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Exploring the use of mobile communications in a sample of older people Preliminary results of a case study in Los Angeles

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Abstract

This paper introduces a qualitative case study on mobile communication among the older population (60+ years old) conducted in Great Los Angeles (CA, USA) in autumn 2011. Methodology, fieldwork and preliminary results are discussed.

Before, country-level data is presented to better understand the specific characteristics of the studied individuals. The section focus is on demographics and on acceptance and use of information and communication technologies (ICT).

Preliminary results show that within the sample under study (20 individuals) there is a high number of mobile phone users (15) while among non-mobile users (5), three of them decide to stop using this technology. A majority of mobile phone adopters describe a very limited use of the device for everyday life communications. Finally, while Internet is really popular within the sample (14 users), just 3 individuals go online through their mobile telephone.

Keywords

Older population; mobile telephony; case study; Los Angeles (CA); Personal System of Communication Channels (PSCC)

Introduction

The age factor plays differently regarding adoption and uses of mobile telephony, an evidence discussed since the first stages of popularization of this technology (see for instance, Ling, 2002; or Castells et al., 2006). The elderly, indeed, are "catching up to the levels of mainstream innovation, but largely lag behind in the use of new services integrated into the technology" (Karnowski et al., 2008; p.191).

Being them accepted or rejected, the incorporation of mobile phones in everyday life should be studied by taking into account the personal system of communication channels (PSCC) of every person. PSCC can be defined as the set of media –devices or services, as fixed and mobile telephony, computer, or Internet–; that each person would identify as being part of their everyday life (see Fernández-Ardèvol 2011a).

This analytical approach raises research questions related to the exploration of the ways this age cohort incorporates, or rejects, mobile communication in everyday life: How do older people use their mobiles? Who do they communicate with by mobile and why? Which combination of communication channels can be found? What are the motivations to reject the use of mobile telephony? Which is the position that mobile telephony occupies in the PSCC of the elders?

This paper discusses the design and preliminary results of a qualitative case study conducted in Great Los Angeles in autumn 2011. The aim is to contribute on increasing the evidence and research regarding the elder population by exploring distinctive characteristics of mobile telephone use among seniors. Besides, a review of secondary data is included to better contextualize obtained results. This is a work-inprogress report so further analysis is needed to have a complete picture of the studied processes.

The text is organized as follows: section 1 describes the demographic situation of older population in the US while section 2 focuses on the diffusion and adoption of information and communication technologies (ICT) among different generations in the country. Section 3 describes the research design, including the goals of the case study and the methodology. Section 4 discusses the fieldwork. In section 5 preliminary results are presented while last section (6) summarizes and discusses main findings.

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1. Some demographics: US elder population

In 2010, 55.8 million people in the US were aged 60 years old or over, representing 18% of the country population. Proportion of seniors is higher among women, as their life expectancy is higher as well (see Table 1).

26% of this age group holds a University degree while more than 80% of 60+ years old have graduated from High School (see Table 2). Education attainment is higher among men, with higher differences among genders in the case of University degrees. The level of education has risen steadily in America over the last 70 years (Julian and Kominski, 2011) and, consequently, educational level of older generations is below younger age cohorts.

Among those 60 years old and over, up to 29% [still] participate in the labor market (see Table 3). Participation is higher among men (34%) than among women (25%). The normal pensionable age in the US is 66, while the effective retirement age is slightly below (65.6 years old for men, and 64.8 years old for women; source: OECD, 2011 chapter 2).

Table 1. Distribution of US Population, by age (2010)

%	•	Total	Male	Female
Under 60 years		82.0	83.6	80.4
60 years and over		18.0	16.4	19.6
	-		-	

Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2010.

http://www.census.gov/population/www/socdemo/age/older 2010.html (downloaded 28/09/2011)

Table 2. Educational attainment US, population 60 years old and over, by sex (2010)

%	Total	Males	Females
60 years and over (all levels)	100	100	100
Less than high school graduate High school graduate or more	17. 6 82.4	17.1 82.9	17.9 82.1
Less than bachelor's degree Bachelor's degree or more	74.4 25.6	69.0 31.0	78.7 21.3
	_	-	

Source: Own elaboration based on U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2010.

http://www.census.gov/population/www/socdemo/age/older_2010.html (downloaded 28/09/2011)

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_%	Total	Males	Females				
TOTAL	100	100	100				
In civilian labor force	28.9	34.3	24.5				
Employed	26.9	31.8	23.0				
Unemployed	2.0	2.6	1.5				
Not in civilian labor force	71.1	65.7	75.5				
Source: Own elaboration based on U.S. Census Bureau, Current Population							
Survey, Annual Social and Economic Supplement, 2010.							

