

# SeLiD – Senior's Learning in the Digital Society

## Survey on the Use of Digital Technologies



Academic Year: 2019/2020

Number of respondents: 118

## Profile of the University

Brno University of Technology offers structured tertiary-level education in the following types of studies: Bachelor's programmes (3-4 years, ending with the titles Bc. or BcA), Master's programmes (1.5-2 years, ending with the titles Ing., Ing. arch. or MgA) and doctoral programmes (3-4 years, ending with the title PhD). Studies may be pursued full-time ("on-site") or in combined form.

The traditional fields of study are civil, mechanical and electrotechnical engineering, architecture, business and management, the fine arts and information technology.

The basic forms of teaching are lectures, seminars, studio work, projects, classwork, consultations, work placements, excursions and individual work.



University of the Third Age offers university courses (lectures, seminars, workshops) intended mostly for senior citizens.

This form of university education aims not only to improve specialist qualification of senior citizens (the knowledge acquired or degrees received are seldom needed for their jobs), but also to improve the quality of their lives, offering them intellectual activities and contact with younger generations.

The types and scope of courses offered by different universities are of a rather diverse nature. They range from single lectures to complete degree programmes studied along with full-time students. In the Czech Republic, universities of the 3rd age mostly offer thematic lecture series.

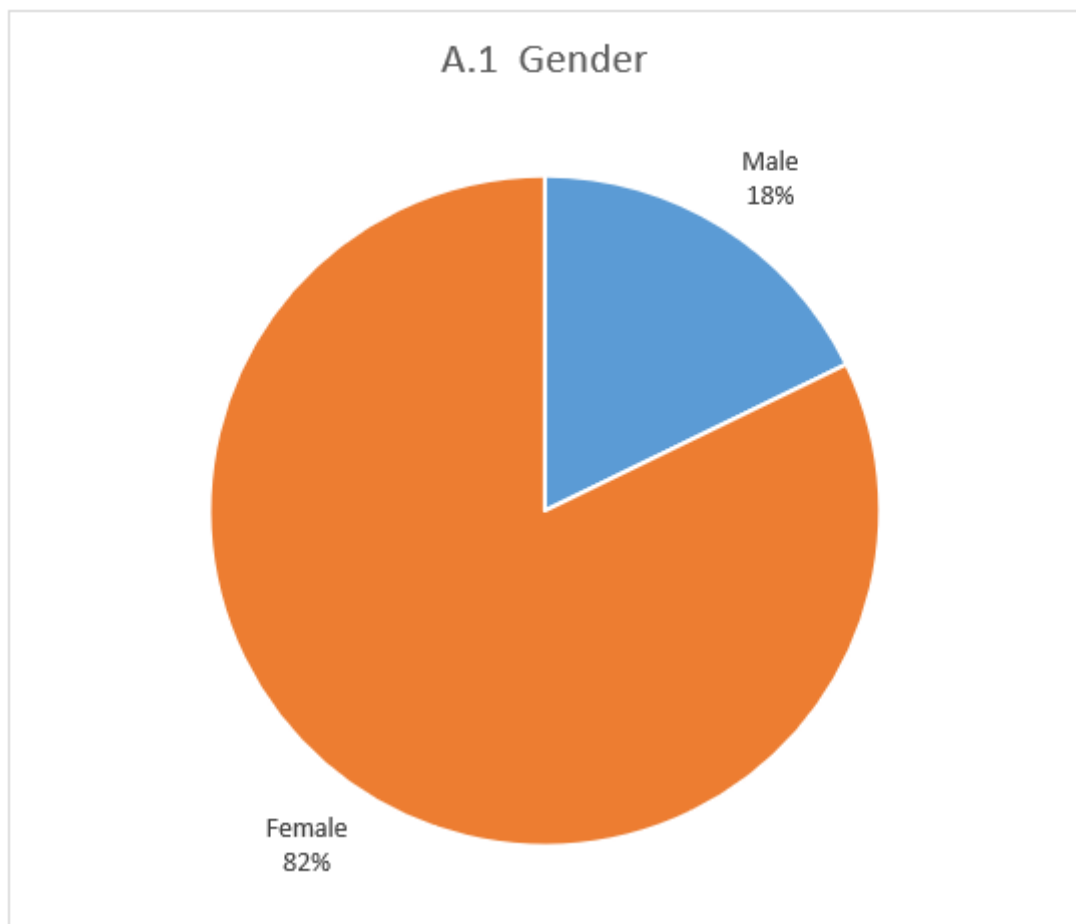
University of the Third Age is a part of the system for education-for-life at the Brno University of Technology and forms one of the modules of the Lifelong Learning Institute. Participants of University of the Third Age have the status of students of the university. University of the Third Age contributes to the popularisation of science and new discoveries, with the particular aim of making new technology and modern engineering more accessible to a wider public.

## Results from a Survey

### A. RESPONDENT PROFILE

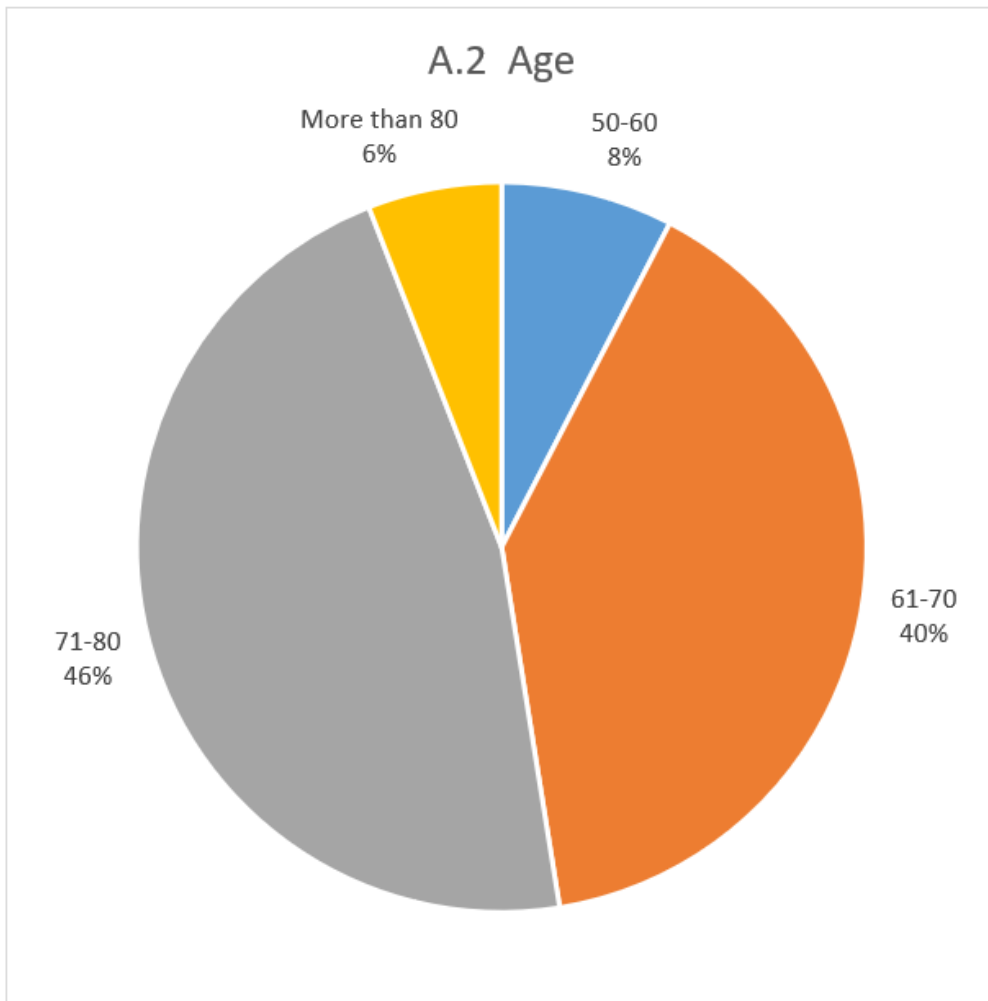
#### 1. Gender:

