

THE EMPLOYMENT OF PERSONS WITH DISABILITIES. THE ROLE OF DIGITAL SKILLS, ASSISTIVE TECHNOLOGIES AND REASONABLE ACCOMMODATION

Ciprian IFTIMOAEI¹, Angela ACHIȚEI²

Abstract: The present study is the result of an empirical research about the role of digital skills, accommodation and technological assistance for the employment of people with disabilities. This research was conducted by the „Alături de Voi” (ADV) Romania Foundation to identify and analyze the challenges faced by people with disabilities on the labour market in Romania as part of a project carried out by the European Disability Forum (EDF), an organization that works at the European level to promote the rights of people with disabilities. More than half of people with disabilities in Europe do not have a job, even though many of them are willing to work. People with disabilities who wish to work are not aware of all the facilities provided by the European and national legislative framework. Sociological research takes as its starting point the right of people with disabilities to work, irrespective of their location, to equal opportunities in the labour market, to decent working conditions, including through the use of modern technologies. The following methods were used to conduct this sociological research: (1) desk research, which involved reviewing national strategies, programs, and public policies related to the education, training, and employment of people with disabilities; (2) secondary data analysis based on statistics provided by Eurostat and National Institute of Statistics regarding the conditions of the persons with disabilities on the labour market; (3) applying a total of 27 questionnaires to companies/organizations to collect information on the education and training level of people with disabilities in digital skills, programs and initiatives related to lifelong learning opportunities, human resources policies of organizations in Romania regarding the employment of people with disabilities, and best practice models in the application of technology to facilitate the work of individuals with special needs. This sociological study does not represent the official position of EDF, nor of ADV.

Keywords: *persons with disabilities, employment, hiring and training policies, assistive technology, reasonable accommodation.*

¹ Sociologist, Deputy-Director of the Iasi County Department of Statistics, Ciprian.Iftimoaei@iasi.insse.ro; Associate Lecturer PhD at the Faculty of Philosophy and Socio-Political Sciences, “Al. I. Cuza” University of Iasi.

² Social Antreprenuer, President of “Close to You” Romania Foundation/ Fundația “Alături de Voi” România, angela.achitei@alaturidevoi.ro. In 2016, she won the EY Social Entrepreneur of the Year award, and in 2021 the organization he leads was one of the finalists of the European “Social Economy Award” competition.

Résumé : La présente étude est le résultat d'une recherche empirique sur le rôle des compétences digitale, de l'hébergement et de l'assistance technologique pour l'emploi des personnes handicapées. Cette recherche a été menée par la Fondation roumaine „Alături de Voi” (ADV) pour identifier et analyser les défis rencontrés par les personnes handicapées sur le marché du travail en Roumanie dans le cadre d'un projet mené par le Forum européen des personnes handicapées (EDF), une organisation qui travaille au niveau européen pour promouvoir les droits des personnes handicapées. Plus de la moitié des personnes handicapées en Europe n'ont pas d'emploi, même si nombre d'entre elles sont prêtes à travailler. Les personnes handicapées qui souhaitent travailler ne connaissent pas toutes les facilités prévues par le cadre législatif européen et national. La recherche sociologique prend comme point de départ le droit des personnes handicapées au travail, quelle que soit leur localisation, à l'égalité des chances sur le marché du travail, à des conditions de travail décentes, y compris grâce à l'utilisation des technologies modernes. Les méthodes suivantes ont été utilisées pour mener cette recherche sociologique: (1) la recherche documentaire, qui consistait à examiner les stratégies, les programmes et les politiques publiques nationales liées à l'éducation, à la formation et à l'emploi des personnes handicapées; (2) analyse de données secondaires basée sur les statistiques fournies par Eurostat et l'Institut national des statistiques concernant les conditions des personnes handicapées sur le marché du travail; (3) l'application d'un total de 27 questionnaires aux entreprises/organisations pour collecter des informations sur le niveau d'éducation et de formation des personnes handicapées dans les compétences numériques, les programmes et initiatives liés aux opportunités d'apprentissage tout au long de la vie, les politiques de ressources humaines des organisations en Roumanie concernant l'emploi des personnes handicapées et les modèles de meilleures pratiques dans l'application de la technologie pour faciliter le travail des personnes ayant des besoins spéciaux. Cette étude sociologique ne représente pas la position officielle d'EDF ou d'ADV.

