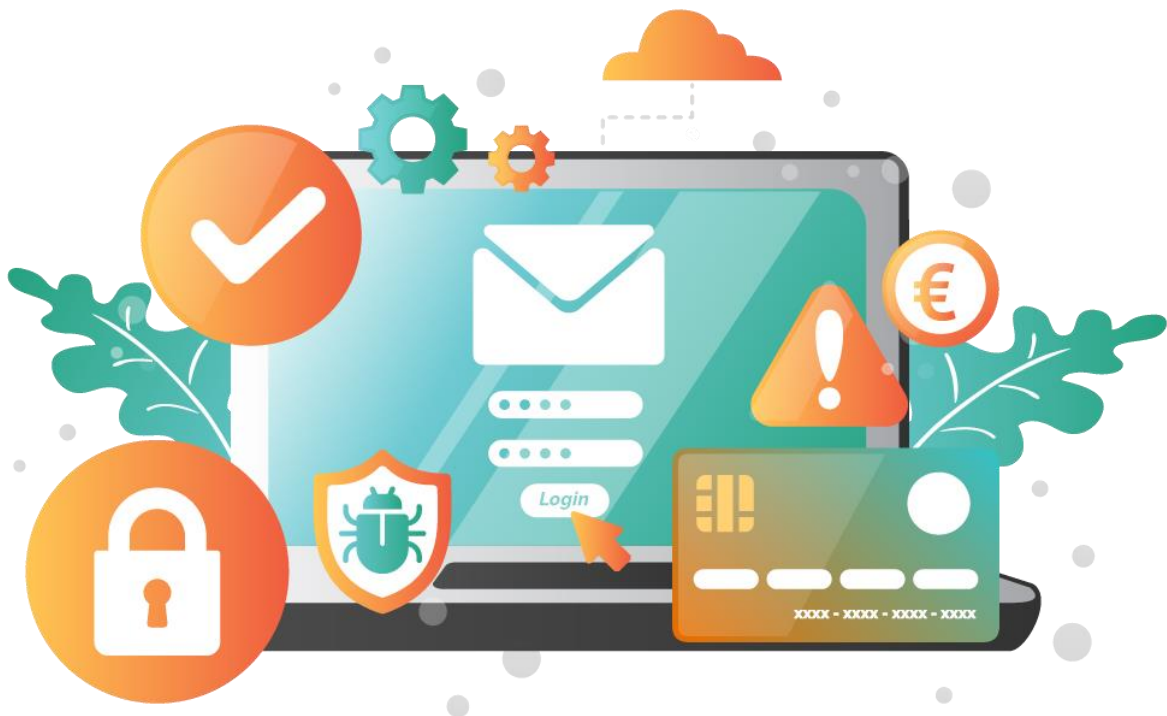# e-Protect project

Consumer and data protection skills for the elderly

IO1.A1 Desk Research

National Report: Switzerland

Contents

1. Profile of the digital elder society

The importance and use of modern information and communication technologies (ICT) has increased greatly in recent years. Since 1997, at least occasional use of the internet in Switzerland has risen steadily (cf. Fig. 1). In 2017 in contrast, 93% of all households in Switzerland had internet access.

This development, however, is not the same in all age groups: while the age groups up to 69 years show a strong increase between 1997 and 2020 (cf. Fig. 1), the age group over 70 years falls back. The same difference between these age groups can be found generally in Europe. Particularly the elderly aged 70 and more use the internet less frequently than younger people. Finally, the share of internet users over 70 years was only at 52 % at the end of 2020.
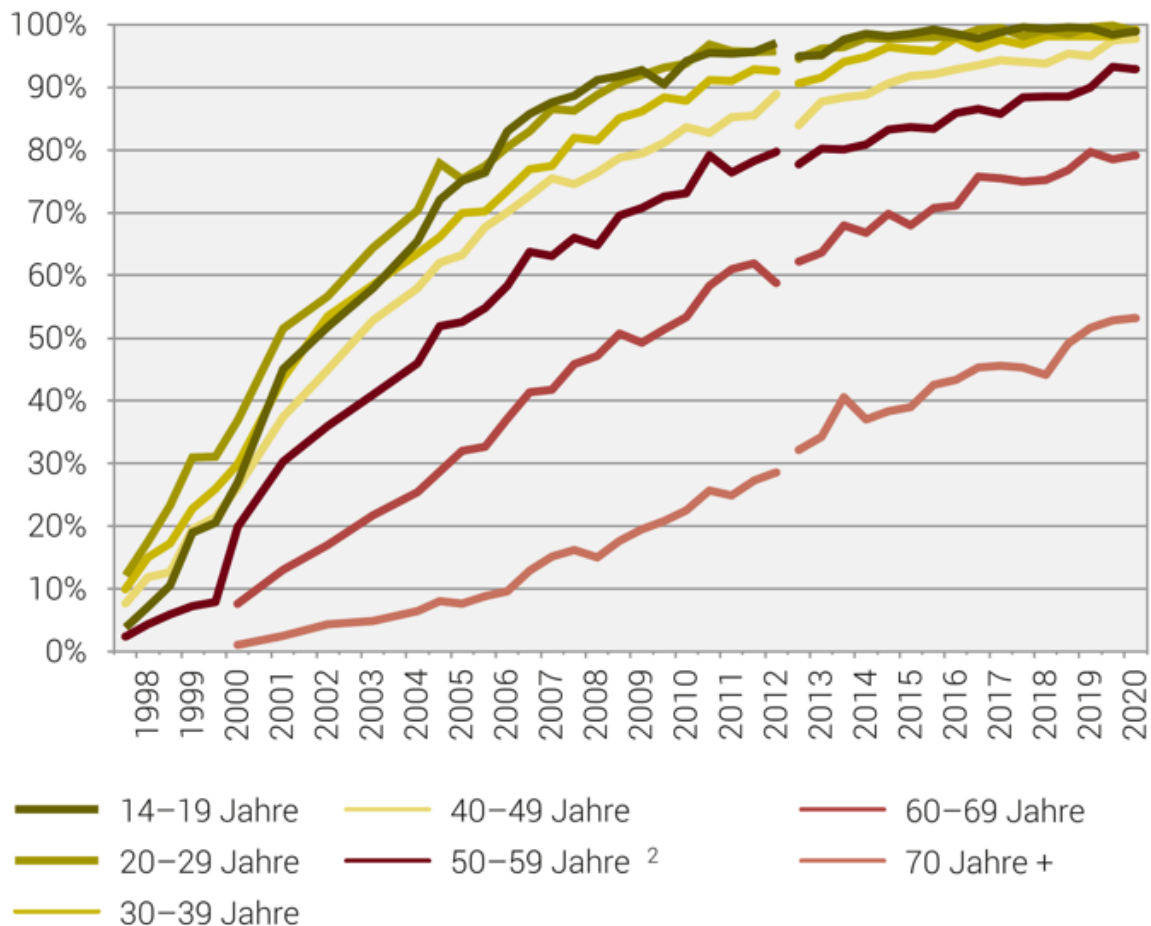