Male	21	18%
Female	97	82%



**2. Age:**

50-60	9	8%
61-70	47	40%
71-80	55	47%
More than 80	7	6%

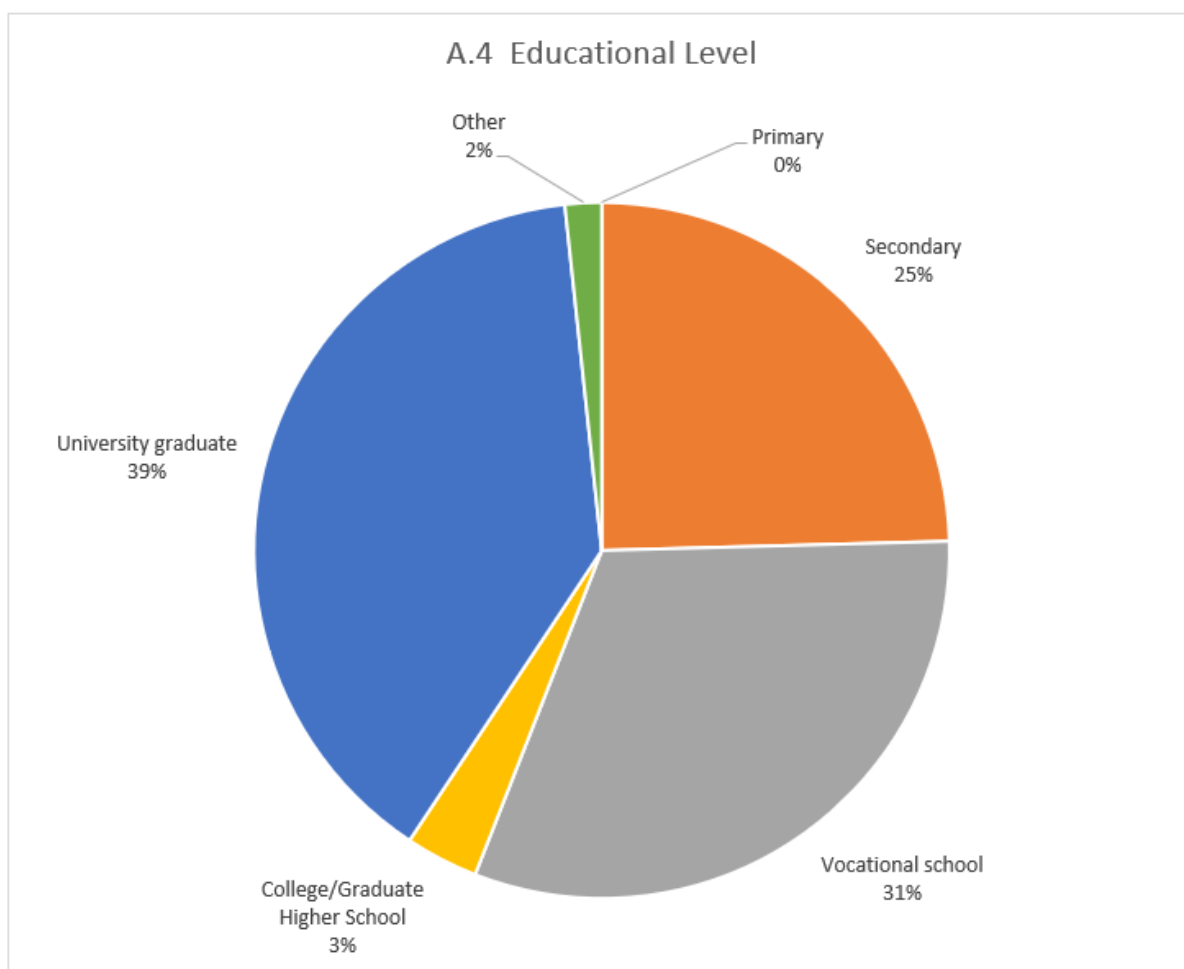


### 3. Country of Residence:

Czech Republic	118	100%
Germany	0	0%
Poland	0	0%
Slovakia	0	0%
Spain	0	0%
Sweden	0	0%
Other: the Netherlands, Austria, the UK, .....	0	0%

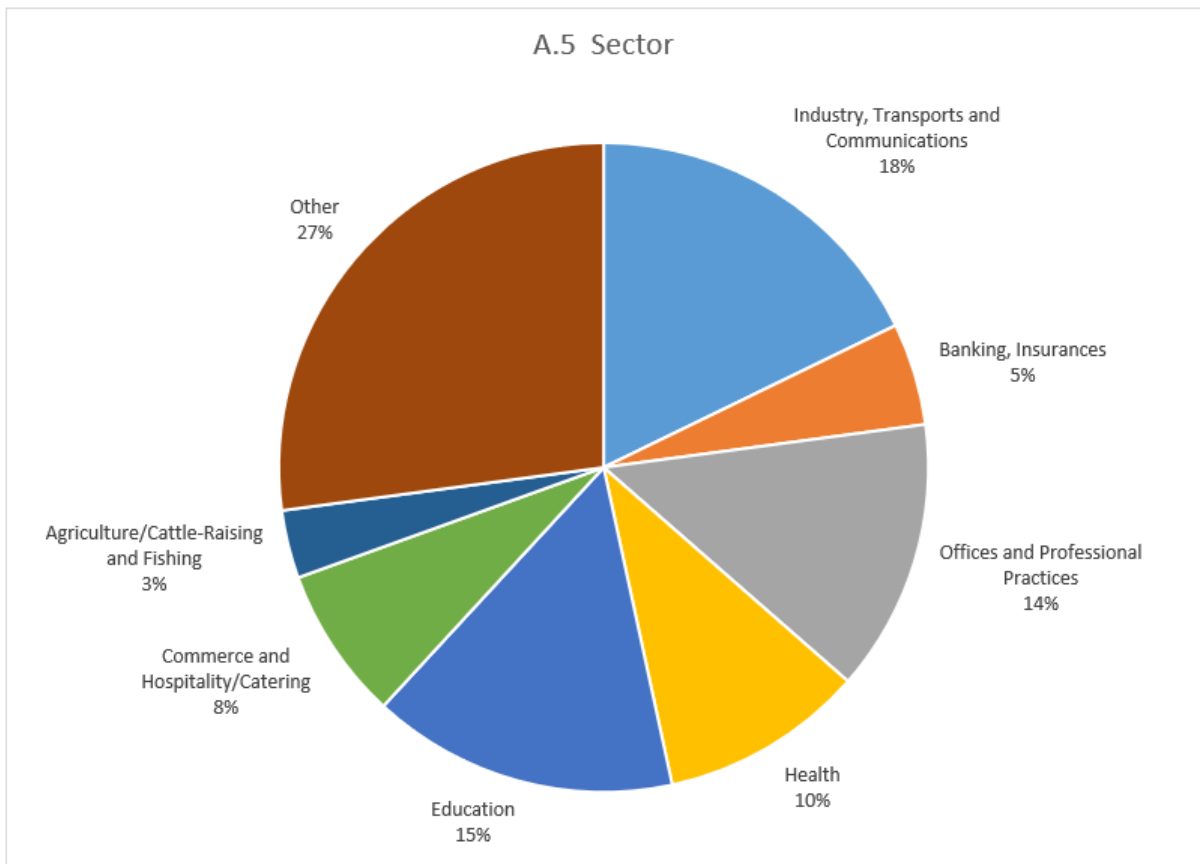
### 4. Educational Level:

Primary	0	0%
Secondary	29	25%
Vocational school	37	31%
College/Graduate Higher School	4	3%
University graduate	46	39%
Other	2	2%