Mots-clés: *personnes handicapées, politiques d'emploi, d'embauche et de formation, technologies d'assistance, aménagements raisonnables.*

Rezumat: Acest studiu este rezultatul unei cercetări empirice privind rolul competențelor digitale, a dispozitivelor de acomodare și a tehnologiilor asistive în angajarea persoanelor cu dizabilități. Cercetarea de față a fost realizată de o echipă de cercetători din cadrul Fundației „Alături de Voi” România pentru a identifica și analiza problemele cu care se confruntă persoanele cu dizabilități pe piața muncii din România, parte a unui proiect de mai amplu derulat de *European Disability Forum (EDF)*, organizație care activează la nivel european pentru promovarea drepturilor persoanelor cu dizabilități. Mai mult de jumătate din persoanele cu dizabilități din Europa nu au un loc de muncă, deși multe dintre acestea au disponibilitatea de a munci. Persoanele cu dizabilități care doresc să lucreze nu cunosc toate facilitățile furnizate de cadrul legislativ european și național. Cercetarea sociologică are ca punct de plecare dreptul persoanelor cu dizabilități de a munci, oriunde s-ar afla, de a beneficia de șanse egale pe piața muncii, de condiții decente la locul de muncă, inclusiv prin utilizarea tehnologiilor actuale. Pentru realizarea acestei cercetări sociologice au fost utilizat următoarele metode: (1) documentarea (desk research) privind strategiile, programele și politicile publice național referitoare la nivelul de educație, formarea și ocuparea persoanelor cu dizabilități; (2) analiza secundară bazată pe datele furnizate de Eurostat și Institutul Național de Statistică privind situația persoanelor cu dizabilități pe piața muncii; (3) aplicarea unui număr de 27 de chestionare la companii/ organizații prin care s-au colectat informații referitoare la nivelul de educație și de formare a persoanelor

cu dizabilități în domeniul competențelor digitale, programele și inițiativele privind oportunitățile de învățare pe tot parcursul vieții, politica de resurse umane a organizațiilor din România față de angajarea persoanelor cu dizabilități, modele de bună practică în aplicarea tehnologiei pentru facilitarea muncii acestor persoane cu nevoi speciale. Acest studiu sociologic nu reprezintă poziția oficială a EDF, nici a ADV.

Cuvinte cheie: *persoane cu dizabilități, ocupare, politici de angajare și formare, tehnologii asistive, dispozitive de acomodare.*

1. Introduction

Romania is one of the poorest countries in the European Union (about 24% relative poverty rate), with an employment rate (69%) lower than the EU-27 average, with 15% of employed people at risk of poverty, affected of the lack of labour force in the context of a massive migration after the country's accession to the UN (2007). Under these conditions, disabled people who have the availability to work do not find vacant jobs adapted to their special needs and are not always helped to integrate into the labour market.

A study published in the *International Archive of Medicine* shows that, in 2015, the total number of people with disabilities was 759,019 (3.41% of the Romanian population), of which approximately 415,852 (54.8%) were aged between 18 and 64 years old. The employment rate of people with disabilities was 14%. People with physical disabilities represent the most employed category (38.4%); the least employed were the mental (3.1%) and psychiatric (5.2%) categories. In the period 2011-2025, the percentage of employment of people with disabilities in Romania evolved from 12.26% (in 2011) to 14% (in 2015). In Romania, the share of people with disabilities employed, compared to developed European countries (Norway 61.7%; Switzerland 62.0%; Austria 41.9%; Germany 46.1%; United Kingdom 38.9%) or North American ones (Canada 56.3%; USA 38.1%) was quite low at that time. (Anghelescu et al., 2016).

In a study about the condition of people with disabilities in Romania, in a European context, E.-L. Baciu & T.-A. Lazar (2017), shows that there are problems regarding ensuring equal opportunities, in accordance with the objectives stipulated in the Convention on the Rights of Persons with Disabilities (CRPD), respectively in the European Disability Strategy (EDS) 2010-2020. The two authors criticize the official statistics regarding the way they present the data describing the situation of people with disabilities on the labour market, from a legal and financial point of view. They believe that the most reliable data are provided by the General County Directorates of Social Assistance and Child Protection and centralized at national level by the Ministry of Labour, which refer exclusively to disabled persons for whom a disability certificate has been issued and which represent only a proportion of the total number of Romanian disabled people. One of the conclusions of the study shows that the discrimination of people with disabilities is a problem that belongs to the culture of the majority of citizens, encountered as an institutional practice, in employment on the labour market.

The above conclusion is also shared by S. Bungău, D. Țiț et al. (2019), who state that, after Romania's accession to the EU, the national legislation on the protection of the rights of people with disabilities was amended taking into account the requirements of European legislation. However, in Romanian society there are still areas, institutions, practices that have remained impregnated by the residual discriminatory mentality from the communist period.

