public services and entitlements, and that information seeking is very often a two-step process mediated and assisted by others.

Limitation of the study

Even though the questionnaires were distributed in different parts of the country, the demographic data show that the sample is not necessarily representative of the whole population. A large percentage of the respondents (43.9%) answered that they heard about SHIL, but had never used its services. It would have been interesting to know why they have not used this service, but there was no such question in the survey.

Conclusions

The results show that Israeli citizens are concerned with problems related to public services and entitlements, mainly in the areas of health, transportation and education, work relations and housing. Their primary source of information is friends and relatives, even though these cannot always solve their problems. The two-step structure of information seeking is prevalent. An interesting observation is that people quite often find that the Internet as the most useful information source. They turn to the Internet, but they are largely unaware of the SHIL Web site, which serves as an information and referral service on the Internet.

Our recommendation is to take steps to raise awareness to this Web site, because Web sites of

this type are used heavily in other countries. Some of the possible options for raising the awareness to SHIL are distributing pamphlets in public places (government offices, Health Maintenance Organizations, libraries), and/or to advertise the services SHIL offers in newspapers and on the TV and on popular websites. Because of the large number of immigrants to the country, the SHIL services should be offered and advertised in several languages.

An interesting issue is the fact that while the SHIL service is relatively unpopular in Israel, respective CABx have much higher visibility and popularity in other countries. This deserves further investigation in future research, in order to find out what are the dimensions of similarity and difference in the service and the populations served that might account for this difference. The differences may be cultural, or could be that in other countries CAB services are better promoted and thus the citizens have higher awareness of the existence of the service.

Acknowledgement

This research was supported by The Israel Science Foundation (grant No. 556/07).

References

- Agosto, D. E., and S. Hughes-Hassell. 2005. "People, Places, and Questions: An Investigation of the Everyday Life Information-Seeking Behaviors of Urban Young Adults." *Library and Information Science Research* 27(2): 141–163.
- Baruchson-Arbib, S., S. Shoham, E. Yaari, and V. Shemesh. 2006. "Community Information Needs of the Urban Population in Israel." *Libri* 56(2): 83–96.
- Central Bureau of Statistics. 2009. "Israel in Figures." Accessed October 24, 2011. http://www.cbs.gov.il/publications/isr_in_n09e.pdf
- Central Bureau of Statistics. 2010. "Statistical Abstracts. Table 9.7." Accessed January 31, 2011. http://www1.cbs.gov.il/reader/shnaton/templ_shnaton_e.html?num_tab=st09_07&CYear=2010.
- Chivhanga, M. B. 2005. "Ethno-information Needs – A Nationwide Study. Final Report." Accessed March 9, 2010. http://www.suomi.fi/suomifi/laatuaverkkoon/suomifi_tietoa/selvityksia_ja_tutkimuksia/muita_selvityksia/ethno_informat ion_needs/EthnoInfo_Final_Print_Version.pdf.
- Citizens Information Board. 2008. "Citizens Information Survey 2008." Dublin, Ireland: Citizens Information Board. Accessed January 31, 2011. http://www.ciboard.ie/downloads/CIS_survey_2008.pdf
- Fisher, K. E., J. C. Durrance, and K. T. Unruh. 2003. "Information Communities: Characteristics Gleaned from Studies of