Figure 1: Internet use in Switzerland by age (Jahre = Years), BFS 2020

2. Use of the internet and digital devices among the elderly (65+)

Use of mobile devices

In Switzerland, 74% of people over 65 years own a computer or a laptop at home. There is, however, a remarkable difference between the elderly who own a computer and those who do not. The average age between those two groups differs significantly, where the elderly owning a computer are on average younger than those who do not. In recent years, the smartphone has become an integral part of our everyday lives especially as a device for communication and to access information. Research shows that the smartphone is for the older population too, a device of the daily life as 69% of the participants attest. Moreover, 81% of the elderly users state a daily usage. Here again, there is a clear age gap: people who use a smartphone are on average, younger than elderly who do not use a smartphone. Additionally, only 25% of the elderly over 85 years use a smartphone. The age difference is also evident in the tablet use (72 years to 75 years). The overall tablet use, however, has increased in all age groups by 43% in 2020. While there is a gender difference in the usage of the smartphone, where men tend to use the smartphone more often than women, there is none concerning the usage of a tablet.

Daily internet use

In recent years, the proportion of internet users over the age of 65 has increased significantly. Between 2009 and 2019, the number of online users has increased from 37.8% to 74.2%. The results of the survey "Digital Seniors III - 2020" show that the internet is used for an average of 92 minutes a day. At the same time the majority (59.7 %) use the internet for no more than one hour a day. Men use the internet for an average of 97 minutes compared to women who spend 85 minutes a day using the internet. People aged 80 and more, use the internet for a slightly shorter time per day than younger seniors (65-79 years).

In addition to the stationary internet use, mobile internet use, e.g., via smartphone or tablet, is becoming increasingly important: 70.2 % of online users over the age of 65 also use a smartphone or tablet to access the internet. More specifically, 31.4 % of the elderly do so daily, 29.8 % several times a week, 15.8 % several times a month and 23.0 % use it less often. Nearly all seniors (94.5%) using the mobile internet own a smartphone while only half of them (58.8%) are in possession of a tablet.

Reasons for (not) using the internet

There are several reasons why people over 65 years use the internet. Almost all of them use the internet to look up general information and to send and receive emails. Among all participants 80% do so to chat/telephone and 78% for navigation and travel information. This is followed by the aspects of searching for information on health topics, online bookings, reading newspapers and internet banking, each with between 50% and 65% usage shares. Less than 50% use services such as online services from public offices, buying goods and streaming services. Not even one in three use services such as online games, social networks and the sale of goods. Only very few seniors (13%) use the internet for commenting, discussing and posting blog entries.

On the other hand, there are also reasons, why some seniors do not use the internet. The most common reasons are complexity of use (77%), security concerns (74%) and too much effort to learn the usage (65%). Furthermore, the lack of support (37%) and the costs of accessing the internet (29%) are stated as reasons for not using the internet. These two reasons are also stated to be reasons for not using the internet but are less prevailing as the percentage shows.

3. Common threats and problems in using the internet

Privacy and data protection

Personal data of internet users are of central importance in the digital economy. The more frequently and automatically personal data and the associated online activities are collected, the more often large amounts of data (big data) are analysed. Personal data is information that is considered private and should not be made public without the consent of the person concerned. They are more or less confidential and can be divided as follows:

- personal data (surname, first name, date of birth, ID number),
- contact information (home address, telephone number, e-mail),
- payment information (credit card number, bank account)
- other personal data (photos, whereabouts, state of health, employment situation, etc.)

87% of the Swiss population stated that they had passed on personal data of various kinds via the internet. Only 7% stated that they had not provided any such information online. Given the associated threats to privacy, the question of ownership, monitoring and control of personal data is becoming increasingly important. Thus, sufficient ICT skills are crucial to secure data protection on the internet.

Risk factors for insufficient ICT skills

There are different risk factors for insufficient ICT skills. The most prominent factor is age. At the same time, the level of other basic skills such as literacy skills are also a key factor in ICT use. The better a person can read and write, the more competent they are in using digital technology. Furthermore, income plays a substantial role: The lower the income, the lower the ICT skills. This finding is reflected in the comparison based on the monthly income. Only 54% of the people with a monthly income of up to 4,000 Swiss Francs use the internet compared to 97% of individuals with a monthly income of 10,000 Swiss Francs. A study by the Canton of Berne shows that almost 20% of people living in poverty do not use the internet because they are unable to cope with it. Moreover, lower levels of education correlate with lower ICT skills. This alignment is also reflected in the use of the internet where only 66% of people without a post-compulsory qualification use the internet compared to 97% of people with a qualification at tertiary level.

4. Current strategies, policies and programmes for providing relevant education and training

Consumer and data protection policies

The "Federal Data Protection Act" regulates data protection for the federal authorities and for the private sector. At the level of the cantons, the respective cantonal data protection law applies. Compliance with the Federal Data Protection Act is monitored by the Federal Data Protection and Information Commissioner and their secretariat. However, the legal level of data protection in Switzerland is insufficient compared to the European environment. The data protection Act was valid up to August 2020, dated from 1993. This explains the inaccuracy addressing the problems prevailing today in the area of the internet and digital communication. In September 2020, the Swiss Parliament passed the revision of this law adapting it to the EU-level and to the modernised data protection convention of the Council of Europe.