Table 3. Labor force status and employment status. US, population 60 years old and over, by sex (2010)

http://www.census.gov/population/www/socdemo/age/older_2010.html (downloaded 28/09/2011)

2. Access and use of mobile technologies and other ICT

The most important source of representative US data with regards to ICT access and use is the Pew Internet & American Life Project (PIP). In what follows I focus on last available information, mainly referred to 2010, and look at evolution when necessary.

2.1. Ownership

The most popular ICT device among all adult generations in the US is the mobile phone (85%, see Table 4), followed by the computer (59% desktop and 52% laptop).¹ Elder cohorts show lower taxes of ownership for all the considered technologies. In the specific case of mobile phones, the percentage of ownership decreases from 85% (average adults) to 68% (66-74 years old) and 48% (75+ years old). Since they are pretty new, tablets and e-books are the less popular devices among all the generations, while among the elder generations, iPod/MP3 players and game consoles show, as well, low levels of popularity.

In addition, 9% of the adult population does not own any of the devices considered by PIP. Among older cohorts this percentage is more than doubled, equaling 20% in the 66-74 years old generation and skyrocketing to 43% among those 75+.

¹ No data published on the percentage of adults having either a desktop computer or a laptop.

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		All adults					
%	18-34	35-46	47-56	57-65	66-74	75+	18+
Cell phone	95	92	86	84	68	48	85
Desktop computer	57	69	65	64	48	28	59
Laptop computer	70	61	49	43	30	10	52
iPod or MP3 player	74	56	42	26	16	3	47
Game console	63	63	38	19	8	3	42
e-Book reader	5	5	7	3	6	2	5
Tablet, like iPad	5	5	4	3	1	1	4
None of these	1	3	8	8	20	43	9

Table 4. Owned devices, percentage of US adult population by age. Year 2010

Source: Pew Research Center's Internet & American Life Project, August 9-September 13, 2010. N=3,001 adults 18 and older, including 1,000 reached via cell phone. Interviews were conducted in English (n=2,804) and Spanish (n=197). http://pewinternet.org/Reports/2010/Generations-2010.aspx (27/09/2011).

2.2. Mobile telephony

Table 5 gathers industry data on the diffusion of mobile telephony. Mobile penetration in the US equals 90% in 2010. Prepaid subscriptions, however, only represent the 10% of the market. Mobile penetration surpasses adult ownership percentage (85%, see Table 4 above)²: This is a common trend when mobile markets are mature because, by construction, penetration des not have an upper bound whereas ownership, by definition, will never go beyond 100%.

Table 5. Mobile subscription	ns in US, 2010
Mobile penetration	89.86 mobile subscriptions per 100 inhab.
Mobile subscriptions	278.90 million active subscriptions
Of them, prepaid subscriptions ¹	9.84%
Source: ITU (2011). ¹ data referred to 2009.	

Furthermore, in terms of consumer expenditures, 2% are devoted to telephone service in the US: 44% of this amount goes to mobile telephony, 36% to landline, and

Internet represents the remaining 21% (FCC, 2010).³

² This figure (85%) refers to adult population (18+).

³ Due to rounding, total does not equal 100.