According to an investigation carried out by Angela Achiței (2022), based on official data published by the National Authority for the Protection of the Rights of Persons with Disabilities (ANPD, 2021), there were officially registered 865,573 people with disabilities (adults and children). At that time, of the total population, people with disabilities represented 4.48%. Unfortunately, in the ANPD statistics, there are no data on two very important indicators that describe the situation of disabled people on the labour market: the number of disabled people with work capacity and the number of employed disabled people.

To find out what is the employment rate of people with disabilities in Romania, A. Achiței requested information from the National Tax Administration Authority (ANAF) under the coordination of the Ministry of Finance. After a series of calculations based on the data obtained, it turned out that, in December 2021, a number of 35,213 people with disabilities were employed. Compared to the number of adults with disabilities from which those with severe disabilities were excluded, it follows that the employment rate in Romania was 7.3%, extremely low compared to the European average which is around 35-40%. According to the Register of Authorized Protected Units (2021), a number of 1189 people with disabilities were employed in 283 protected units. This number could increase, if more companies with more than 50 employees and more would hire people with disabilities or support employment by purchasing products and services from protected establishments. The legislation in force allows half of the tax that employers pay to the state because they do not employ disabled people, to be used for purchases of products and services made by the disabled people in these protected units. The companies/institutions/organizations must ensure that these products and services are not intermediated by the protected units, because they are not allowed to do so, according to the legislation in force from 2020, but are produced within them (Achiței, 2022).

Regarding disabilities and the labour market, Oana-Georgiana Girlescu (2021) in the report *European Semester 2020-2021 Country Fiche on Disability Equality in Romania*, lists the following problems: there is a lack of collection of relevant data, as well as research on the inclusion of people with disabilities on the labour market and their social integration at the workplace; there is no cross-sectoral approach to policies aimed at stimulating the employment of people with disabilities, linked to educational and health policies; public policies must prioritize the inclusion of people with disabilities in the general labour market, rather than in protected places, in order to reduce their dependence on social measures and their segregation in work.

In an article about disability and poverty in Romania, Emma Tkacz (2022) states that the employment rate of people with disabilities would be 17.97%, according to the European Semester report. In 2018, the European Semester found that around 45.5% of people with disabilities were employed, but organizations may use different metrics to define disability and employment. Therefore, data from official statistics do not agree with those from reports and policy documents of various institutions or organizations that have duties in the protection of the rights of persons with disabilities.

People with disabilities are more likely to find themselves in lower-skilled and lower-paid occupations (Meager, & Higgins, 2011). In Romania, support for people with disabilities is mainly focused on the provision of medical assistance and less on the development of independent living skills. People with disabilities and other vulnerable categories are forced to retire in case of illness, obtaining a limited income pension, provided by the state social insurance system, rather than looking for a job vacancy according to their education and/or professional training or accessing professional training services. In the absence of adequate support (technical skills, assistive technologies, accommodation devices at work), people with disabilities are exposed to the risk of failure in integration into the labour market (Achiței, Tompea, Ateșoaie, 2019).

In Romania, people with disabilities who want to work face the following obstacles: (1) lack of integrated services for evaluation, recruitment, selection, orientation towards vacant jobs, mediation between employers and selected persons; (2) not all disabled people looking for a job, having the availability to start working immediately, are registered with the county employment agencies; (3) the insufficiency of assistive technologies and accommodation devices to support employees with disabilities in the workplace; (4) the persistence of a discriminatory mentality of some employers who are not aware of the role of people with disabilities in increasing employment; (5) employers do not always communicate job vacancies to county employment agencies.

2. Research methodology

This sociological study is about how digital skills, assistive technology, and reasonable accommodation can contribute to the increasing of the employment of the persons with disabilities on the labour market using the following methods: policy analysis, secondary analyses based on official statistics, and data interview analyses. It is rather a case study/ exploratory research in Romania and the conclusions can be used in proposing legislative changes or even new public policies to increase the employment of people with disabilities.