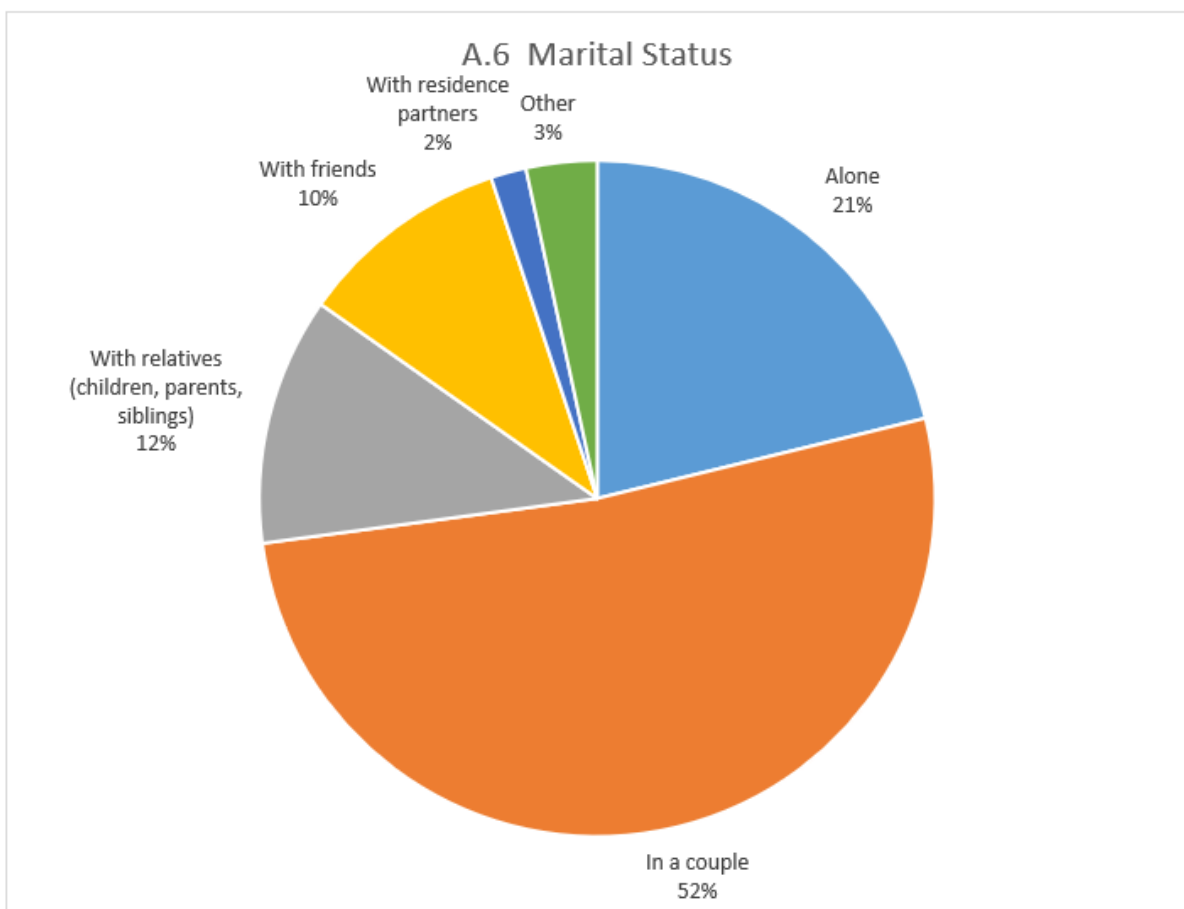
**5. Which sector do you currently work/or did you previously work in if you are not working now?**

Industry, Transports and Communications	21	18%
Banking, Insurances	6	5%
Offices and Professional Practices	16	14%
Health	12	10%
Education	18	15%
Commerce and Hospitality/Catering	9	8%
Agriculture/Cattle-Raising and Fishing	4	3%
Other	32	27%



## 6. Marital/Life Status:

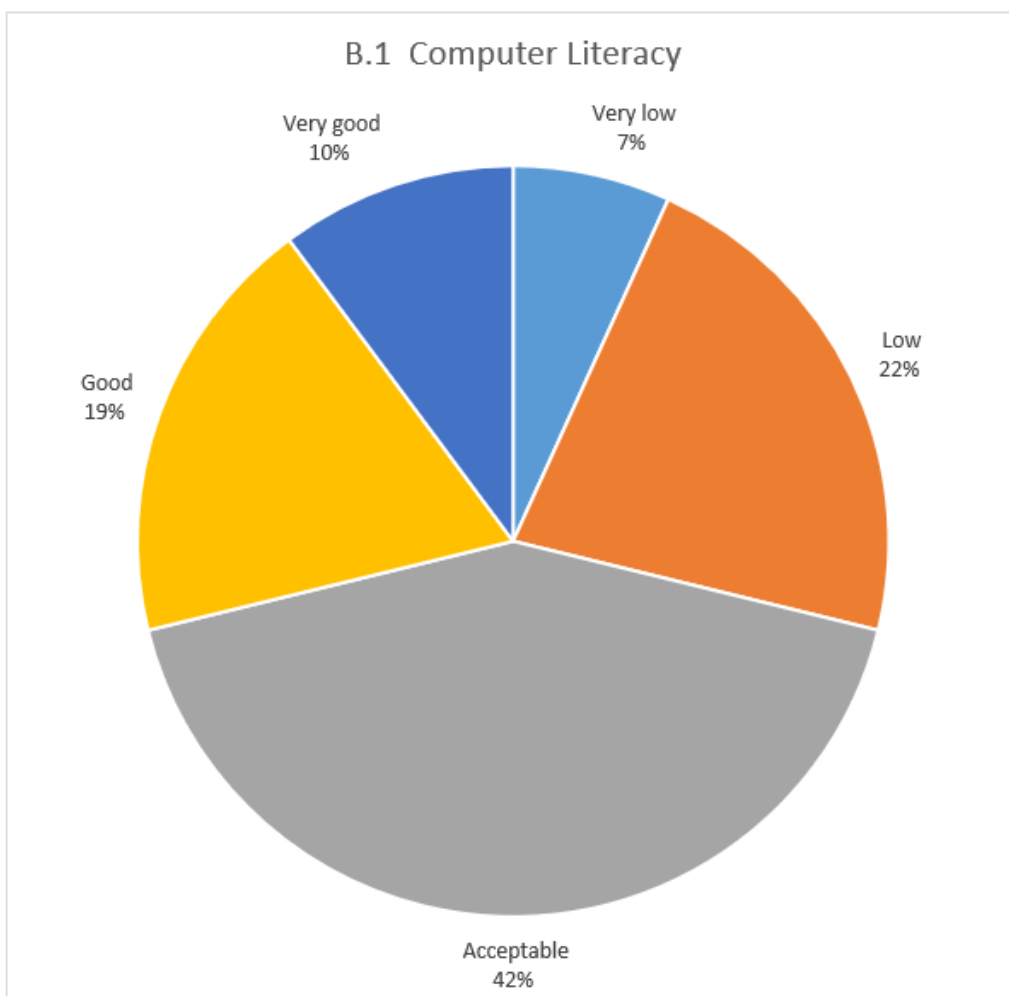
Alone	25	21%
In a couple	61	52%
With relatives (children, parents, siblings)	14	12%
With friends	12	10%
With residence partners	2	2%
Other	4	3%



## B. TECHNOLOGICAL RESOURCES AVAILABLE

### 1. How do you rate your computer literacy (the ability to use the computer)?

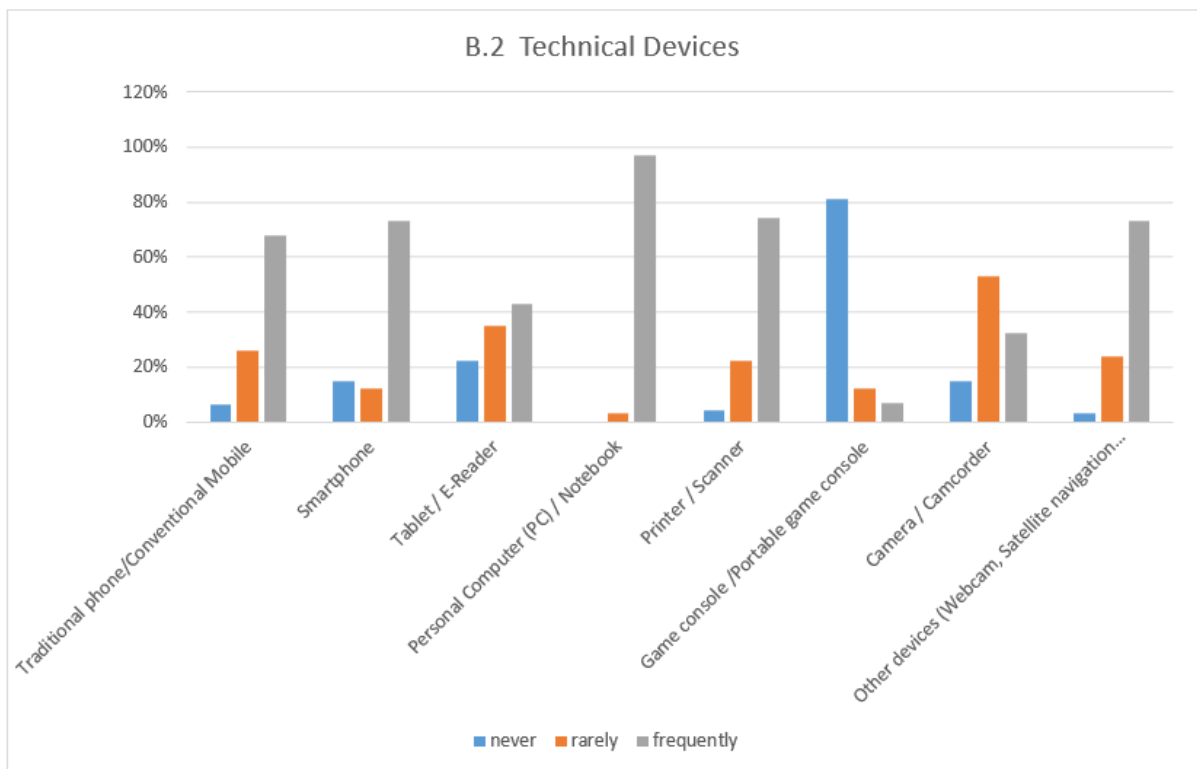
Very low	8	7%
Low	26	22%
Acceptable	50	42%
Good	22	19%
Very good	12	10%