2.2.1. Use and activities

The most recent available data from the point of view of final consumers refers to 2010 and show that "cell phone ownership has remained stable over the last year, but users are taking advantage of a much wider range of their phones capabilities compared with a similar point in 2009" (Smith, 2010b; p. 2). There is a clear growth in the use of mobile non-voice data applications but there are differences by age: younger generations tend to use more non-voice services and are more prone to incorporate them into their communication practices, given the average number of activities developed by age (see Table 6).⁴

Table 6. Percentage of cell phone owners and their activities, by age. US, 2010

%	18-29	30-49	50-64	65+
Cell phone owners	90 ⁽¹⁾	88 ⁽²⁾	82 ⁽³⁾	57

Activities done with the cell phone (% of mobile phone owners)							
Take a picture	93 ⁽¹⁾	83 ⁽²⁾	67 ⁽²⁾	34			
Send or receive SMS	95 ⁽¹⁾	82 ⁽²⁾	57 ⁽³⁾	19			
Send or receive email	52 ⁽¹⁾	37 ⁽²⁾	22 ⁽²⁾	11			
Access the Internet	65 ⁽¹⁾	43 ⁽²⁾	18 ⁽²⁾	10			
Send or receive instant messages	46 ⁽¹⁾	35 ⁽²⁾	17 ⁽⁻⁾	10			
Play a game	60 ⁽¹⁾	37 ⁽²⁾	17 ⁽²⁾	9			
Play music	64 ⁽¹⁾	36 ⁽²⁾	13 ⁽²⁾	6			
Make a purchase	20 ⁽¹⁾	11 ⁽²⁾	4 ⁽⁻⁾	5			
Record a video	60 ⁽¹⁾	39 ⁽²⁾	14 ⁽²⁾	5			
Watch a video	40 ⁽¹⁾	20 ⁽²⁾	6 ⁽⁻⁾	4			
Use a social networking site	48 ⁽¹⁾	23 ⁽²⁾	8(-)	3			
Post a photo or video online	33 ⁽¹⁾	15 ⁽²⁾	5 ⁽⁻⁾	2			
Use a status update service	21 ⁽¹⁾	9 ⁽²⁾	3 ⁽⁻⁾	2			
Mean number of activities	6.9	4.7	2.5	1.2			

⁽¹⁾ Significant difference compared with all other age groups; ⁽²⁾ Significant difference compared with 50-64 and 65+; ⁽³⁾ Significant difference compared with 65+; ⁽⁻⁾ Sample size too small to analyze.

Source: Pew Research Center's Internet & American Life Project, reproduced from Smith (2010b:14).

There are important differences among generations in the activities performed with the mobile phone. Thus, while in the 18-29 age group, SMS is the most popular non-voice service with a use rate of 95%; for older population, on the other hand, taking pictures is more popular than texting, with the use of SMS decreasing to 57% in the 50-64 years old cohort and lowering to 19% for those 65+.

⁴ No information available on voice services.

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Indeed, for those 65+ the most popular non-voice services are taking pictures (34%), sending or receiving SMS (19%), sending or receiving email (11%), accessing the Internet (10%) and sending or receiving instant messages (10%). The 50-64 years old cohort shows a similar pattern, with higher percentages of adoption of each service. However, among the 18-29 years old generation the most popular activities are different: SMS (95%), taking pictures (93%), Access the internet (65%), play music (64%), play games (60%) and record videos (60%).

2.3. Internet

A great majority of US adults are Internet users in 2010 (79%), "a number that has remained relatively steady since early 2006" (Zickuhr, 2010:5). Again, only the older generations are below the average: 58% Internet users in the 66-74 generation and 30% for those 75+ years old (see Table 7).

Mobile phones are personal, portable communication devices (Ito el al. eds., 2005) in developed countries. Therefore it is correct to identify ownership and use in the case of cell phones in the US. This assumption enables a comparison between Internet and mobile phone users. First evidence is that in all adult generations there are more mobile users than Internet users with the exception of 18-34 years old age cohort, where figures are strictly equal (95%). Besides, the difference increases with age, and for elder generations cell phones are comparatively much more popular than the Internet: among those 75+, there a 60% more mobile users than Internet users.