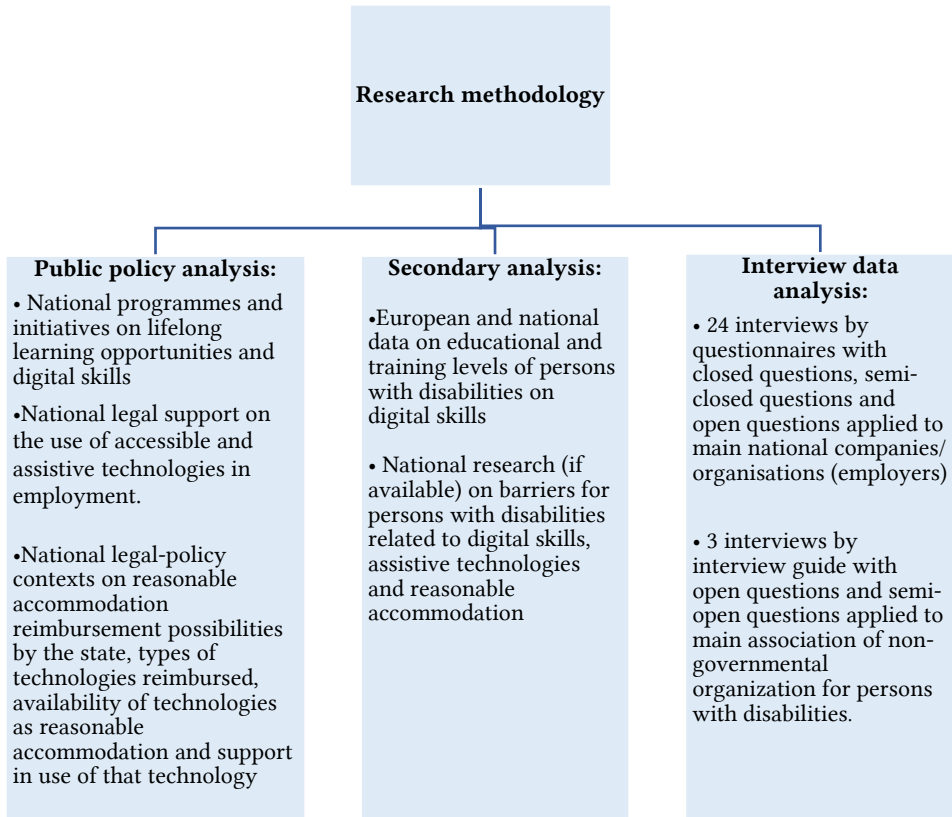


Figure 1. Research methodology, techniques used and working tools

Table 1. Research questions by research levels

	Research Levels	Research Questions
1	Hiring and training policies	<ul style="list-style-type: none"> ▪ Does the Human Resources policy from your company/organisation have specific guidelines about hiring persons with disabilities? ▪ Does your company participate in any programme aimed at improving employment of persons with disabilities? ▪ Are you aware of the public support systems for the promotion of employment of persons with disabilities in your country/region? ▪ Do you believe lack of digital skills are a burden when your company/organisation plans on hiring persons with disabilities? ▪ Does your company/organisation develop training programmes for employees related to digital skills?
2	Internship policies; digital skills	<ul style="list-style-type: none"> ▪ Has your company/organisation ever hired, or considered to hire, interns with disabilities?

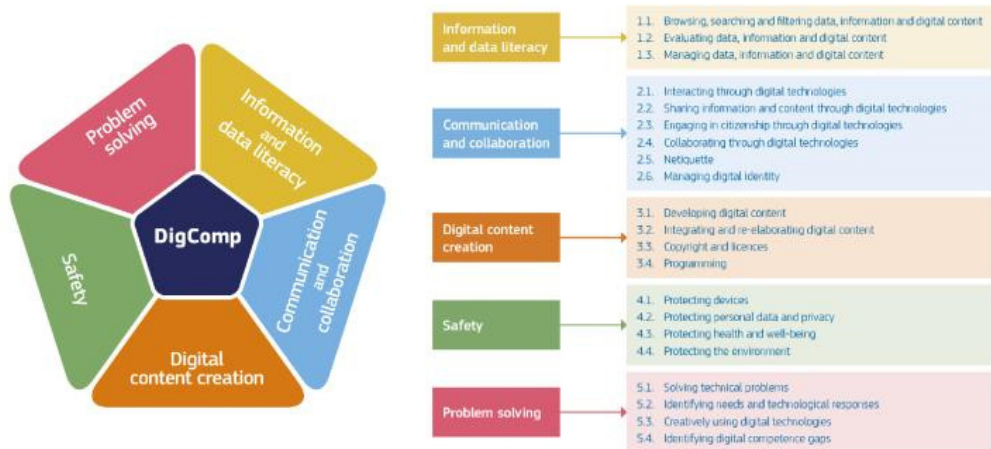
THE EMPLOYMENT OF PERSONS WITH DISABILITIES