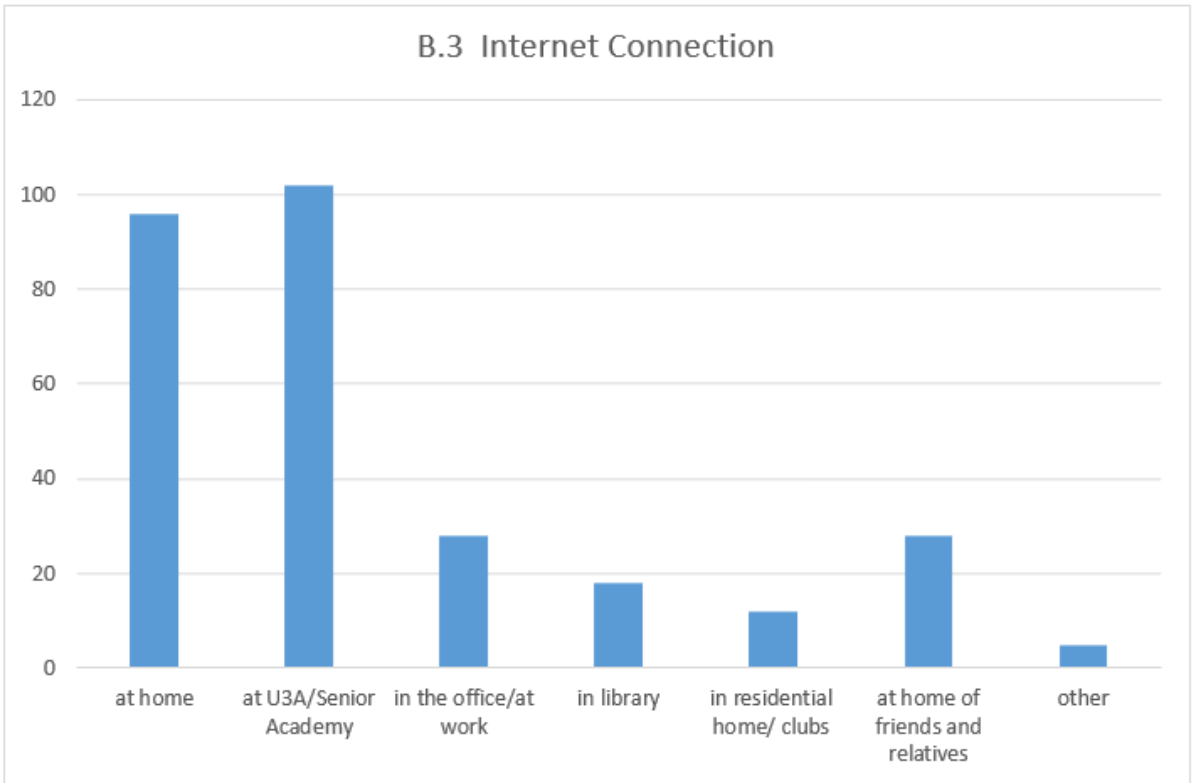
**2. Which of the following technical devices do you use and to what extent?**

	never	rarely	frequently
Traditional phone/Conventional Mobile	6%	26%	68%
Smartphone	15%	12%	73%
Tablet / E-Reader	22%	35%	43%
Personal Computer (PC) / Notebook	0%	3%	97%
Printer / Scanner	4%	22%	74%
Game console /Portable game console	81%	12%	7%
Camera / Camcorder	15%	53%	32%
Other devices (Webcam, Satellite navigation (GPS), etc. ...)	3%	24%	73%



**3. Where do you use access to the Internet connection (You can choose more than one)**

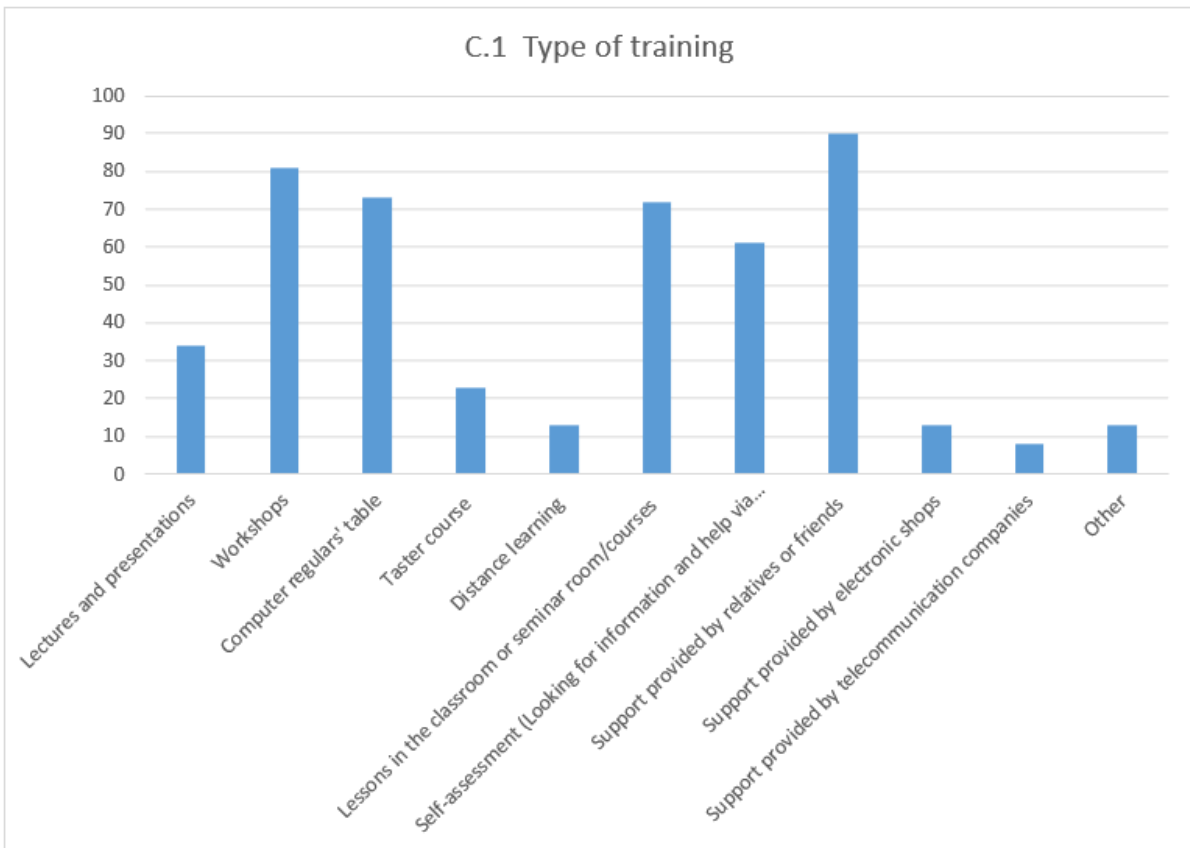
at home	96
at U3A/Senior Academy	102
in the office/at work	28
in library	18
in residential home/ clubs	12
at home of friends and relatives	28
other	5



## C. LEARNING MODES OF THE USE OF THE DIGITAL TECHNOLOGIES

1. When you need to learn the basic use or to deepen your knowledge about the use of digital technologies, which type of training do you prefer?