	Age cohort					All adults	
%	18-34	35-46	47-56	57-65	66-74	75+	18+
Internet (1)	95	86	81	76	58	30	79
Mobile phone (2) Mobile phone over	95	92	86	84	68	48	85
Internet users (2)/(1)	1.00	1.07	1.06	1.11	1.17	1.60	1.08

Table 7. Comparison of Mobile phone and Internet users (%), US adult population by age. Year 2010

Source: Own elaboration based on Pew Research Center's Internet & American Life Project. Survey date: May 2010. Ages are as for 2011.

http://pewinternet.org/Reports/2010/Generations-2010.aspx (05/10/2011).

Online activities change with time; and while there are notable differences by generations certain key activities are becoming more uniformly popular across all age groups. Cross-generational activities include using e-mail, search engine use, seeking health information, getting news, buying products, or making travel reservations

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(Zickurh, 2010, see Table 8). On the other hand, social networking shows the highest differences among generations, followed by video watching and online banking.

			Age co	ohort			All adults
%	18-34	35-46	47-56	57-65	66-74	75+	18+
Internet users	95	86	81	76	58	30	79
Online activities (% of	interne	t users)					
Send or read e-mail	96	94	91	93	90	88	94
Use a search engine	92	87	86	87	82	72	87
Look for health info ⁽¹⁾	85	84	84	85	76	59	83
Get news	76	79	76	76	67	54	75
Visit a government website	61	75	73	69	56	41	67
Watch a video	80	66	62	55	44	20	66
Buy a product	68	66	64	69	59	57	66
Make travel reservations	64	67	70	67	61	53	66
Use social networking sites	83	62	50	43	34	16	61
Bank online	62	62	58	56	44	35	58
Use online classifieds	64	58	49	42	30	17	53
Listen to music online ⁽²⁾	65	58	48	38	25	12	51

Table 8. Internet users and their activities, by age. US, 2010

Selected activities: only included those with al least 50% of all online adults declaring doing it. ⁽¹⁾ Data referred to 2008, ⁽²⁾ Data referred to 2009.

Source: Pew Internet surveys, http://pewinternet.org/Reports/2010/Generations-2010.aspx (27/09/2011).

2.3.1. Internet connection: broadband and wireless

Broadband connection is [only] available in the 66% of the US adult population homes. Again, its presence decreases with age (see Table 9). Elders are not only less likely to be Internet users but the connection they have tends to be comparatively of worst quality. In this sense, the ratio of broadband connections over total Internet users markedly decreases for older generations: the ratio equals 0.84 for the adult average, decreasing to 0.76 among 66-47 years old cohort and to 0.67 for those 75+.

Wireless Internet users, following PIP definition, are those who access the Internet both from their mobile phone and from a laptop computer with wireless access. These

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wireless connections are becoming more and more popular, with 59% of US adults using it in 2010 (see Table 9). Again, among older generations this connection technology has comparatively lower importance: the ratio of wireless Internet users over total Internet users decreases with age, taking the value of 0.75 for the adult US population and lowering to 0.30 for population 75+.

Table 9. Internet users and broadband connection at home (%), US adult population by age. Year 2010

	Age cohort					adults	
%	18-34	35-46	47-56	57-65	66-74	75+	18+
Internet users (1) Broadband	95	86	81	76	58	30	79
connection at home (2) Broadband over	81	73	68	61	44	20	66
Internet users (2)/(1)	0.85	0.85	0.84	0.80	0.76	0.67	0.84
Wireless Internet users (3) Wireless Internet	82	71	55	46	33	9	59
over Internet users (3)/(1)	0.86	0.83	0.68	0.61	0.57	0.30	0.75

Source: Pew Research Center's Internet & American Life Project. Survey date: May 2010. Ages are as for 2011. <u>http://pewinternet.org/Reports/2010/Generations-</u>2010.aspx (05/10/2011).

Regarding the specific device used for wireless connection, 47% of wireless Internet users go online both by using a cell phone and by using a laptop, while the rest exclusively use one of the devices (20% only mobile phones and 33% only laptops). Besides, 70% of wireless Internet users own a desktop computer (Smith, 2010a).

Summing up, for all the considered ICT it is confirmed the existence of differentiated patterns of adoption and different patterns of use among generations. US older generations tend to show lower adoption rates and a more selective use of the analyzed technologies and their embedded services. Therefore, it is still valid the statement made in 2006 as there exist a trend "toward the general diffusion of mobile communication within the whole population, with age continuing to specify the type of use rather than the use itself" (Castells et al., 2006, p. 41).