	Research Levels	Research Questions
		<ul style="list-style-type: none"> ▪ In general, which do you consider to be the most relevant skills for interns with disabilities? ▪ Do you consider having interns with disabilities would help hiring employees with disabilities on later stages? ▪ Are you aware of any support from State or universities for companies/organisations when hiring interns with disabilities?
3	Assistive technologies and devices	<ul style="list-style-type: none"> ▪ Is your company/organisation aware of the use of assistive technologies by employees with disabilities? ▪ Does your company/organization have policies implementing support for the acquisition and use of assistive devices and technologies by employees with disabilities? ▪ Are you aware of the public legal framework and/or public programmes supporting the acquisition of assistive technologies for persons with disabilities – either direct, by persons with disabilities themselves, or indirect through the company/organization?
4	Reasonable accommodations	<ul style="list-style-type: none"> ▪ Does the Human Resources policy from your company have reasonable accommodation of employees with disabilities as a standardised procedure? ▪ Does your company have any policy regarding the accessibility of recruitment processes? ▪ Which are the current accommodations applied by the company for employees with disabilities? ▪ Which are the main costs for the provision of reasonable accommodation? ▪ Which are the main limits in the provision on reasonable accommodation – the disproportionate burden-? ▪ Are you aware of the public legal framework and/or public programmes supporting the provision of reasonable accommodation in the workplace for employees with disabilities?

Considering the rapid technological advancement in most fields of activity, digital skills are necessary for the smooth conduct of work processes within companies and in communication with other partners (companies, organizations, institutions). Technology companies aim to attract highly skilled workforce, and digital skills are particularly important in advanced industries.

For many of us, digital skills are not very complicated and/or are limited to using internet-connected mobile phones for music, movies and messaging. Obviously, to acquire digital skills you need electronic devices connected to the

Internet. To better understand the nature of this competence, the European Commission designed the *European Digital Competence Framework for Citizens (DigComp)*, structured in five areas: digital literacy, communication using information technology, including creation of digital content, cyber security and problem solving. The five domains count 21 skills, as can be seen in figure 2.



Source: EU Science Hub, https://joint-research-centre.ec.europa.eu/digcomp_en

Figure 2. The Digital Competence Framework for Citizens (DigComp)

According to the World Health Organization & UNICEF (2022), assistive technologies are particularly important for people with permanent or temporary activity limitations/disabled people, contributing to the improvement of their functional capacities and their social and professional insertion. Definitions of assistive technologies differ from one country to another, depending on their scope, how they are used. By extension, assistive technologies include accommodation devices. Assistive technologies can also include devices such as wheelchairs for immobile people, hearing aids for people with hearing impairments, prostheses for people with mobility impairments, special glasses, pads for urinary or other incontinence, applications to improve interpersonal communication, digital devices for access to information, time management, rehabilitation programs and professional training, etc. At the limit, assistive technologies also include systems for adapting the physical environment (access ramps in buildings or rooms, adapted toilets, grab bars, etc.) which are part of what are called „reasonable accommodations”.

According to the Article 3 of the Directive (EU) 2019/882 on the accessibility requirements for products and services, assistive technology means „any item, piece of equipment, service or product system including software that is used to increase, maintain, substitute or improve functional capabilities of persons with disabilities or for, alleviation and compensation of impairments,

activity limitations or participation restrictions”. Assistive Technology industry Association (ATiA) mentions the following examples:

- “communication boards made of cardboard or fuzzy felt;
- special-purpose computers;
- hardware systems: prosthetics, mounting systems, and positioning devices;
- computer hardware devices like special switches, keyboards, and pointing devices;
- computer software, screen readers and communication programs;
- inclusive or specialized learning materials and curriculum aids;
- specialized curricular software”.

Assistive technology can be much more than those mentioned the above: electronic devices, wheelchairs, walkers, braces, educational software, power lifts, pencil holders, eye-gaze and head trackers, and others.

According to the UN Convention on the Rights of Persons with Disabilities (UNCRPD), Article 2, „Reasonable accommodation means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms”.

3. Public policies analysis

In the document „Educated Romania – Vision and Strategy 2018-2030,” a project developed under the coordination of the President of Romania, education is envisioned to be developed based on the following guidelines: (1) personalized learning and ensuring quality for all students; (2) flexibility of the education system to effectively respond to the changing profiles and roles of beneficiaries and stakeholders involved; (3) adapting the system to external changes and future trends. The document emphasizes the digitalization of the education system and vocational training. The COVID-19 pandemic has given a boost the implementation of digital technologies in the education system, prompting stakeholders such as teachers, educators, trainers, pupils, students, etc., to develop their digital skills to meet the new demands of the job market.