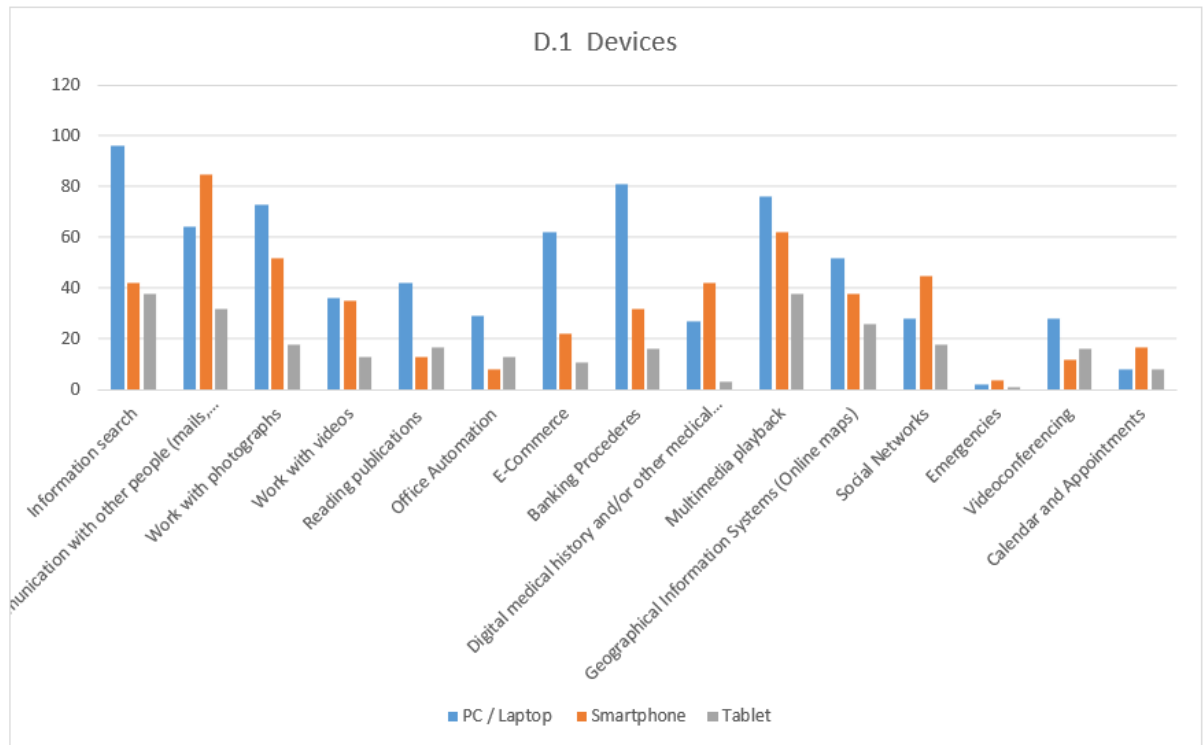
Lectures and presentations	34
Workshops	81
Computer regulars' table	73
Taster course	23
Distance learning	13
Lessons in the classroom or seminar room/courses	72
Self-assessment (Looking for information and help via the Internet)	61
Support provided by relatives or friends	90
Support provided by electronic shops	13
Support provided by telecommunication companies	8
Other	13



## D. CASES OF MORE FREQUENT USE OF DIGITAL TECHNOLOGIES

**1. Please indicate which devices you use for the possible uses of digital technologies in the left column**

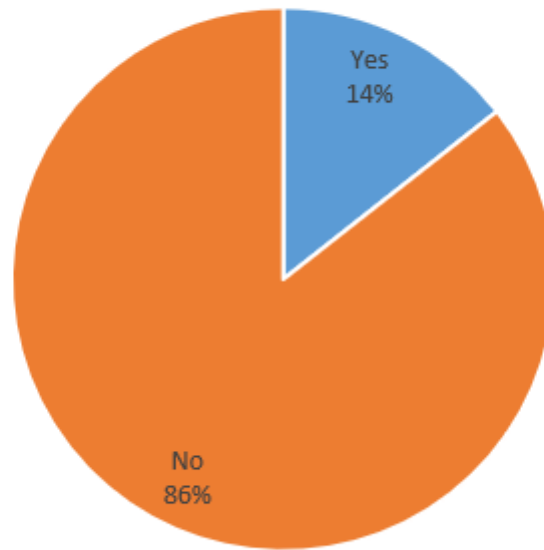
(You can choose more than one)	PC / Laptop	Smartphone	Tablet
Information search	96	42	38
Communication with other people (mails, conversations, messages)	64	85	32
Work with photographs	73	52	18
Work with videos	36	35	13
Reading publications	42	13	17
Office Automation	29	8	13
E-Commerce	62	22	11
Banking Procedures	81	32	16
Digital medical history and/or other medical procedures or monitoring systems (pedometer, sleep, the period, etc.)	27	42	3
Multimedia playback	76	62	38
Geographical Information Systems (Online maps)	52	38	26
Social Networks	28	45	18
Emergencies	2	4	1
Videoconferencing	28	12	16
Calendar and Appointments	8	17	8



## 2. Do you use voice input?

Yes	17	14%
No	101	86%

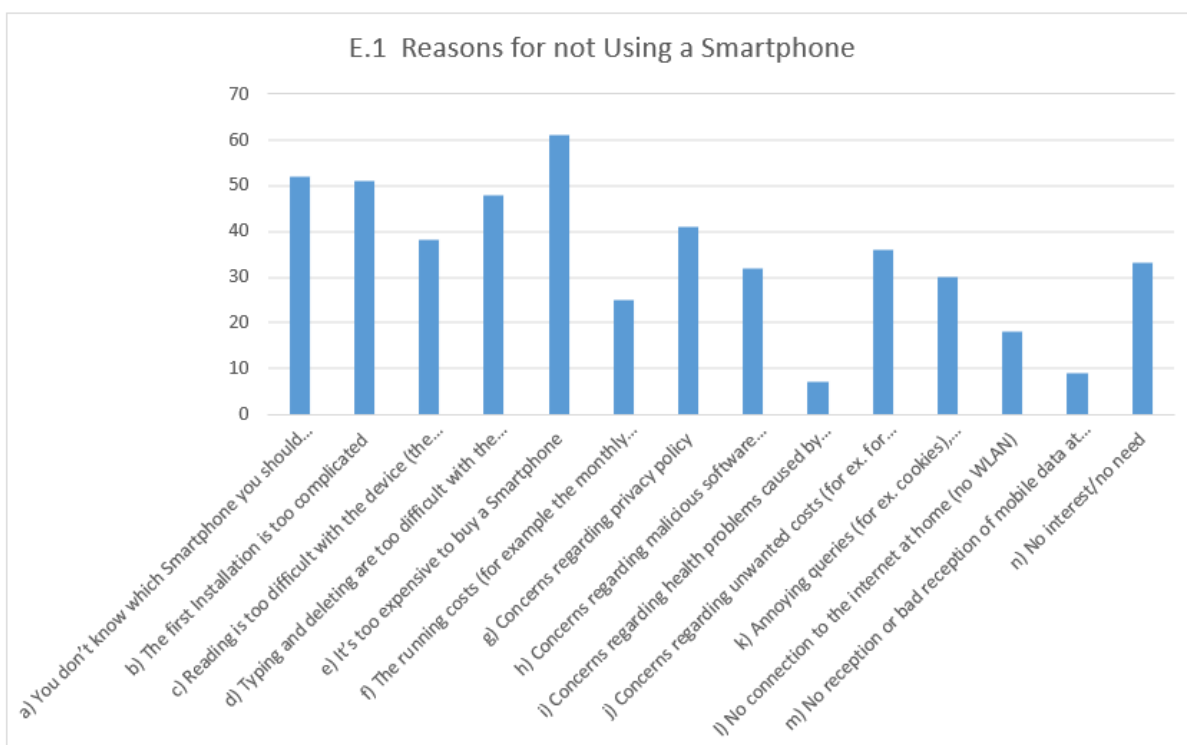
D.2 Voice Input



## E. THE SMARTPHONE

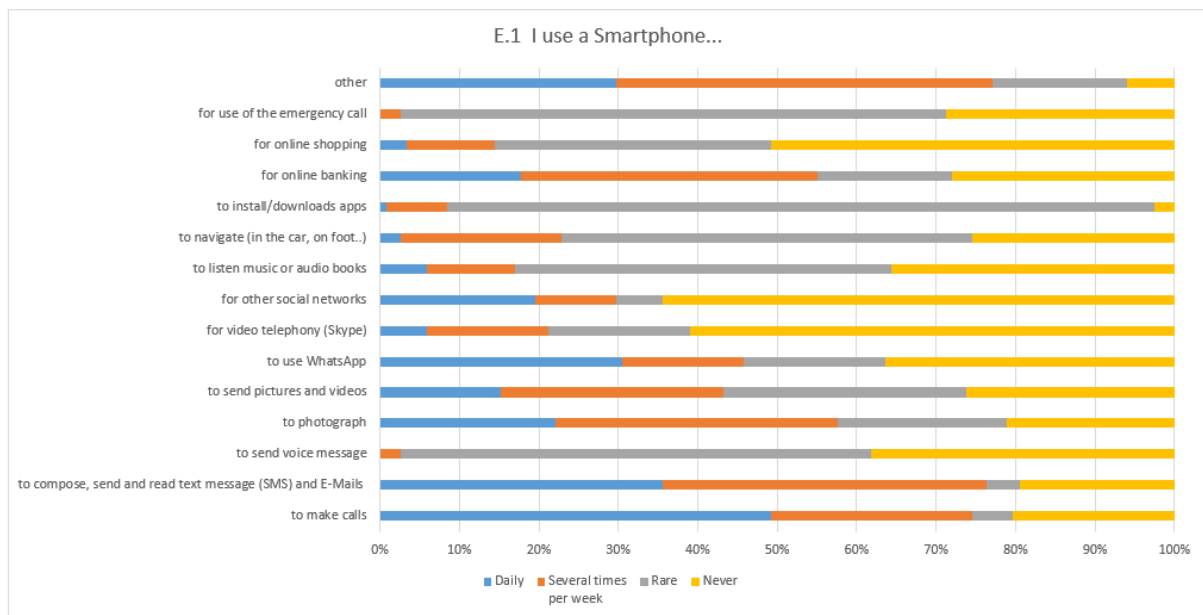
### 1. What are the reasons for older people for not using/not wanting to use a Smartphone? (Multiple answers possible):