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3. Methodology

The goal of this case study is to understand the processes and motivations for using (or reject to use) mobile telephony among population of 60+ years old in Great Los Angeles (California). To achieve this goal a qualitative approach to the object of study was defined. A flexible, interactive research design is taken to incorporate the specific circumstances in which the research is carried out (Maxwell, 2005:7). Specifically, some elements of the research design took into account the foreign condition of the researcher.

This case study shares goals and methodology with a previous case study conducted in the Metropolitan Area of Barcelona (Catalonia, Spain; see Fernández-Ardèvol, 2011b, 2011c); therefore further comparison of results is allowed.

The case study is based in semi-structured interviews. However, fieldwork is composed by four different elements: the semi-structured interview, a short questionnaire, the observation of the mobile telephone –whenever possible and relevant–; and the notes that are taken after each interview. First of all, every semi-structured interview follows a flexible outline and is guided as a relaxed conversation. No correct or wrong answers are expected. Interviews are voice recorded for transcription and further text analysis. The place of the interview can be both the interviewee home and a public premise (like a library). Expected length of interviews is around one hour. However, in general, global interactions tended to be longer in inhome interviews.

Secondly, the short questionnaire is administered at the beginning of the meeting (see Annex 1). It is focused on individual socioeconomic characteristics and would allow a first approach to the personal network of the interviewed. It is designed to act as an ice-breaker before the voice recorder is turned on and to introduce main points of the conversations. Thirdly, handset observation, when pertinent, is allowed by asking permission to take a picture of the device. This facilitates the observation of how the interviewee handles the cell phone. While handsets tend to appear in the table when the conversation revolves around mobile telephony, the explicit question regarding the possibility of taking a picture of the handset helps in the case of those individuals who use the cell phone in a limited, restricted way and do not usually carry it with them. Finally, notes are taken after the interview. The goal of these notes is to incorporate non oral information of the whole interaction, relevant pieces of information raised when the voice recorder was off and, in general, researcher reflections before, during and after the interview.

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4. Fieldwork

Sample size was targeted to be between 15 and 20 individuals. The selection axes defined were two: age (60 or more years old) and place of residence (Great Los Angeles). Mobile ownership was not defined as a selection criterion. This should bring relevant information for a better understanding of the processes of rejection and acceptance of that technology and the relationship of the elderly person with mobile telephony. Furthermore, special attention should be given to the different devices that are in the PSCC of each individual to gain a better understanding of the specific role of mobile telephony.

The fieldwork was developed during a visiting period made at the Annenberg School for Communication (University of Southern California) and it benefited particularly from the help of the Annenberg School for Communication and the USC Davis School of Gerontology.

The final studied sample is formed by 20 individuals, who were interviewed between October 10th and November 15th 2011. Interviews average length is 46 minutes. Interviews were carried out in the USC Campus (9 individuals) and in interviewee's home (11 individuals). A symbolic reward was delivered at the end of the interview, a piece of information not usually given in advance to interviewees.

Recruitment of individuals to participate in the research followed a snow ball approach. Main part of the sample consisted of volunteers of a university organization. It was possible to access other seniors that joined the study through them. Other ways of access were staff of the university, their friends and relatives. This means that a significant part of the sample had a direct relationship with a University. This characteristic must be taken into account in the analysis and the interpretation of the results.

Cooperation of informants and the specific help of some interviewees was crucial in achieving the maximum sample size. This is particularly relevant as the first institution I approached, a senior center, did not authorize the research after a significant period of conversations.⁵

Due to the characteristics of the fieldwork the results reported here can not be generalized to the whole senior population in Los Angeles and/or in the US. However, it brings preliminary results and interesting data description that should be understood within the scope of an exploratory qualitative approach.

⁵ Conversations started at the end of September with a very good reception and expectations of starting the fieldwork in the coming week. After a standby period, November the 7th I was informed that the study was not authorized in the senior center.