While in other countries consumer protection organisations are often substantially supported by the state, in Switzerland private organisations represent the interests of consumers vis-à-vis business, politics and the public. Their activities are self-financed to a large extent (through membership fees, donations or own publications). These consumer protection organisations are active in various areas: They lobby on a political level in the interest of consumers, for example when drafting laws concerning consumer and data protection in the internet. In recent years, the organization "Consumer protection" has increasingly addressed data protection concerns and advocated for strong and enforceable rights for consumers regarding their personal data on the internet.

National strategies and synergies in internet safety

The majority of existing offers to promote basic ICT skills are supported within the framework of special national laws and are therefore, co-financed by the Federal Government and the cantons. The "Adult Education Act" has been in effect in Switzerland since the beginning of 1 January 2017. On the basis of this law, the Swiss state offers financial support for Adult Education-programmes in the area of basic skills, which includes ICT skills.

Beyond the legal, goals and measures have been formulated in the Federal Council's "Digital Switzerland" strategy and the "e-Inclusion action plan". Both have a recommendatory character and do not provide resources for implementation.

- "Digital Switzerland is a strategy, where the Federal Council formulates goals in order to consistently use the opportunities of digitalisation in all areas of life. The Swiss population should be made fit for digitalisation, which is why the education system is assigned a central role in imparting these skills.
- e-Inclusion Action Plan: The e-Inclusion Action Plan 2016-2020 of the "Digital Inclusion Switzerland"-network defines various fields of action to promote equal opportunities and the participation of all. One field of action is the promotion of ICT skills. The measures proposed

include support for developing low-threshold further education offers and promoting the training and further education of adult educators.

Best practices and good examples

As the national strategies show, there is no specific offer in Switzerland for the elderly to acquire digital skills in the area of data and consumer protection. However, there are several organisations that offer regional digital literacy courses with different levels of difficulty.

Pro Senectute is the largest professional and service organisation for seniors in Switzerland. It offers introductory courses for seniors in the use of computers, mobile phones, smartphones or tablets and the use of the internet:

<https://www.prosenectute.ch/de/dienstleistungen/freizeit/bildung.html>

The Adult Education Centres are central pillars in Swiss adult education. Since summer 2014 they have explicitly focused on the basic skills of adults such as ICT-Skills. Correspondingly, the Adult Education Centre in Basel offers computer courses for seniors.

< https://www.vhsbb.ch/kursprogramm/grundkurs-computer-232866>

The volunteer organisation "Internet and Computer Corner" is an open computer instruction offer for residents of the retirement centres of the city of Zurich and other interested senior citizens of the corresponding neighbourhood.

< https://computercorner.ch/>

There are several private companies in Switzerland that offer computer courses for senior citizens. The private company SurfingSenior offers different computer courses for senior citizens. They only work in small groups to ensure the greatest learning effect.

< https://www.surfingsenior.ch/>

5. Challenges on addressing the gaps

Challenges and gaps

The requirements for the competent use of ICT are constantly increasing. People over 65 years are unable to keep up with this. Some of them reach out to adult education programmes in order to acquire basic ICT skills. However, a large proportion of the seniors in Switzerland who have little, or no ICT skills are not reached by courses to acquire these skills. The result is an increased risk of being excluded from social life, the labour market or the lifelong learning process. People with low basic ICT competences who do not attend ICT courses either through the regular structures or through private offers are called "non-participants".

Difficulties accessing existing programs

The reasons why non-participants do not take part in corresponding educational offers vary. Here are some challenges that need to be addressed:

- Lack of interest and awareness: The "non-participants" are able to cope with their basic ICT skills. Therefore, they do not see the need for action.
- Lack of appropriate offers: The existing offers are not suitable for the elderly.
- Lack of information: People over 65 years often do not know about ICT-courses.
- Course costs: The courses are too expensive for some of the "non-participants".
- Geographical distribution of offers: The travel time to the courses is too long. The courses are mainly concentrated in urban regions.

6. Skills validation systems and processes

Swiss national qualifications framework

The Swiss national qualifications framework or Vocational and Professional Qualifications (NQF VPQ) is based on the European qualifications framework (EQF). The following types of qualifications are referenced to the NQF VPQ:

- Vocational qualifications: these are upper-secondary level qualifications awarded upon successful completion of 2 or 3-4 years of training
- Professional qualifications: these are tertiary-level professional qualifications awarded either by taking a federal professional examination or by attending a study programme at a professional education institution. There are also specific qualifications awarded by the Swiss Federal Institute for Vocational Education and Training (SFIVET) to vocational schoolteachers, workplace trainers, branch course instructors and examiners working within the Swiss VET sector as well as to teachers and examiners working within the Swiss professional education sector.

As the above shows, the NQF is only focused on vocational and professional education and training. The competencies needed as an adult education trainer are not included. This is why the SVEB, in cooperation with other stakeholders, has developed a skill framework for the trainers in the area of basic skills.[1] This also includes competences to promote the use of simple, useful ICT applications in everyday life, taking into account the needs and resources of the target group such as elderly people.

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[1] See Rahmenprofil für die Ausbildung der Ausbildenden (AdA) im Bereich Grundkompetenzen (SVEB).

7. Field Research

Questionnaires

This first part of the field research enclosing a quantitative method was conducted with a questionnaire asking adult educators about their experiences and their opinion on adult education with seniors. This questionnaire was answered by 18 adult educators form Switzerland. A vast majority (61%) of these adult educators offer lifelong learning trainings for the elderly. This is followed by the theme of leisure (33%). Furthermore, 44% of the adult educators chose the category of other. Investigating their specification on other offers, the result clearly reveals the prevalence language courses (six out of eight answers). While there are some offers on health, entertainment and sports as well as skills training, there were no adult educators taking part who offer employment programmes and religious activities. The missing of the first might be explained by the age of the seniors, as individuals over 65 years have retired in Switzerland. The later, however, cannot be explained when looking at the numbers and would need further investigation, maybe on a qualitative level.