- Three Online Networks." In *Humanizing Information Technology: From Ideas to Bits and Back: Proceedings of the 66th Annual Meeting of the American Society for Information Science and Technology, October 19-22, 2003, Long Beach, CA*: edited by R. J. Todd, 299-305. Medford, NJ: Information Today.
- IBEC. n.d. "What Are Information Grounds?" Accessed January 31, 2011. http://ibec.ischool.washington.edu/info_grounds.php.
- IBEC Project. n.d. "Information Behavior in Everyday Contexts – About." Accessed January 31, 2011. <http://ibec.ischool.washington.edu/about/>.
- Institute for Internet Studies. 2006. "Results of an Internet usage survey, October 2006." [In Hebrew.] Accessed January 31, 2011. <http://www.niis.tau.ac.il/page.aspx?pid=148&cid=0&menu=27>.
- Johnson, J. D. E., D. O. Case, J. Andrews, S. L. Allards, and N. E. Johnson. 2006. "Fields and Pathways: Contrasting or Complimentary Views of Information Seeking." *Information Processing and Management* 42 (2): 569–582.
- Julien, H., and D. Michels. 2000. "Source Selection among Information Seekers: Ideals and Realities." *Canadian Journal of Library and Information Science* 25 (1): 1–18.
- Leshem, R. 2006. "Results of the Rishon LeZion telephone survey." Personal communication.
- Marcella, R., and G. Baxter. 1999a. "The Information Needs and Information Seeking Behaviour of a National Sample of the Population in the United Kingdom, with Special Reference to Needs Related to Citizenship." *Journal of Documentation* 55(2): 159–183.
- Marcella, R., and G. Baxter. 1999b. "A National Survey of the Citizenship Information Needs of the General Public." *Aslib Proceedings* 51(4): 115–121.
- Marcella, R., and G. Baxter. 2000. "Citizenship Information Needs in the UK: Results of a National Survey of the General Public by Personal Doorstep Interview." *Aslib Proceedings* 52(3): 115–123.
- McKenzie, P. 2003. "A Model of Information Practices in Accounts of Everyday Life Information Seeking." *Journal of Documentation* 59(1): 19–40.
- Ministry of Social Affairs and Social Services 2009. *SHIL Annual Report for 2008*. [In Hebrew.] Jerusalem, Israel: Ministry of Social Affairs and Social Services.
- Pettigrew, K. 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): 801–817.
- Ravid, G., J. Bar-Ilan, S. Baruchson-Arbib, and S. Rafaeli. 2007. "Popularity and Findability through Log Analysis of Search Terms and Queries: The Case of a Multilingual Public Service Website." *Journal of Information Science* 33(5): 567–583.
- Savolainen, R. 1995. "Everyday Life Information Seeking – Approaching Information Seeking in the Context of the Way of Life." *Library and Information Science Research* 17(3): 259–294.
- Savolainen, R. 2005. "Everyday Life Information Seeking." In *Theories of Information Behaviour*, edited by K.E. Fisher, S. Erdelez, and L. McKechnie, 143–148. Medford, NJ: Information Today.
- Savolainen, R., and J. Kari. 2004. "Placing the Internet in Information Source Horizons: A Study of Information Seeking by Internet Users in the Context of Self-Development." *Library and Information Science Research* 26 (4): 415–443.
- Saxton, M. L., C. M. Naumer, and K. E. Fisher. 2007. "2-1-1 Information Services: Outcomes Assessment, Benefit-Cost Analysis, and Policy Issues." *Government Information Quarterly* 24(1): 186–215.
- Seneviaratne, W., G. C. Gunawardene, and K. A. P. Siddhisena. 2006. "Modelling Community Information Behaviour in Rural Sri Lanka: A Citizen-Centred Perspective." In *Proceedings A-LIEP 2006: Asia-Pacific Conference on Library and Information Education and Practice 2006*; edited by C. Khoo, D. Singh, and A. S. Chaudhry, 369–381. Singapore: School of Communication & Information, Nanyang Technological University.
- Shalev, E. 2009. "Survey of the Ministry of Industry, Commerce and Employment." [In Hebrew.] *Vnet*. Accessed January 31, 2011. <http://www.ynet.co.il/articles/1,7340,L-3679164,00.html>.
- Shemesh, V., Baruchson-Arbib, S., and Shoham, S. 2003. "Community Information and the Public Library: Information Needs Survey of an Urban Community in Israel." [In Hebrew.] *Yad La – Kore* 35: 37–55.
- Smith, A. 2010. "Government Online. Pew Internet and American Life Project." Accessed January 31, 2011. http://www.pewinternet.org/~media/Files/Reports/2010/PIP_Government_Online_2010.pdf.
- Sonnenwald, D. H. 1999. "Evolving Perspectives of Human Information Behavior: Contexts, Situations, Social Networks And Information Horizons." In *Exploring the Contexts of Information Behaviour*, edited by T. D. Wilson and D. K. Allen, 176–190. London: Taylor Graham.
- Tractinsky, N., S. Rafaeli, and N. Pliskin. 1998. "Lessons from Implementation of a Web Site for the Israeli Citizens' Advice Bureau." In *Proceedings of the Americas Conference on Information Systems 1998*, edited by E. D. Hoadley, and I. Ben-Basat, 101–104. Accessed October 24, 2011. <http://aisel.aisnet.org/amcis1998/36/>.
- Williamson, K. 1998. "Discovered by Chance: The Role of Incidental Information Acquisition in an Ecological Model of Information Use." *Library and Information Science Research* 20(1): 23–40.

Editorial history

Received: 31 January 2011

Final version received: 24 April 2011

Accepted: 26 April 2011