a) You don't know which Smartphone you should buy (type, operational system)	52
b) The first Installation is too complicated	51
c) Reading is too difficult with the device (the screen is too small)	38
d) Typing and deleting are too difficult with the device (the control panel is too small)	48
e) It's too expensive to buy a Smartphone	61
f) The running costs (for example the monthly costs) are too high	25
g) Concerns regarding privacy policy	41
h) Concerns regarding malicious software (malware, for ex. virus)	32
i) Concerns regarding health problems caused by radiations	7
j) Concerns regarding unwanted costs (for ex. for things ordered caused by mistake)	36
k) Annoying queries (for ex. cookies), advertisements and so on	30
l) No connection to the internet at home (no WLAN)	18
m) No reception or bad reception of mobile data at the domicile	9
n) No interest/no need	33



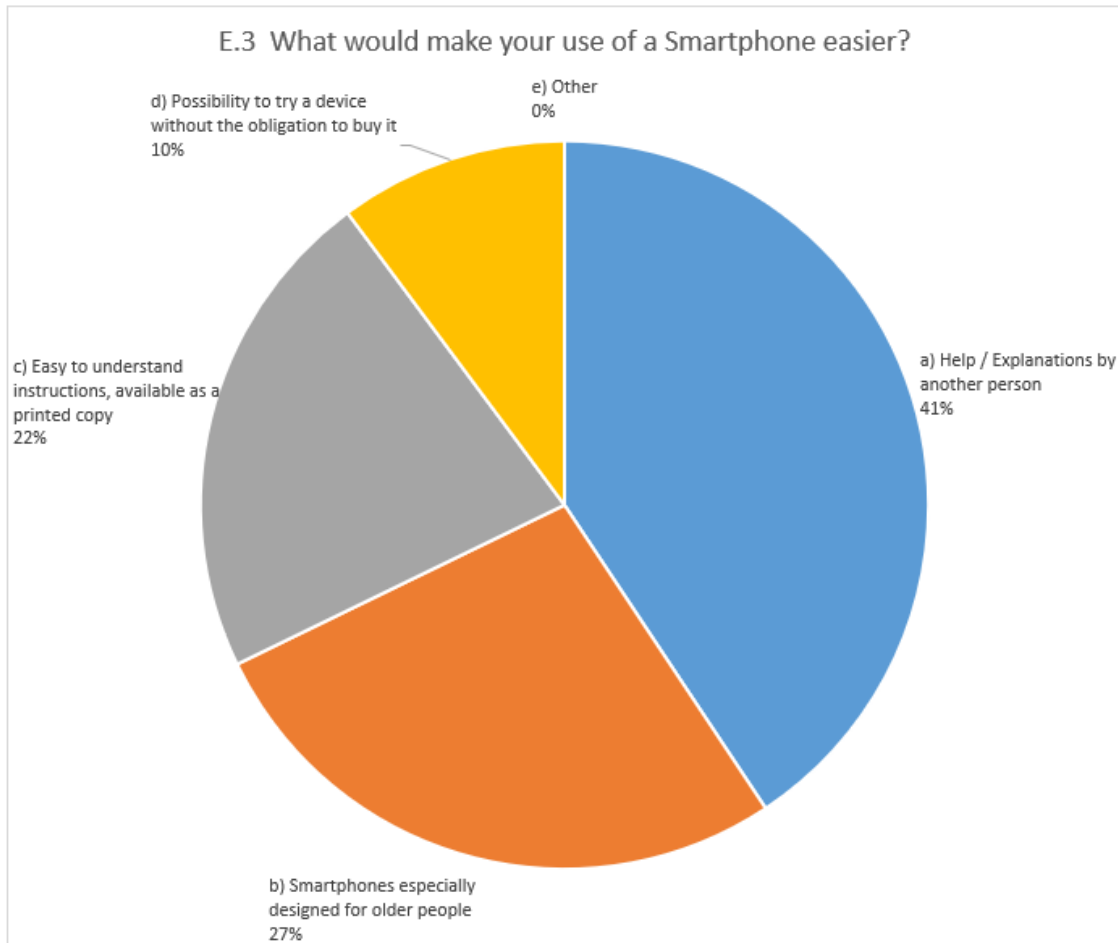
## 2. I use a Smartphone....

(Multiple answers possible)	Daily	Several times per week	Rare	Never
to make calls	58	30	6	24
to compose, send and read text message (SMS) and E-Mails	42	48	5	23
to send voice message	0	3	70	45
to photograph	26	42	25	25
to send pictures and videos	18	33	36	31
to use WhatsApp	36	18	21	43
for video telephony (Skype)	7	18	21	72
for other social networks	23	12	7	76
to listen music or audio books	7	13	56	42
to navigate (in the car, on foot..)	3	24	61	30
to install/downloads apps	1	9	105	3
for online banking	21	44	20	33
for online shopping	4	13	41	60
for use of the emergency call	0	3	81	34
other	35	56	20	7



### 3. What would make your use of a Smartphone easier?

a) Help / Explanations by another person	48	41%
b) Smartphones especially designed for older people	32	27%
c) Easy to understand instructions, available as a printed copy	26	22%
d) Possibility to try a device without the obligation to buy it	12	10%
e) Other	0	0%