The striking finding of this graph (figure 2) is concerning the research topic at hand. While this research focuses on digital skills of the seniors only 17% of the adult educators mentioned offering digital skills education. This finding is in as far striking as it allows two different interpretations: on the one hand, it could be understood as there is no supply for the demand of digital skills education for seniors. On the other hand, it might indicate a lack of demand of digital skills education which results in a reduced supply. Either interpretation is further investigated in this research especially though the qualitative research targeting seniors directly.
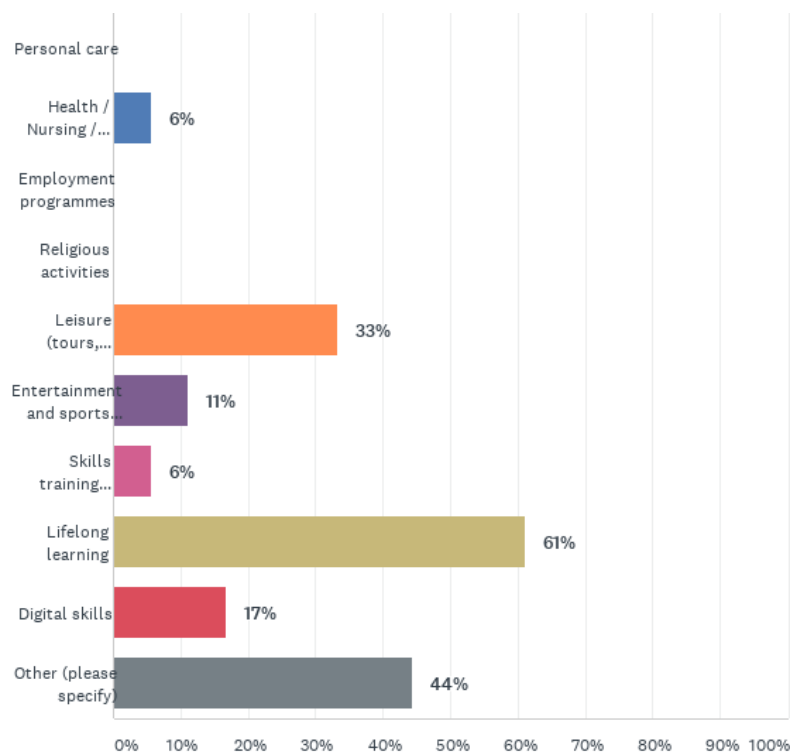

Figure 2: What kind of education/training do you offer to the elderly? (N=18)

When asked what challenges affected the participation of the elderly in digital skills training there were three issues which were named to affect the participation to a great or even a very great extent. The first issue, where over 60% of the adult educators agreed to affect the participation from some up to a very great extent is the lack of self-competence in digital settings. This issue is followed by age-related issues, such as eyesight and hearing, and the low perceived usefulness. Linked with the low perceived usefulness is the lack of motivation which is concerned by over 50% of the adult educators to affect the participation of seniors in digital skills training to some or a (very) great extent.

Looking on the other side of the issues that do not affect the participation at all, there are two rather surprising results. Physical mobility as well as the low level of basic skills are considered by 35% of adult educators to not influence the participation of the elderly at all. While the mobility issue was concerned by equal 35% of adult educators to have some effect on the participation, putting the issue into perspective again, additional 29% of the adult educators believe that a low level of basic skills would only affect the participation to a little extent. Therefore, there seems to be a consensus that the low level of basic skills does not or only to a little extent affect the participation of the elderly in digital skills education.
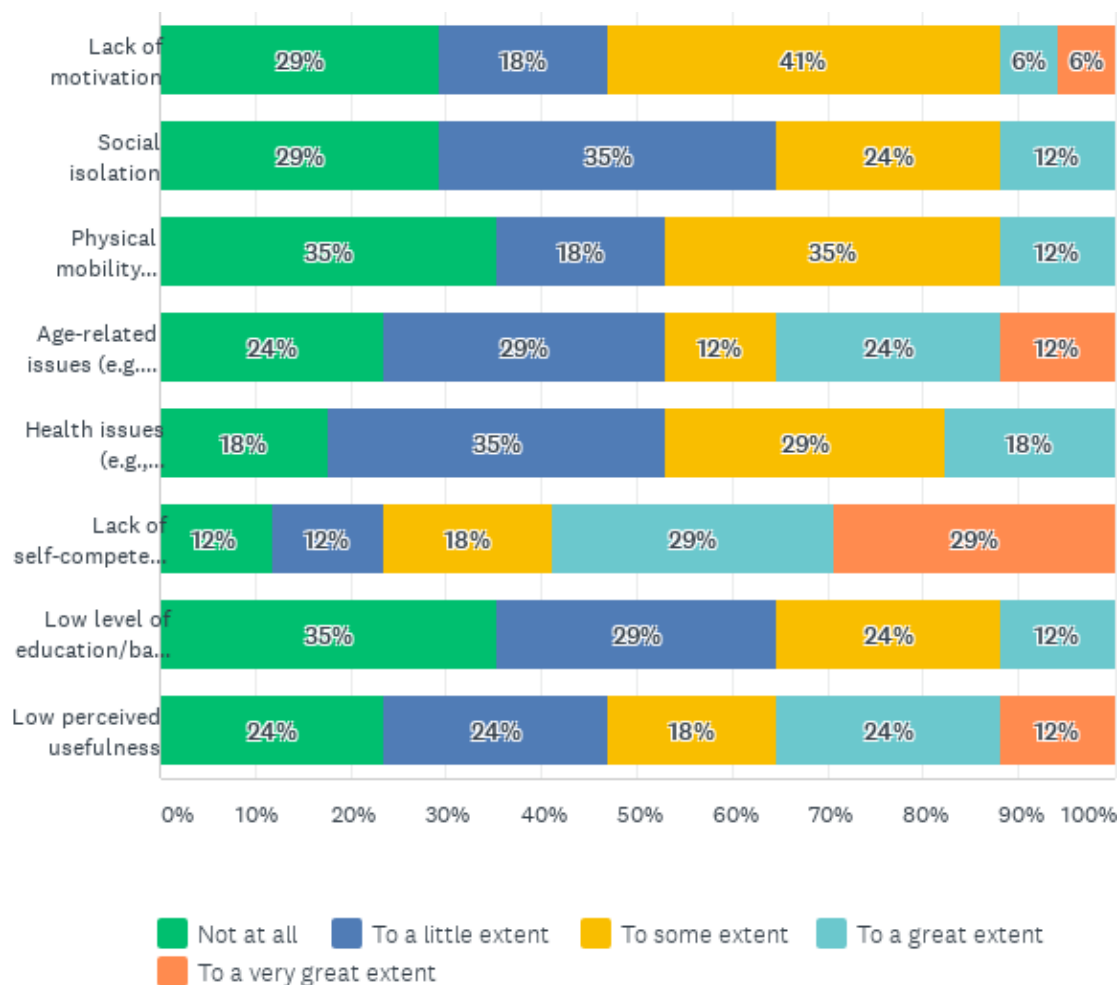

