TRIO

Adult education on digital, health and data literacy for citizen empowerment

ROMANIA NATIONAL REPORT

SUMMARY

Co-funded by the European Union

TRIO

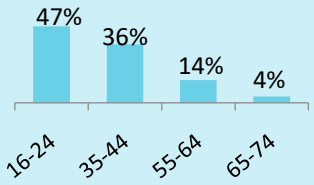
Co-funded by the European Union

DIGITAL, HEALTH, AND DATA LITERACY IN THE ROMANIA

DIGITAL LITERACY

28% of Romanian citizens aged 16-74 have basic digital skills

Digital proficiency drops significantly with age



Digital skills of men and women are different for age 16-24, as 51% of men have digital skills compared to only 44% of women

Digital literacy is most influenced by:
- Education
- Engagement
- Residential environment

HEALTH LITERACY

Most difficulties are perceived in:
- Health Promotion & Disease prevention

7,5% of respondents have poor e-Health skills

40% of people in Romania use the internet to search for health information

More than 21% of the Romanian interviewees find it difficult to protect themselves from diseases based on health information in the media

Health literacy is most influenced by:
- Education
- Social status

DATA LITERACY

48% of Romanian citizens aged 16-54 have basic data skills

Data literacy is influenced by:
- Education
- Engagement
- Income

Both younger (16-24) and older (65+) people are less apt in online data security

Of the 25% of people who have basic digital data security skills, aged 65-74, only 9% refused to have their personal data used for advertising purposes

SOCIETAL AND ECONOMIC IMPACTS

Low education and low income negatively affect:
- Nutrition
- Sport
- Lifestyle

15% of Romanians participates in physical activities and sports on a weekly basis

Unemployment is related to:
- Low Education
- Age
- &
- Gender

41% of Romanian citizens are considered to have a low level of literacy

Results of the desk research

Healthcare in Romania is dominated by the public sector, which owns most of the hospitals and provides national health insurance to almost all Romanian citizens. Health spending increased in the last decade, but remains the second lowest in the EU, both as a share of GDP and per capita [1]. The desk research performed in regard to the Romanians' digital, health and data skills drives us to the conclusion that to a very large extent the whole adult population needs support and education in order to acquire the necessary skills to reach at least the average of the EU. These needs are even more stringent when it comes to individuals of older age, lower education, being unemployed or retired, or living in rural areas. Furthermore, the potentially low levels of general literacy of the adult population, further puts them at risk, as they are more likely to make unhealthy lifestyle choices and to become victims of health miss and disinformation (e.g. not knowing and not being able to apply practices of fact-checking).

Digital literacy

Romania is ranked very poorly among the European countries in regard to digital literacy, being on the last places with Albania, Bulgaria and Turkey. According to the data gathered by the European statistical office Eurostat in the year 2021, 28% of the Romanian population between the ages of 16 to 74 was determined to have basic or above basic digital skills [2]. As such, Romania is very far from achieving the European target in digital proficiency, which is set at 80% by 2030. The comparison of the situation in Romania with the average of the European Union countries shows that all age groups are behind when it comes to digital skills, but particularly individuals in the older age groups (e.g. aged 55+) have significantly less basic digital skills. Romania's internet infrastructure is highly developed and competitive, the fast broadband coverage reaching the EU average. The share of households with internet access in Romania continuously increased over the last years, having reached a peak in 2021 with 89% of the households having internet access. While more than 90% of individuals aged 16-24 are using the internet on a daily basis, this percentage drops significantly with age, with only 25% of the individuals aged 65-74 using the internet daily. The already low level of digital skills of the Romanian population is strongly influenced by various socio-economic variables: (i) only 13% of the individuals with a low formal education have basic or above basic digital skills, as compared to 67% of the individuals with a high formal education; (ii) only 8% of the individuals that are retired and out of the labour market have basic and above basic digital skills as compared to 35% of the employed individuals; (iii) only 18% of individuals living in rural areas have digital skills as compared to 38% of the individuals living in cities. These finding are confirmed also by the DESI (Digital Economy and Society Index) ranking, which shows that Romania is well below the EU average on 3 of the 4 dimensions taken into account to calculate the DESI, namely: ranking 26th in regard to Human capital, ranking 25th in regard to Integration of digital technology, and 27th in regard to Digital public services. The only dimension in which there is good progress concerns the Connectivity, Romania ranking 10th, and this is due to the fact that the infrastructure was mostly developed by the private mobile companies in particular in the urban areas.