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5. Preliminary results

Preliminary results reported here correspond to the information gathered during the fieldwork with no posterior analysis of transcribed text. Only basic information will be discussed in what follows, while more detailed and in depth analysis will be developed in the future.

The studied sample consists on 15 females and 5 males (see Table 10). There are slightly more older-seniors (11) than younger-seniors (9) with ages ranging from 61 to 92 years old. The educational attainment is relatively high in the sample, with 11 individuals with at least a university degree. In addition, level of studies is higher among younger seniors. In terms of housing characteristics, older seniors in the sample do live alone in most cases than younger seniors, while those who have moved to a senior's apartment building always live on their own.

	Younger senior (60-74 y.o.)	Older senior (75+ y.o.)	Total sample
Gender			
Female	7	8	15
Male	2	3	5
Education			
University degree or more	6	5	11
Less that university degree	3	6	9
Housing			
Own home	8	10	18
Of whom, living alone	0	5	
Seniors' apartment building	1	1	2
Of whom, living alone	1	1	
Total	9	11	20

Table 10: Sample characteristics

Source: own elaboration.

With respect to use and ownership of different ICT (see Table 11), the majority of the individuals in the sample are mobile phone users (15). There are 2 individuals that gave up using the cell phone, while 3 have never had a mobile phone.

All the individuals in the sample have a fixed line at home (20) while a majority of 14 individuals are Internet users. Almost all the Internet users are mobile phone users (12 individuals) (see Table 12), while the other two Internet users once had a cell phone but do not have it anymore. Finally, there are three individuals who neither have mobile phone nor are Internet users. The analysis of the characteristics and motivations of mobile non-users and mobile ex-users are left for a subsequent paper.

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	Mobile phone		Landline	Internet	
	User	Ex-user	Non-user	At home	User
Gender					
Female	12	1	2	15	10
Male	3	1	1	5	4
Age group					
Younger seniors:					
60-74 years old	6	2	1	9	7
Older seniors:					
75+ years old	9	0	2	11	7
Education					
University	8	2	1	11	9
Less than University	7	0	2	9	5
Total (20)	15	2	3	20	14

Table 11: ICT owners and users (total sample, 20 individuals)

Source: own elaboration.

Table 12: Mobile phone users and Internet users in the sample

	Internet user			
		Yes	No	TOTAL
Mobile	Yes	12	3	15
user	No	2	3	5
	TOTAL	14	6	20
wn alaboration	r			

Source: Own elaboration.

Mobile users can be classified by taking into account autonomy of use and specific mobile services incorporated in their communication practices. As discussed elsewhere, we identify four categories: assisted users, basic users, intermediate users and expert users (Fernández-Ardèvol and Arroyo, forthcoming).

"Assisted users" are those individuals who show at least two of these characteristics: they are only able to identify and use the green button (to answer calls) and the red button (to hang up) of the device; they dial numbers directly, as the phonebook is empty or they are not able to use it; alternatively, they only call numbers in the phonebook because they are not able to dial a number directly; any service beyond voice communication is not used or even not understood (alarm clock, SMS, missed calls,...); they leave the handset permanently in a fixed place to keep it safe; they have the handset permanently plugged in; or they do not know how to turn the phone off or how to set it to silent. The other three categories are "basic users", who use a few basic applications and need help from time to time to manage the device; "intermediate users", who are effective, adaptable and autonomous in their relationship with the mobile phone; and "experts", corresponding to innovative users who share contents and are able to give support to other users.

Although based only on preliminary evidence, at this point I am able to classify users in two rough categories: assisted/basic users and intermediate/expert users. Most part of the studied individuals are assisted/basic mobile users (11) while only 4

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are intermediate/expert mobile users (see Table 13). All the assisted/basic users have clamshell devices, that can be considered basic handsets, and declare using them exclusively for voice communications.

Three intermediate/expert users have touch-screen, smart phones and use in a daily basis both voice and data services (including mobile Internet and e-mail). The remaining individual in this category has a clamshell and rejects SMS and other non-voice services, even though she shows a creative and rich use of the cell phone. She is a 66 years old and is among the few persons in the sample who considers the mobile phone more important than the landline.