Figure 3: To what extent do the following challenges affect the participation of the elderly in digital skills training? (N=17)

Part of the questionnaire also covered the pedagogic experience and knowledge of the adult educators, asking what teaching techniques and practices responded to the needs of the elderly during digital skills training. Starting on a positive manner, the learning linked to real-life experiences was considered by nearly 80% of the participants to respond to a great or even very great extent to the needs of the elderly. Furthermore, the encouragement of active participation and the demonstration technique were agreed on by over 70% to respond greatly to the needs of seniors developing their digital skills. Another teaching technique which was agreed by nearly 80% of the participants to respond to some or (very) great extend to the needs of the elderly was scaffolding, which implies the acquisition of skills on small and manageable steps. Lastly, online learning was stated by nearly 30% to not respond to the needs of the elderly at all. This statement is further supported by the fact that no adult educator stated online learning to respond to the needs of the seniors to a very great extent.
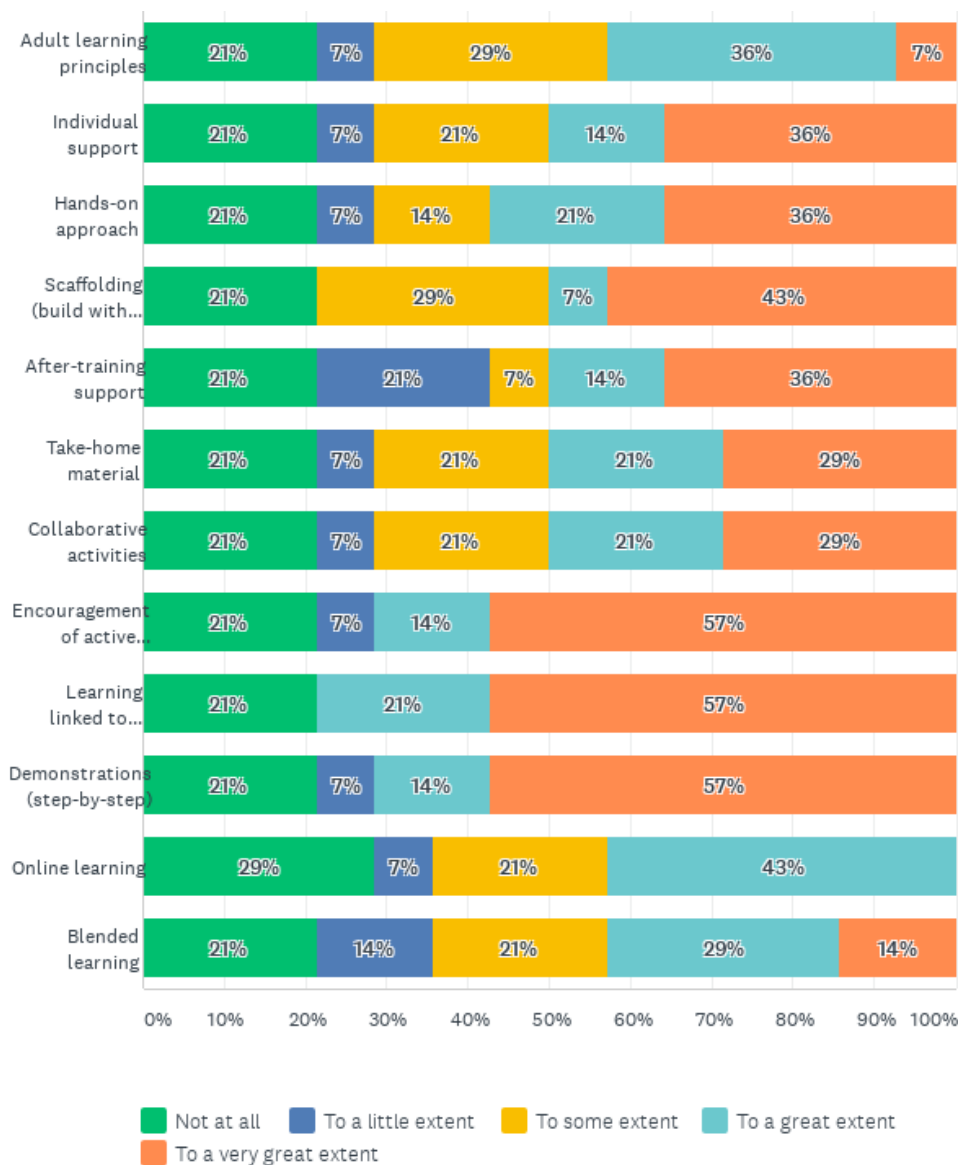

Figure 4: To what extent do the following teaching techniques/practices respond to the needs of the elderly during digital skills training? (N=14)

Another question asked in the questionnaire was partly a self-reflection on the educators' skills. The question asked to what extent some competences of trainers were necessary during digital skills training for the elderly. A vast majority of adult educators (77%) agreed that communication skills were necessary to a very great extent for the digital skills training of senior individuals. Similarly, compassion and sensitivity as well as patience were stated necessary to a very great extent by over 60% of adult educators. The former was supported by another 23% of adult educators considering the necessity of compassion and sensitivity to a great extent when working with seniors on their digital skills.