In the National Strategy for the Rights of Persons with Disabilities – „An Equitable Romania”, 2022-2027, there are no specific mentions regarding opportunities for developing digital skills for persons with disabilities. This strategy is based on data and information from the report *Diagnosis of the Situation of Persons with Disabilities in Romania* – a document prepared within the framework of technical assistance provided by the World Bank (2021). The World Bank Report about peoples with disabilities states that „Romania has the lowest employment rate compared to other European Union countries for persons with severe limitations (with a difference of over three times between Romania and the best-performing countries)”. This research evaluates the issues and needs faced by persons with disabilities in Romania from the perspective of complying with the provisions of the *United Nations Convention on the Rights of Persons with Disabilities*

(CRPD) in eight main areas: (1) improving the accessibility and mobility of persons with support needs, (2) protection of the rights of persons with disabilities, (3) employment of persons with disabilities, (4) social protection (including rehabilitation), (5) social services and independent living (including community integration), (6) education, (7) health, and (8) social participation (political and public).

The development of assistive technologies for persons with disabilities is a priority in the 2022-2027 Strategy. Within the *National Strategy for the Rights of Persons with Disabilities - 'An Equitable Romania' (2022-2027)*, developed by the Ministry of Labour and Social Solidarity, priority is given to the development of access technologies and assistive devices that enable people with disabilities to achieve and maintain maximum autonomy, to develop their physical, mental, social, educational, and professional potential, for full integration and participation in all aspects of life. In accordance with this document, assistive technologies are defined as 'any item, equipment, software application, or product used to increase, maintain, or improve the functional capabilities of persons with disabilities.' Regarding employment and the integration of people with disabilities into the labour market, the provision of equal opportunities for employment is foreseen through the development of qualifications and competencies, in an occupation of their choice, within an inclusive, accessible, and adapted work environment.

The National Strategy for Employment 2021-2027 aims to increase employment through measures targeting inactive individuals who are capable of work, unemployed individuals, especially the long-term unemployed, and young people, including NEETs, by promoting a competent, qualified, and adaptable workforce, with the goal of combating social exclusion and reducing territorial disparities.

Romania's National Recovery and Resilience Plan (NRRP) proposes specific investment projects that address common aspects among all member states, in areas that create jobs and economic growth, and are necessary for the green and digital transition. This document provides a framework for financing the projects that propose hiring and training measures, tools, and activities to develop employment opportunities for people with disabilities facing difficulties on the labour market.

The Operational Programme for Education and Employment (OPEE), which focuses on the key challenges in the field of education and employment, aligned with the priorities of the European Union's policy objectives, the European Skills Agenda, the Digital Education Action Plan (2021-2027), and other European documents, aims to promote equal access to quality education and training, conducive to inclusion, as well as graduation, especially for disadvantaged groups, starting from early education and care, continuing with general and vocational education and training, up to tertiary education, as well as adult education and learning, including facilitating mobility for learning purposes and accessibility for people with disabilities.

The National Implementation Plan for Initial and Continuous Vocational Education and Training (NIP-VET) defines the national measures to achieve the objectives set at the European level, as outlined in the European Council Recommendation of November 24, 2020 on Vocational Education and Training (VET) for sustainable competitiveness, social equity, and resilience. This document details aspects related to the digitalization of education, including the adoption of a legislative framework for digitalization in education, workplace training for teaching staff, and the provision of digital equipment and technological resources for educational institutions.

Order no. 924/2022 of the Minister of Labour amending the Methodology for granting and distributing vouchers exclusively for the purchase of assistive technologies and access technologies, other than those financed through the National Single Health Insurance Fund within the social health insurance system, approved by Order no. 1263/2019 of the Minister of Labour and Social Justice, provides that people with disabilities can benefit from vouchers with a maximum value of 23,000 lei (4,600 euros) if they are in one of the following situations: (1) the person with disabilities has the status of unemployed or inactive person seeking employment; (2) the person with disabilities is between 18 years old and reaching the retirement conditions; (3) the person with disabilities is between 18 and 30 years old and is enrolled in a vocational training program or in the education system (non-NEETs).