Health literacy

Contrary to the growing interest at European and international level and despite its importance for the health care and public health sectors, Romania is far behind the European countries in regard to establishing procedures, assessing and monitoring health literacy, with official empirical data on health literacy being almost inexistent. The research on health literacy in Romania is not only scarce, but also not aligned with the standards developed at EU level. When comparing the status of e-Health skills of Romanians to the Europe average, the Eurostat statistics [3] shows that there are fewer individuals in Romania (e.g. 40% in Romania as compared to 55% in EU) that are using the

internet to seek health information. This gap is visible for all age groups. Gender is a significant determinant, as females are using more (49%) the internet to look for health as compared to males (31%). Education also plays a key role, as only 17% of low educated individuals are using the internet to seek health information as compared to 41% of individuals with medium education and 66.5% of individuals with high education. The first non-experimental, cross-sectional study of health literacy in Romania [4] demonstrated that a very large percentage (21.6%) of the respondents found it very difficult to protect themselves from illness based on the health information from the media. The main conclusion of the study regarding health literacy levels of the studied population is that while 7.5% of the participants have an inadequate level of health literacy and 33.2% have a problematic level, there is a quite large portion of the population that has a sufficient level of health literacy (59.2%). The same study identified age, gender, education and self-reported health status as main determinants of Health Literacy, while residential area was not associated with Health Literacy. Males, older people, people with lower levels of education, and people that rate their health as not very good have lower levels of health literacy.

Data literacy

Information and data literacy rates in Romania are very low (48%), being on the last place in this regard among the European countries [5, 6]. While gender does not influence the data literacy skills of individuals much, age is an important determinant, as for individuals aged 55-74 there is a drop of almost 20% in regard to information and data literacy skills. Furthermore, when other socio-economic variables are examined, there are significant disparities between various groups of individuals. In particular, individuals with a low or medium education level, who are retired or unemployed, and those living in rural areas or suburbs have very low information and data literacy skills. Only highly educated individuals have information and data literacy skills which are above the European Union average (68%) and closer to the average of top rated countries. Digital data security and safety skills are also very low for the Romanian citizens, with only 48% having basic or above basic safety skills as compared to the average of 68% of people living in the European Union in 2020. While for younger ages (e.g., individuals aged 16-24 and 25-34) the gap between the average European Union safety skills and the respective skills of the Romanian people is approximately 15%, for older ages this gap is further increasing, and reaches a 26% difference for individuals aged 65-74.

Societal and economic impacts

The health preventive approaches have resulted in an increase of life expectancy in the EU countries over the past decades, reaching 81 years in 2018 in the EU as a whole, but still remaining at only around 75 years in Romania. Romania has very high rates of avoidable deaths from both preventable and treatable causes, which could be avoided through public health and primary prevention interventions [7]. Romania has extremely low rates of breast cancer screening, with only 9% of Romanian women aged 50-69 having reported accessing breast cancer screening in 2019 (the EU average is 57%) and only 5% of those aged 50-74 had been screened for colorectal cancer at least once in their life (the EU average is 47%). Almost half of all deaths in Romania in 2019 can be attributed to behavioural risk factors, including tobacco smoking, unhealthy diet, alcohol consumption and low physical activity. Romania records the lowest score in regard to participation in society as compared to the European Union countries, as only 6% of Romanian individuals declare they that participate to social activities on a monthly basis in 2016, as compared to approximately 30% of Europeans. A very low percentage of the Romanian population is participating on a weekly basis in physical activities and sports, with an average of less than 15% of all individuals and marking a decrease in 2016 as compared to 2011.