This question on the competences of the trainers shows two further results, as can be seen in the graph below (figure 5). Firstly, the digital skills of an adult educator were not valued as a necessity for training seniors in their digital skills. Nearly 40% of the participants stated the necessity from some extent to not at all. All the more, the knowledge of adult learning is valued the least necessary for the education of seniors on digital skills with striking 46% of the adult educator saying the knowledge of adult learning principles and methods are only necessary to a little or some extent. While this could indicate the speciality of the elderly as an educational target group, this finding also supports this research as it might point towards the lack of such principles and methods.
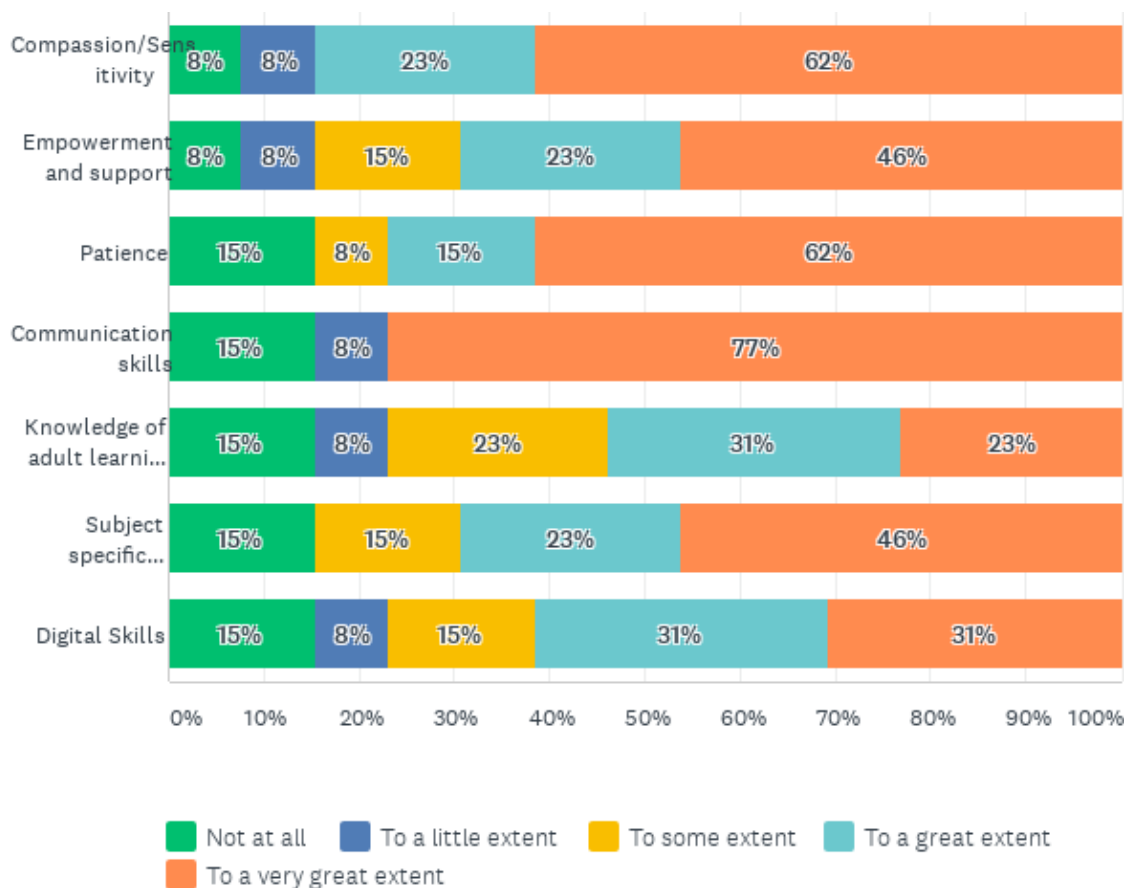

Figure 5: To what extent are the following competences of trainers necessary during digital skills training for the elderly? (N=13)

The last part of the questionnaire concentrated on the competence of the adult educator before then asking about their view of the competence of the elderly.

The online consumer behaviour and protection competence is one that brings out two interesting aspects concerning the competence of the adult educators. Firstly, the graph (figure 6) does not show one adult educator who feels highly competent in online consumer behaviour and protection. Secondly, a great part of the adult educators (31%), state to be uncertain about this competence. On the one hand, this allows the interpretation of a lack in this competence of adult educators and therefore, a need to build upon it. On the other hand, however, the uncertainty on the trainer's competences of themselves might lead to the conclusion that an actual self-evaluation of adult educators on this competence is needed, regardless of the need for training.