	Assisted or basic users ⁽¹⁾	Intermediate or expert users ⁽¹⁾	Full use of the phonebook	Mobile Internet users	
Gender					
Female	10	2	3	2	
Male	1	2	3	1	
Age group Younger seniors: 60-74 years old Older seniors: 75+ years old	4	2	2	2	
Education					_
University Less than	6	2	3	2	
University	5	2	3	1	
Total (15)	11	4	6	3	

Table 13: Selected characteristics of mobile phone users (15 individuals)

(1) Immediate classification made just after the interviews, it might change with an in depth analysis of transcriptions.

Source: own elaboration.

There is a limited use of the phonebook among individuals in the sample. In this sense, only 6 individuals (2 assisted/basic and all intermediate/expert users) declare doing a full use of the phonebook; that is, having the capacity of introducing new contact data and being able to use these data to start a communication.

In general, cell phone owners report a combined use of mobile and landline telephony. Among assisted/basic users the trend is towards a more intense use of the land phone. In some cases the handset is usually kept in a specific place as the owners only expect to use it in particular situations. For instance, a 92 years old woman keeps the cell phone always connected to mail supply in her bedroom. She

IN3 Working Paper Series is a monograph series promoted by the Internet Interdisciplinary Institute (IN3) of the UOC IN3 Working Paper Series (2012) | ISSN 2013-8644 | http://in3wps.uoc.edu used to bring it with her when leaving home whereas currently she is using it even from home to make long distance calls in the US as they turned out to be cheaper than a landline call. In the same line, two individuals always keep the mobile phone in the glove compartment of their car.⁶ A man (87 years old) and a woman (86 years old) only expect to use the mobile phone for emergencies while in the car and rely on the landline for the rest of communications. The woman reports making a total of three calls in seven years, while the man declares an evolution on the use of the mobile phone as he is using it once a week for micro-coordination when away of his home.

6. Discussion and conclusion

This paper discusses the methodology, the fieldwork and preliminary results of a case study on the use of mobile telephony among seniors in Los Angeles (California). Secondary data on demographics and ICT are used to contextualize the study.

The sample under study seems to be above the average of senior population in the US both in terms of educational attainment and in terms of possession and use of information and communication technologies.

Higher educational level is associated with higher income level (for a recent analysis of the US see Kominski, 2011). This, in turn, would suggest higher levels of adoption and use of mobile telephony and other information and communication technologies. In this sense, in the sample under study with 15 out of 20 mobile phone users, it is confirmed that adoption is higher than the senior US average. However, it seems somehow surprising that most part of the studied users have basic, clamshell mobile phones (12 out of 15) and can be classified as assisted/basic users (11). On the other hand up to 4 individuals are intermediate/expert users, with 3 of them going online with their smart-phone.

Country-level data presents a picture in which older cohorts use a limited number of non-voice services. The sample under study follows this trend, with most part of the individuals being assisted/basic users and exclusively using voice communication capabilities. Nevertheless, users that go online with their mobile phone are in the sample as well.

The selection process of studied seniors did not include any condition on ownership of a cell phone, neither on the kind of device nor the activities individuals performed with their mobile phone. Therefore, being able to find non users (5) and different kind of users owning technically different devices is, as well, an interesting result of the fieldwork that should be further analyzed.

⁶ One mobile phone ex-user reports the same behavior (woman, 63 years old).

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Finally, all the individuals in the sample do have a landline, while most part of them are Internet users. In both cases, they report a daily use of these technologies. Furthermore, they declare a combined use of mobile and fixed telephony (and Internet, when it applies), with a general trend that points to a higher importance of the landline in their communicative practices. Therefore, a preliminary conclusion is that mobile phones occupy a peripheral position in the Personal System of Communication Channels of the majority of the studied seniors. In this sense, landline is more central and, in consequence, comparatively more essential to them. Mobile telephony is, in general, an extra layer among the channels they usually incorporate in mediated communication. In addition, limited used of mobile telephony tends to be a conscious decision of the user, as in general they show enough ability to communicate through more sophisticated channels, such as computers.