The *National Strategy for Research, Innovation, and Smart Specialization for the period 2022-2027*, developed by the Ministry of Research, Innovation, and Digitalization, includes the development of 'technologies for independent living' for people with disabilities/impairments (physical, cognitive, perceptual), illnesses, or injuries, in all relevant aspects - domestic life, social interactions, mobility, leisure time. Technologies for enhancing the autonomy of people with disabilities encompass devices, sensors (including wearables) for activity monitoring, physiological or environmental parameters, robots (companion robots, collaborative robots, exoskeletons), and artificial intelligence algorithms.

The National Authority for the Protection of the Rights of Persons with Disabilities (ANPDPD), in partnership with the National Employment Agency, is implementing a project aimed at facilitating the integration of people with disabilities into the labour market. The project, which runs from May 2019 to October 22, 2023, targets approximately 7,000 people with disabilities and is funded under the *Human Capital Operational Program (POCU) 2014-2020, Priority Axis 3 - Jobs for All, Specific Objective 3.1 - increasing the employment of unemployed and inactive individuals*, with a focus on long-term unemployed, older workers (aged 55-64), persons with disabilities, and individuals with low levels of education. The project provides funding for initiatives that aim to increase the employment of individuals who face difficulties in finding work through vocational training courses, considering the available job opportunities. One of the expected outcomes of the project is to have at least 700 beneficiaries of assistive technology vouchers with disabilities successfully employed in the labour market.

The protection of rights, social assistance, services and benefits offered to people with disabilities are regulated by Law No 448/2006 on the protection and promotion of the rights of people with disabilities. In summary, Law No 448/2006 defines and regulates the following aspects:

- ensuring and facilitating the access of people with disabilities to the physical, informational and communication environment;
- affirming and protecting the rights of people with disabilities in society;
- implementation of assistive technologies and accommodation devices to make physical space accessible for people with disabilities;
- making jobs accessible, implementing assistive technologies in companies and organizations to facilitate the employment and professional integration of people with disabilities (acquisition of equipment, devices, adjustment of work schedule, etc.);
- supported employment for persons with disabilities, which facilitates access to vacant job positions and provides support in job search, transportation, assistive technologies, training and specialization measures, and reimbursement methods for social and professional integration expenses for persons with disabilities.

Article 62, paragraphs (1), (2), and (3) of *Law no. 448/2006* provide clarifications regarding the reimbursement of adaptation/accommodation measures and technologies for persons with disabilities: „Public utility buildings, access routes, residential buildings constructed with public funds, public transportation and its stations, taxis, railway passenger cars, main station platforms, parking spaces, streets and public roads, public telephones, the informational and communication environment shall be adapted in accordance with the legal provisions in the field, so as to allow unrestricted access for persons with disabilities. (2) Heritage buildings and historical buildings shall be adapted, respecting their architectural characteristics, in accordance with the legal provisions in the field. (3) The costs of the necessary works for the adaptations provided in paragraphs (1) and (2) shall be borne by the budgets of central or local public administration authorities and by the own resources of legal entities with private capital, as applicable.”

However, in national legislation (*Article 84 of Law 448/2006*) there are a number of provisions that can contribute to facilitating the employment of people with disabilities: (a) the deduction, when calculating the profit tax obtained by companies, of the amounts spent on the implementation of assistive technologies and accommodation devices for people with disabilities at workplaces; (b) deducting the expenses related to the transportation of disabled persons from home to the workplace, the expenses related to the transportation of raw materials and finished products to and from the home of a disabled person employed for work at home, from the profit tax obtained by the company; (c) reimbursement from the unemployment insurance budget of specific expenses for training, professional guidance and job placement of disabled people; (d) granting a subsidy from the state, under the conditions provided by *Law no. 76/2002 regarding the*

unemployment insurance system and employment stimulation, with subsequent amendments and additions.

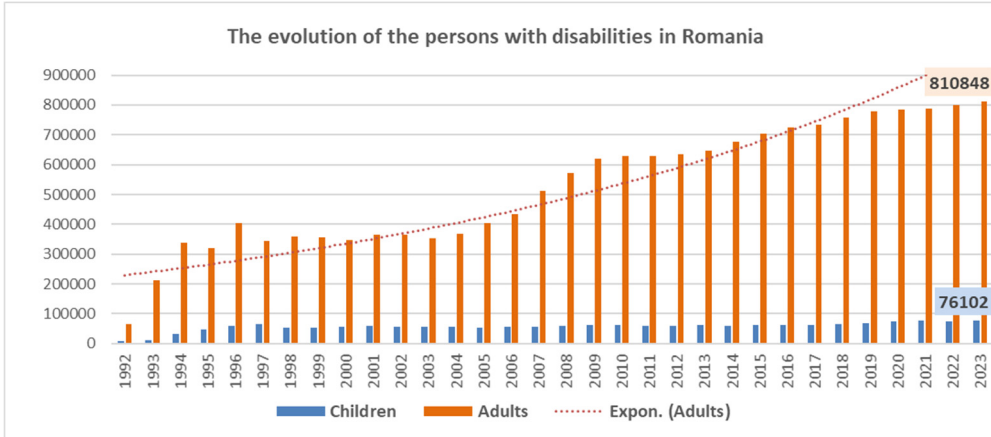
In *Law no. 448/2006, Chapter V* regulates all aspects related to guidance, vocational training, employment, and labour integration of persons with disabilities. Any person with a disability who wishes to integrate or reintegrate into the workforce has free access to vocational assessment and guidance, regardless of age, type, and degree of disability. Persons with disabilities have the right to all conditions necessary to choose and pursue a profession, trade, or occupation, to acquire and maintain employment, as well as to advance professionally.