Contrarily, the competence of online payments and transactions brings forward a picture of fit trainers. Nearly 80% of the trainers state to feel (highly) competent with online payments and transactions. This finding is less surprising as this competence involves less theoretical knowledge than practical experience. With the assumption that adult educators are younger and therefore more fluent in the digital world in their daily life (as shown in Chapter 2) this practical knowledge seems quite logical.
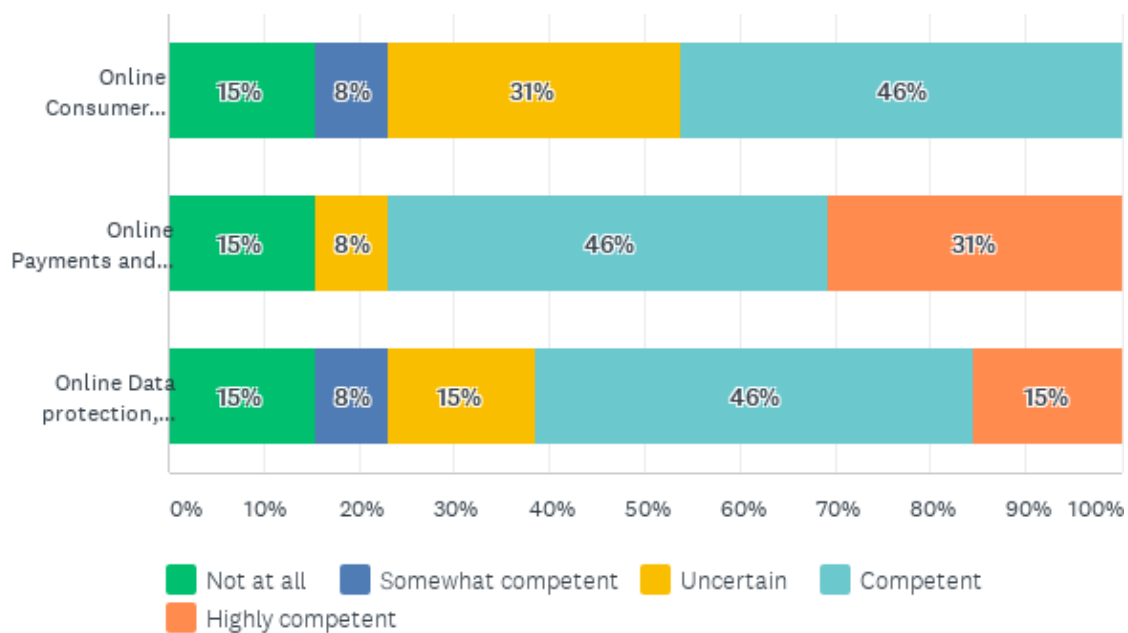

Figure 6: How competent are you in: (N=13)

When looking at the image of competences of the elderly perceived by the adult educators, there is one general finding which does not vary notably in relation to a single competence. Overall, the trainers do not ascribe great competences to the senior population. This can be noticed as there is not one single trainer who sees the elderly highly competent in any of the skills listed below (figure 7).

Finally, comparing the perceived competences of the trainers of themselves and of the seniors there are two distinct matters to be discussed. Firstly, the finding stated above, describing the perception of the competence of the seniors by the trainers as not highly competent, indicates the need for training of the senior population with competent trainers (as they see themselves). Second, again indicating extra training and education of the elderly on digital skills, is the higher uncertainty when judging the senior's competences compared to their own competence. Furthermore, this emphasises the need of a competency scale for the digital skills of the elderly.
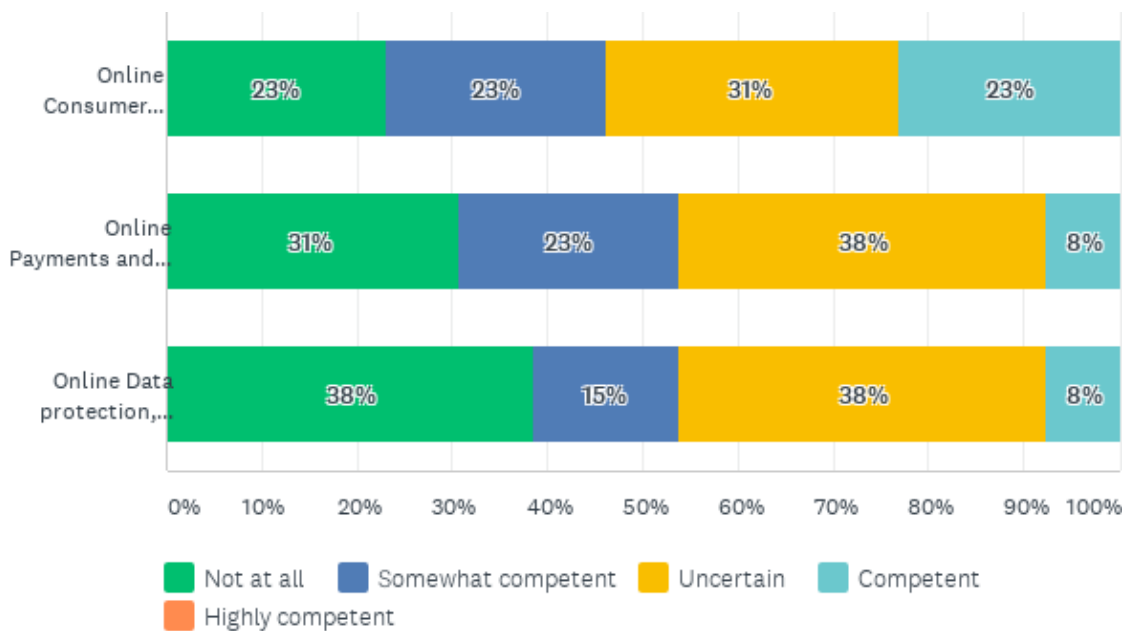

Figure 7: How competent do you think elderly are in: (N=13)

Interviews

Habits and Challenges of the elderly

Many of the participants have different devices which they can access the internet with. All of them own a computer/laptop and a smartphone. Some of them noted owning a table or iPad. Many use their laptop to buy train or plane tickets or book hotels. Some others watch movies and even bought their groceries online in the first lockdown. Especially those who own a tablet or iPad stated reading the newspaper online. Moreover, one participant mentioned an online language course they are attending at the moment.

Another habit which is bringing up new challenges is the WhatsApp-app. Nearly all participants stated its usage to stay in contact with friends and family. With the news about the data handling issues being present, they are considering a migration to another app. Many have heard about this issue via the media or through a friend. The search for a new application is now dominated by two main features: on the one hand, when choosing a new platform, they want to pay great attention to the data protection principles they would agree to and on the other hand it has to be a platform their friends and family are using too. None the less, all participants stated to be using WhatsApp at the moment since all their friends and family are using it too.