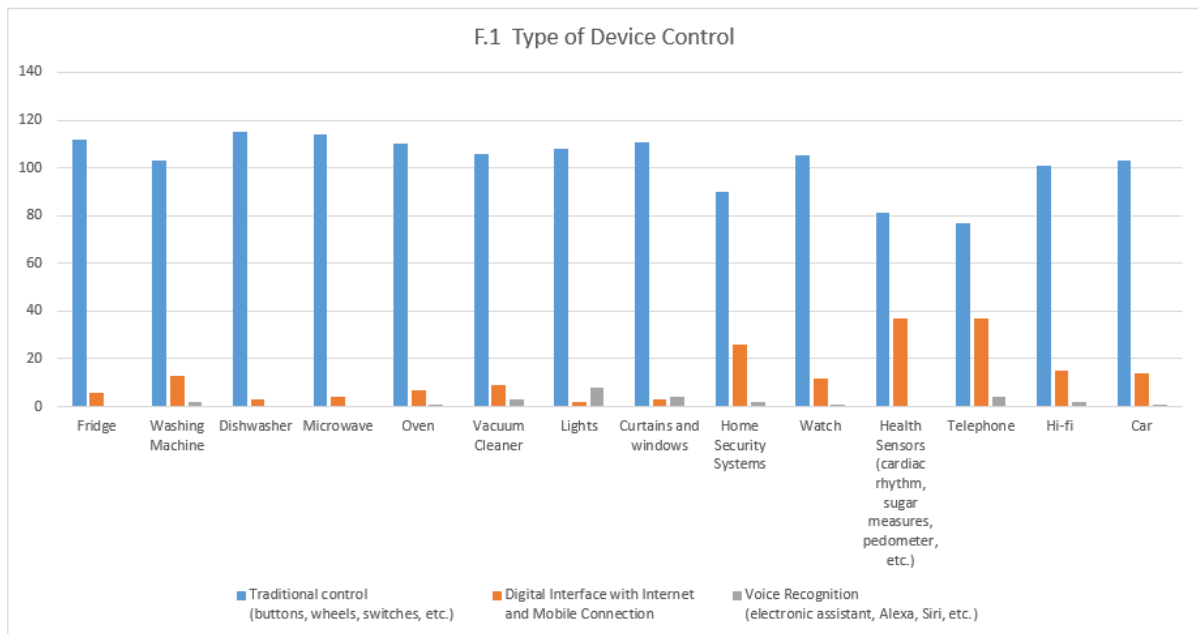




## F. THE INTERNET OF THE THINGS

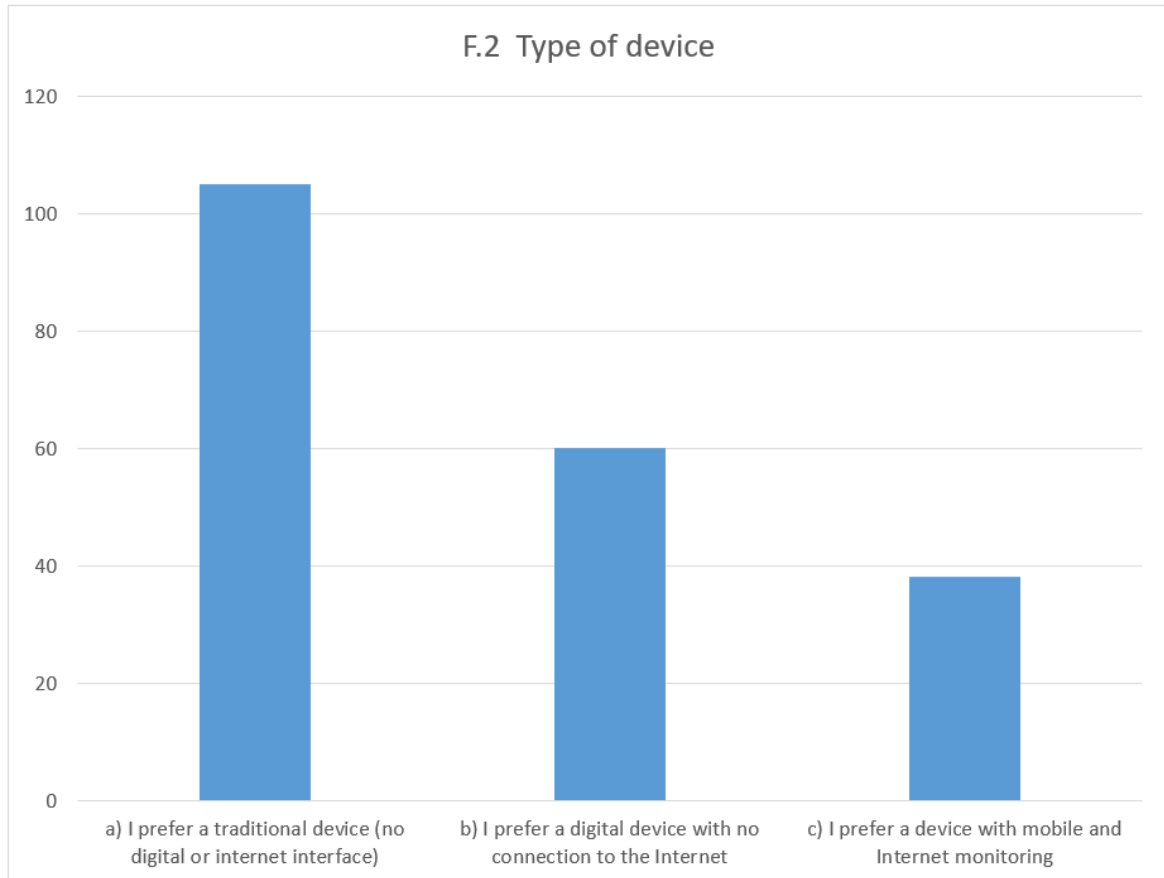
### 1. When you use an electronic device, how do you prefer to use/control it?

(You can only choose one per row)	Traditional control (buttons, wheels, switches, etc.)	Digital Interface with Internet and Mobile Connection	Voice Recognition (electronic assistant, Alexa, Siri, etc.)
Fridge	112	6	0
Washing Machine	103	13	2
Dishwasher	115	3	0
Microwave	114	4	0
Oven	110	7	1
Vacuum Cleaner	106	9	3
Lights	108	2	8
Curtains and windows	111	3	4
Home Security Systems	90	26	2
Watch	105	12	1
Health Sensors (cardiac rhythm, sugar measures, pedometer, etc.)	81	37	0
Telephone	77	37	4
Hi-fi	101	15	2
Car	103	14	1



**2. When you buy a new device, do you take in consideration if they have the possibility of being controlled by mobile or internet connection or do you prefer a traditional device? (You can choose more than one)**

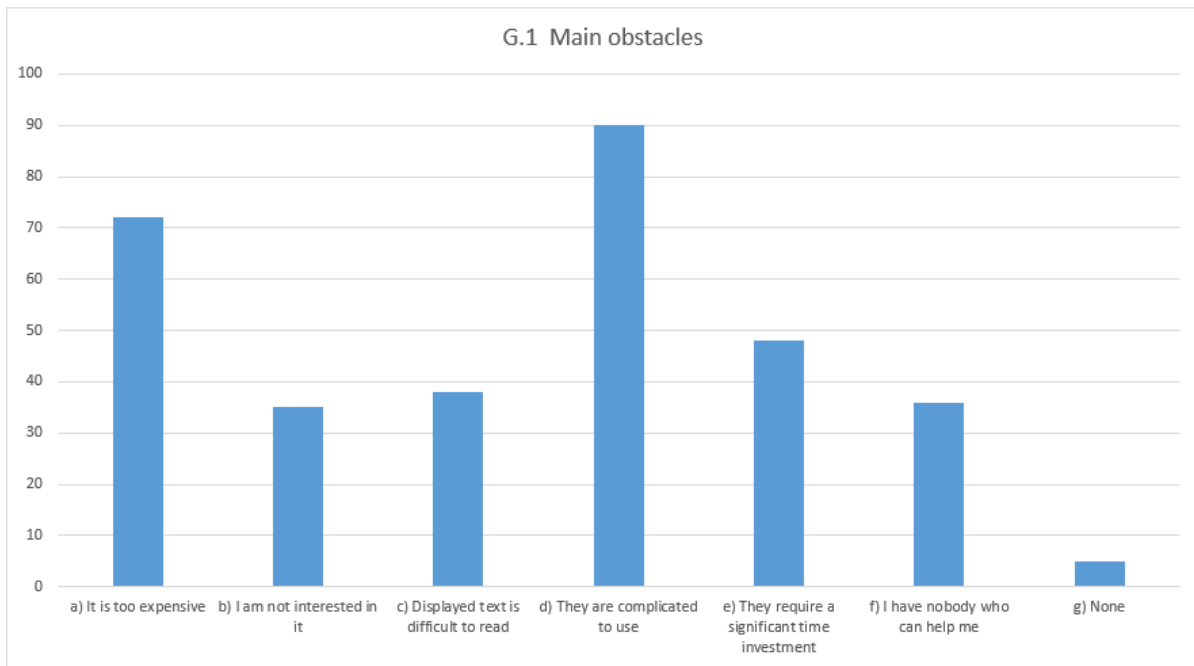
a) I prefer a traditional device (no digital or internet interface)	105
b) I prefer a digital device with no connection to the Internet	60
c) I prefer a device with mobile and Internet monitoring	38



## G. MAIN DIFFICULTIES IN THE USE OF DIGITAL TECHNOLOGIES

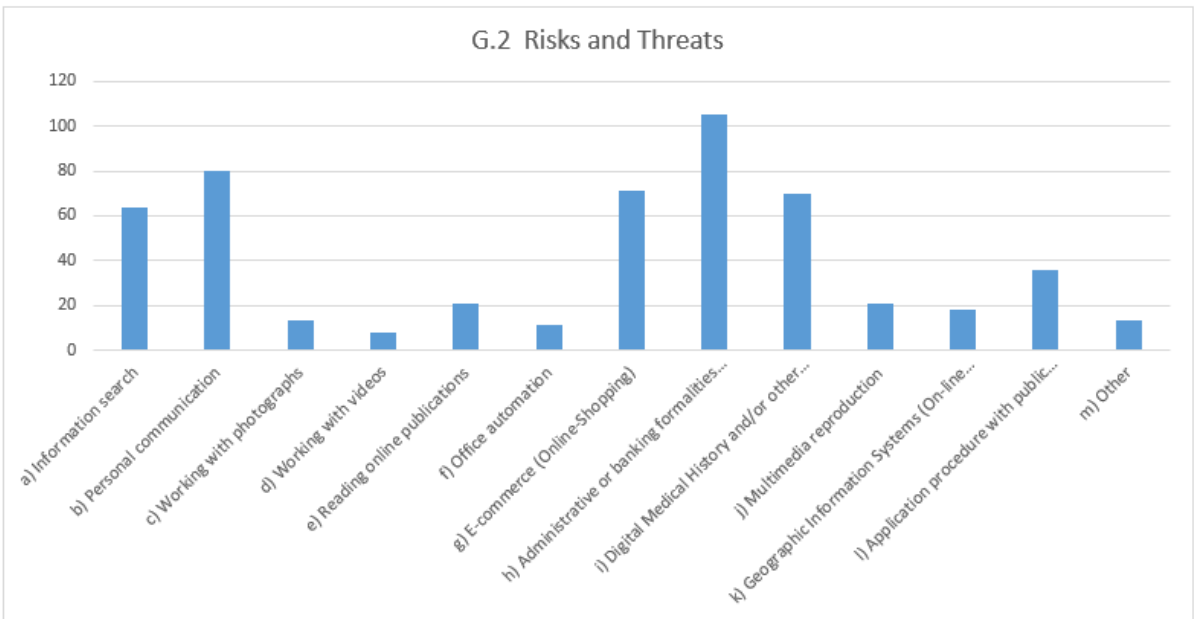
1. Indicate the main obstacles you face when using digital technologies and apps/applications.