Results of the Interviews

Citizens

- Regarding the basic accessibility of medical in Romania, the majority of the participants identified a number of disadvantaged groups: people with low income and/or low education level, older people and people living in rural areas.
- Only half of the participants are able to search for health information on the internet by themselves, and younger people can generally rate the quality of the health information they find, and trust in that information is quite low.
- Older people consider the internet as not useful in order to make health decisions, as they feel insecure and confused due to the different views on the same subject, thus trusting a medical expert better whenever they need advice.
- Most of the interview participants are not using any online medical portals, they did not know or were unsure about the accessibility of their personal medical data and where it is stored.
- Participants having lower education level and/or living in rural areas indicate that they don't understand most of the medical documents or examination results.
- All interview participants indicated that they don't know how or are not able to make any changes to the content or accessibility of their personal electronic health record.
- Even those with private insurance are only able to view the record online (and they usually access it to see appointments or past exam results), but the system does not allow them to edit any data or change any access rights.
- A large portion (>75%) of the interview participants are not using any health apps or digital devices to monitor their health status.
- The vast majority of the interview participants indicated that they are asked to sign some paper mentioning their personal data at every visit at the healthcare units.
- More than 75% of the interviewed participants are interested in using an online platform and/or manual to improve their digital, health and data literacy skills.
- Older people with low digital skills would prefer to have the possibility to print the education materials.

Experts

- All the experts participating in the interview indicated that more than 50% of the individuals have poor skill in regard to this trio of literacies.
- Potential barriers for the digitalization of the healthcare system were indicated mainly in relation to human factors, as the healthcare personnel and patients don't have the necessary digital skills, users are reluctant/ unwilling to use such systems, and mistakes may appear due to misuse.
- The main barriers preventing people from using digital health tools indicated by the interviewed experts are: missing digital services and devices, low literacy of the population in regard to basic digital skills, missing medical information portals, insufficient education on health and digital issues, and costs of healthcare services and equipment.
- It was seen as important for the citizens to have access to their medical and health data through an online platform, but it was considered that it is not (yet) a good idea to have editing right to the medical history data.
- In order to motivate people, any efforts toward education on this trio of literacies should start locally, with trusted representatives (e.g., medical doctors, public authorities, workplace, etc).

Suggested learning needs for the target groups

- For Romanian citizens the focus of the TRIO learning platform should be on establishing a set of educational modules for acquiring the most basic elements at the intersection of the various dimensions of digital health and data literacy.
- For older people and people with lower education levels, the accent should be on improving their digital and data skills in the context of health management.
- People from the disadvantaged socio-demographic groups would benefit from additional education and support towards better understanding preventive health practices (e.g., purposes of health screening, regular checkups, healthy lifestyle, etc).
- Institutions and policy makers should be made aware of the extremely important role of monitoring health and literacy of the adult population, and of the promotion of educational activities on all the TRIO dimensions for the public health prevention and treatment outcomes, and the benefits of the public healthcare system.

Resources

1. European Observatory on Health Systems and Policies, 2021, State of Health in the EU: Romania, Country Health Profile 2021.
2. Eurostat. "Individuals level of digital skills (from 2021 onwards)." Accessed July 7, 2022. https://ec.europa.eu/eurostat/databrowser/view/ISOC_SK_DSKL_I21__custom_2982372/default/bar?lang=en.
3. Eurostat. "Individuals – internet activities: seeking health information." Accessed December 15, 2022. https://ec.europa.eu/eurostat/databrowser/view/ISOC_CI_AC_I__custom_4264326/default/table?lang=en
4. Coman MA, Forray AI, Van den Broucke, Chereches RM, "Measuring Health Literacy in Romania: validation of the HLS-EU-Q16 survey questionnaire", International Journal of Public Health, 2022, doi: 10.3389/ijph.2022.1604272.
5. Eurostat. "Individuals' level of digital skills (from 2021 onwards)." Accessed July 14, 2022. https://ec.europa.eu/eurostat/databrowser/view/ISOC_SK_DSKL_I21__custom_3974314/default/table?lang=en.
6. Eurostat, "Privacy and protection of personal data (2020 onwards)." Accessed July 14, 2022. https://ec.europa.eu/eurostat/databrowser/view/ISOC_CISCI_PRV20__custom_3974993/default/table?lang=en.
7. OECD/ European Union, "Health at a glance: Europe 2020 State of Helath in the EU cycle.", OECD Publishing, Paris, 2020, https://doi.org/10.1787/82129230-en.

TRIO

trioproject.eu

Co-funded by the European Union