The unknown world of cookies

One area of interest that came up in many interviews were cookies. Many seniors simply don't know what cookies are about and try to avoid them altogether as one participant states:

> *I have got no idea about cookies. I usually quit the internet when they want my information.*

Another participant noted as well that they use the internet less and less frequently because of the cookies. The same person explained how they are confident accepting the terms and conditions during an online purchase because they have had positives experiences so far. With cookies, however, it is different, and they wouldn't agree to cookies. The reason being their unknowingness and their limited understanding of what they would be agreeing to. One senior noted how it would make things easier if there was an option where one could simply accept the most necessary ones.

The same level of nescience was highlighted by another participant. They stated:

> *I'd love to do a course about cookies. I want to know about it. What do I show about myself? What data am I giving away, without knowing it?*

The topic of cookies came up in three out of five interviews. Overall, there was the unknowingness what cookies are about and the lack of familiarity since the open declaration of the cookie policy has not been introduced until recently.

Experience as a measure for safety

The lack of familiarity as discussed with the cookies and the familiarity with using some online stores is another insight from these interviews. When asked how the seniors determine the safety of a certain website, many participants referred to their past experiences which were positive. Because of their experiences they don't see the necessity to know determinants of a safe website. One participant stated:

> *I don't check the pages if they are safe. I normally buy on websites I know. I don't think I have to check it there.*

Many participants state to be using websites they know and websites they can trust to do their online purchases. Since they do the purchases over and over again on the same webpage only encountering positive experiences, they don't see why they would check for a website's safety.

One participant stated quite frankly to not know how one would check for the safety of one certain webpage. They further explained that they only visit new websites they were referred to by a friend or someone they trust. Therefore, they assume that this webpage would be safe.

Data cycles and how data is passed on

Another topic which was addressed by two participants is the wish to know how data is handled and furthermore what data protection is about. One person referred to the discussion they were having about the migration away from WhatsApp. They said that their partner knew more about data protection and the reasons why they should quit the platform. The participant therefore wanted to have the same level of information and would wish for some sort of education in the field of data protection.

Another person who addressed this topic of data protection said in the context of cookies:

> *I have just recently learned that you shouldn't use the same password you're using for your email account when you register for other platforms.*

This participant had previously stated that they didn't know much about cookies and didn't know what exactly would happen if they simply accepted the policy. When they then came up with this example of the passwords, they said that they could not imagine how that works when data is passed on and that this would be something they'd be happy to know about more in detail.

Lacking practice

Nearly all of the participants, when asked what sort of training they needed, denied any need for further education on their ICT skills. Most of them stated to get through everyday life with what they know already and how it should suffice for now.

At the same time there was one sentence that came up in nearly all the interviews:

> *There are things, if you don't use them every day you forget it quite quickly.*

This lack of practice was elaborated on in different contexts. One participant does online teaching using Zoom. They explained how they were trained in the beginning in how to use the tool and furthermore in how to conduct online classes. However, they noted that their course was only taking place every other week which made them forget how to use the tool by the time of the subsequent class. Moreover, they stated how it felt like starting all over again every other week.

Another participant elaborated on the topic of practice in the context of credit cards. This person prefers not to use the credit card because it's too complicated for them. Here again, the reason is that they don't use it frequently enough. As a consequence, if the card is needed at a special occasion, they start all over again because they forget how to use it.

Basic Skills related to IT Skills

When asked what the needs could be where a senior person might need more training there were two topics that were referred to as basic skills: one being the knowledge of the English language and the other being the ability to know the difference between fake and real.

One participant explained how numerous words related to the digital world are in English. Especially, since English is not an official language of Switzerland, they expressed the thought how, in relation to IT skills, the English language is a basic skill. Furthermore, they explained how some of their friends who aren't as fluent in the English are failing in some of the IT-related matters because of their limited language skills.

Another participant referred to so-called basic skills in relation to cybercrime. They explained how, especially nowadays, the spam-emails are presented in a very credible way and how hard it could be for anyone to differentiate between fake and real. Therefore, they concluded that the ability to differentiate between fake and real should be a basic skill within IT-skills in general.

8. Recommendations

Key areas that can be transferred and adapted to the project

It has become clear in this desk research, that there is no specific offer in Switzerland for the elderly to acquire digital skills in the area of data and consumer protection. Therefore, it is crucial to motivate adult educators in Switzerland to invest into this specific target group.

One central finding that fuels the need for this project comes out of the survey among the adult educators. Comparing how competent they estimate themselves to how competent they rate the elderly in general, one finds the revealing uncertainty when guessing the elderly's competences. This finding underlines the necessity of a competency scale of the digital competences of the seniors for adult educators.

The most prominent feature of adult education with the specific target group of seniors seems to be practice. As it was mentioned in all interviews, held with five seniors, the feeling of safety comes with the recurring usage of a website or a software. Therefore, one core principle of such a curriculum should be practice.

Another central finding from the interviews concerns the topic of cookies. Linked to the experiences and practice mentioned above, the rather new issue of cookies brings great difficulties to the elderly. All of them do not know what the consequences are of accepting certain cookie policies. Therefore, they avoid this issue altogether in using the internet less frequently. "The world of data", as it was put by one participant, is one key area that must be made more accessible to seniors. The central question here is what can happen to personal data that is shared online and what are the consequences of agreeing to cookie policies.

Key skills that need to be involved in the Competency Scale

The desk research brings forward different aspects that make the senior population a group with special conditions and special needs. Besides the structural factors such as age or income, there are also certain skillsets that influence the usage of the internet. Many of the skills needed in daily life as literal and numeral literacy are only some of the skills that determine digital skills.

This thought on basic skills was also referred to in the interviews with the elderly. One specific skill which was named a basic skill is the knowledge of the English language. Since English is not an official language in Switzerland and while most terms related to the digital world are in English, these language skills are considered essential in the usage of digital devices.

What could be understood as a critique of this project has to be surely implemented in the competency scale. One adult educator participating in the survey left the comment that there are worlds in between the competences of a 65-year-old and an 80-year-old. The competences, therefore, might vary according to their age even if the target group is named seniors including individuals above 65 years of age.