a) It is too expensive	72
b) I am not interested in it	35
c) Displayed text is difficult to read	38
d) They are complicated to use	90
e) They require a significant time investment	48
f) I have nobody who can help me	36
g) None	5



**2. Specify which apps/applications of digital technologies make you most suspicious of/are most afraid in their use for reasons of loss of privacy, risk of theft or fraud, personal data leaks, ...**

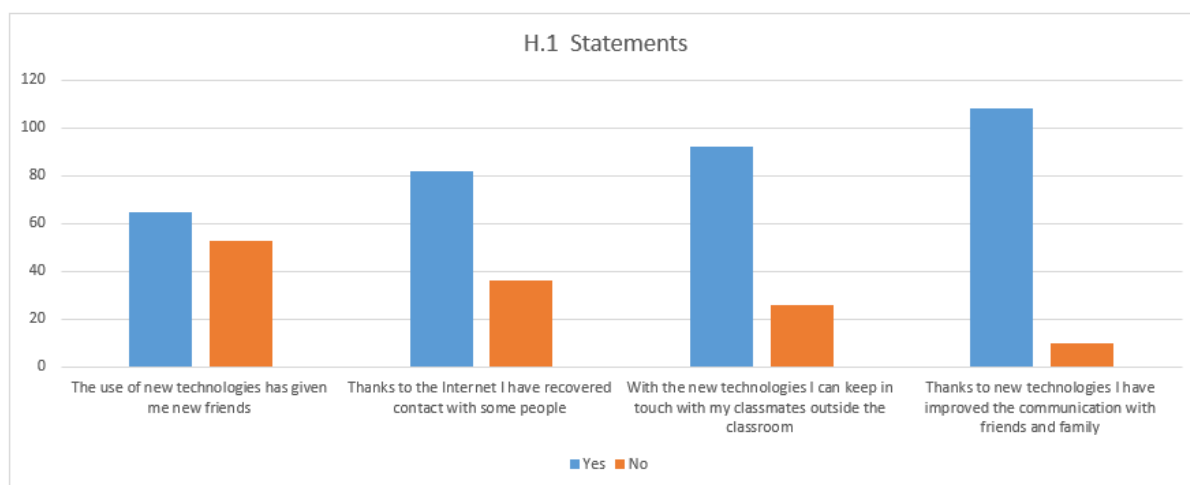
a) Information search	64
b) Personal communication	80
c) Working with photographs	13
d) Working with videos	8
e) Reading online publications	21
f) Office automation	11
g) E-commerce (Online-Shopping)	71
h) Administrative or banking formalities (Online-Banking)	105
i) Digital Medical History and/or other medical formalities	70
j) Multimedia reproduction	21
k) Geographic Information Systems (On-line maps)	18
l) Application procedure with public authorities (online communication)	36
m) Other	13



## H. PERCEPTION and ATTITUDE TOWARDS DIGITAL TECHNOLOGIES

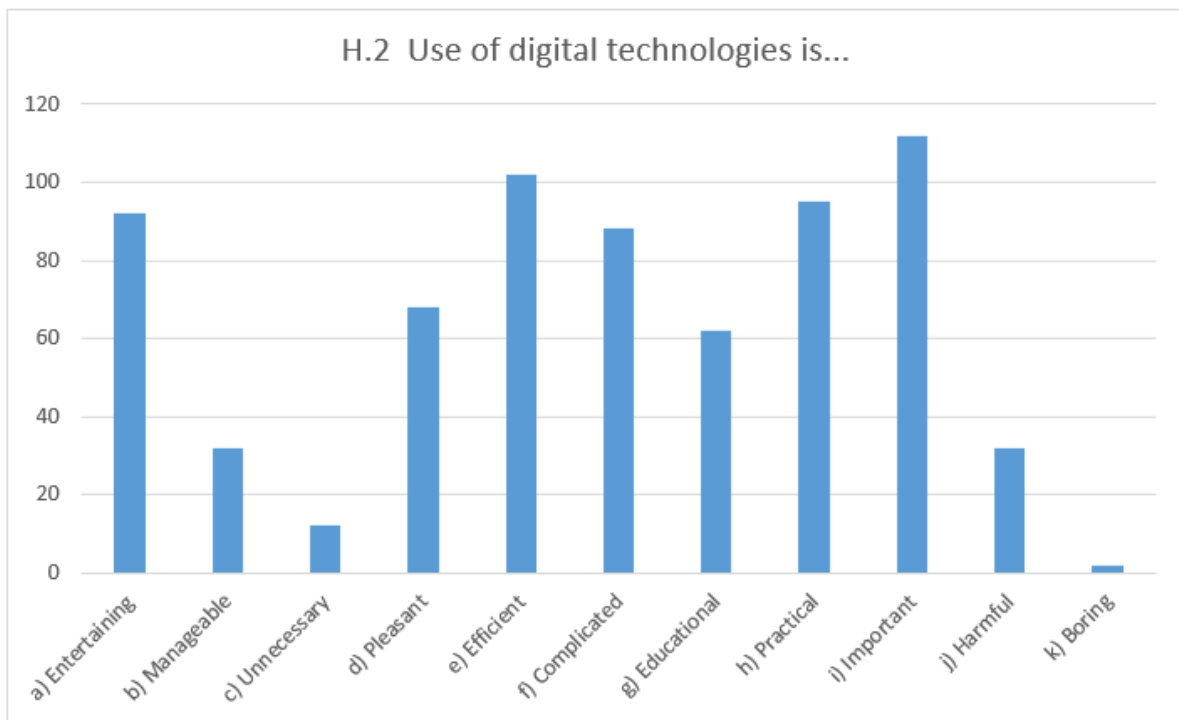
### 1. Indicate if you feel identified with the following statements:

	Yes	No
The use of new technologies has given me new friends	65	53
Thanks to the Internet I have recovered contact with some people	82	36
With the new technologies I can keep in touch with my classmates outside the classroom	92	26
Thanks to new technologies I have improved the communication with friends and family	108	10



**2. You consider that the use of digital technologies is...:(You can choose more than one)**

a) Entertaining	92
b) Manageable	32
c) Unnecessary	12
d) Pleasant	68
e) Efficient	102
f) Complicated	88
g) Educational	62
h) Practical	95
i) Important	112
j) Harmful	32
k) Boring	2



## Conclusion

This report offers relevant information for the next part of the project: enlargement of the seniors' ICT skills. Most of the respondents of the survey were women (82 %). About 46 % of the surveyed respondents were situated between 71 and 80 years of age, 40 % were 61-to-70-year-olds, the remaining 14 % corresponded to people between 50 and 70 years. All respondents have at least secondary education. Concerning their computer literacy, about 29 % of respondents consider their skills are low or very low, 42 % acceptable, 29 % good or very good. Smartphones are used by 73 % of respondents. Almost all respondents use a personal computer (97 %). Seniors mostly uses access to the Internet at home or at the University of the Third Age.

Respondents usually prefer support provided by relatives or friends, workshops and lessons in the classroom. Only 14 % of respondents use voice input. Although the goal behind the Internet of Things (IoT) is to have devices that self report in real-time, improving efficiency and bringing important information to the surface more quickly than a system depending on human intervention, almost all respondents prefer traditional control of the devices.

According to the results of the questionnaire, we can conclude that the majority of respondents have a positive attitude towards digital technologies and are willing to overcome the difficulties of using the equipment. Nowadays ICT cannot be separated from their daily needs. Because digital technologies have a great impact on seniors' lives, during the upcoming computer courses implemented within the SeLiD project, our special goal is to attract seniors' attention to the most popular IoT devices and to the artificial intelligence issues.