Finally, in order to validate –or redefine– these preliminary conclusions, further analysis is needed to identify the processes that are in operation among studied individuals when deciding whether to use mobile telephony or not, and the way this technology is used among those who incorporate it in their everyday life communication practices.

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Annex 1

Questionnaire⁷

Age

Birth place

When did you move to Los Angeles? (If pertinent)

Where is your home located? (Not the exact address, but the area/neighborhood)

Do you live by your own?

Yes
No
→ With whom do you live?

Educational attainment (studies level)

No chance to go to scho	ol
-------------------------	----

Less that 9th grade

9th to 12th grade (no diploma)

High school graduate

Some college or associate degree

Bachelor degree

Advanced degree

Where are located... family and friends? (Important persons in your life)

⁷ Questions were not compulsory. This, in general, was not explicated. Flexibility allowed for different ways of delivering the questionnaire. Therefore, even though it was designed to be an oral questionnaire, in one interview the circumstances guided to a written by one of the interviewees.

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Are you retired?

Yes

- → For how long have you been retired?
- \rightarrow What did you used to do before retirement?

No No

→ Which is your (main) occupation?

Which is, aprox., you monthly household income?⁸

- < 1,000 USD per month
- 1,000 2,500 USD per month
- 2,500 4,000 USD per month
- 4,000 6,500 USD per month
- > 6,500 USD per month
- Don't know

⁸ When necessary, annual income was recorded instead of monthly income.

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Resumen

Este artículo presenta un estudio de caso cualitativo sobre el uso de comunicaciones móviles entre personas mayores (60 años o más) del área metropolitana de Los Ángeles (CA, EE.UU.). El trabajo de campo se desarrolló durante el otoño de 2011. Se discuten la metodología, el trabajo de campo y los resultados preliminares.

Previamente se analizan datos de ámbito nacional para contextualizar y comprender mejor las características específicas de los individuos objeto de estudio. En este sentido, el interés se centra en los rasgos demográficos y en la aceptación y el uso de tecnologías de la información y la comunicación (TIC).

Los resultados preliminares muestran que dentro de la muestra estudiada (20 personas) hay una elevada presencia de usuarios de teléfono móvil (15), mientras que entre los no usuarios de móviles (5), tres de ellos decidieron dejar de usar esta tecnología en el pasado. La mayoría de las personas que han adoptado la telefonía móvil describen un uso muy limitado del dispositivo en sus prácticas comunicativas cotidianas. Por último, mientras que Internet es muy popular en la muestra (14 usuarios), sólo 3 personas se conectan a Internet con el móvil.

Palabras clave

Tercera edad; telefonía móvil; caso de estudio; Los Ángeles (CA); Sistema Personal de Canales de Comunicación (PSCC).

Resum

Aquest article presenta un estudi de cas qualitatiu sobre l'ús de les comunicacions mòbils entre persones grans (60 anys o més) de l'àrea metropolitana de Los Angeles (CA, EUA). El treball de camp es va desenvolupar durant la tardor de 2011. Es discuteixen la metodologia, el treball de camp i els resultats preliminars.

Prèviament s'analitzen dades d'àmbit nacional per contextualitzar i comprendre millor les característiques específiques dels individus objecte d'estudi. En aquest sentit, l'interès se centra en els trets demogràfics i en l'acceptació i l'ús de tecnologies de la informació i la comunicació (TIC).

Els resultats preliminars mostren que a la mostra estudiada (20 persones) hi ha una elevada presència d'usuaris de telèfon mòbil (15); mentre que entre els no usuaris de mòbils (5), tres d'ells van decidir deixar d'usar aquesta tecnologia en el passat. La majoria de les persones que han adoptat la telefonia mòbil descriuen un ús molt limitat del dispositiu en les seves pràctiques comunicatives quotidianes. Finalment, mentre que Internet és molt popular dins de la mostra (14 usuaris), només 3 persones es connecten a Internet amb el mòbil.

Paraules clau

Gent gran; telefonia mòbil, estudi de cas; Los Angeles (CA); Sistema Personal de Canals de Comunicació (PSCC)

Exploring the use of mobile communications in a sample of older people

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