Order of the Minister of Labour no. 924/2022 regulates the aspects related to the methodology of granting and distributing vouchers exclusively for the purchase of assistive technologies and devices, and access technologies, other than those financed through the National Single Health Insurance Fund within the social health insurance system, approved by the Order of the Minister of Labour and Social Justice no. 1263/2019 – aspects that have been detailed in the previous sections.

Law no. 76/2002, Article 80, paragraph 2 and Article 85, paragraph 2, regulate the procedure for granting subsidies to employers who wish to hire persons with disabilities. Employers can receive a monthly subsidy for a period of 12 months for employing persons with disabilities on an indefinite term basis, and for a period of 18 months for employing graduates with disabilities, provided that they maintain their employment for 18 months. In the research/report of the World Bank on „Diagnosis of the Situation of Persons with Disabilities in Romania” (2021, p. 117), it is mentioned that the subsidy system granted to employers is insufficiently known, and some employers consider it financially unattractive because it does not cover all the costs involved in hiring a person with disabilities (costs of workplace adaptation and costs resulting from the lower productivity of employees with disabilities).

4. Secondary analysis

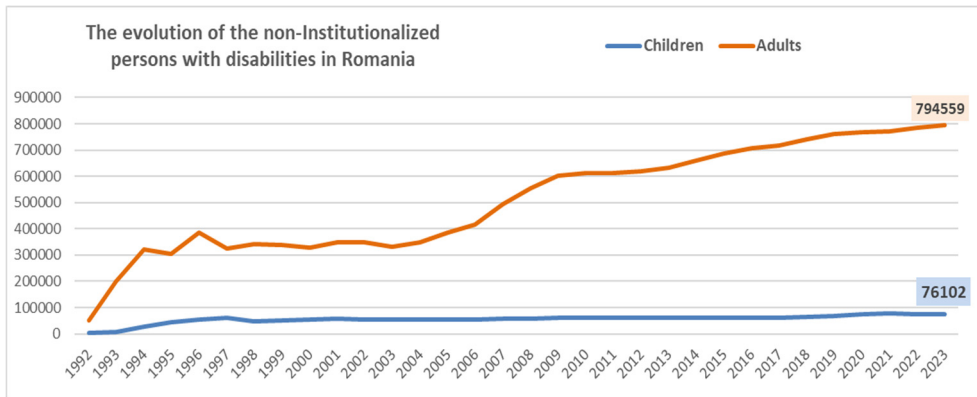
According to Law no. 292/2011 on social assistance, the term 'persons with disabilities' refers to 'those individuals who have long-term physical, mental, intellectual, or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others'. *Law no. 448/2006 on the protection and promotion of the rights of persons with disabilities*, republished, describes the types of disabilities that a person may have: physical, visual, auditory, deaf, blindness, somatic, intellectual, mental, HIV/AIDS, associated disabilities, and rare diseases. According to the data provided by the Ministry of Labour and Social Protection – National Authority for Persons with Disabilities, as of March 31, 2023, there were 886,950 registered persons with disabilities in Romania.



Source: own processing based on data from National Authority for Persons with Disabilities

Figure 3. The number of persons with disabilities in Romania (1992-2023)

In relation to the resident population of the country, persons with disabilities represent 4.7% of the total population of Romania. Currently, the number of persons with disabilities recorded by the Romanian authorities is 12 times higher compared to 1992 when the number was 74,053 persons with disabilities. Out of the total of 886,950 persons with disabilities registered in 2023, 870,661 persons with disabilities are non-institutionalized (98%) and 16,289 persons with disabilities receive services within the institutionalized system (2%).



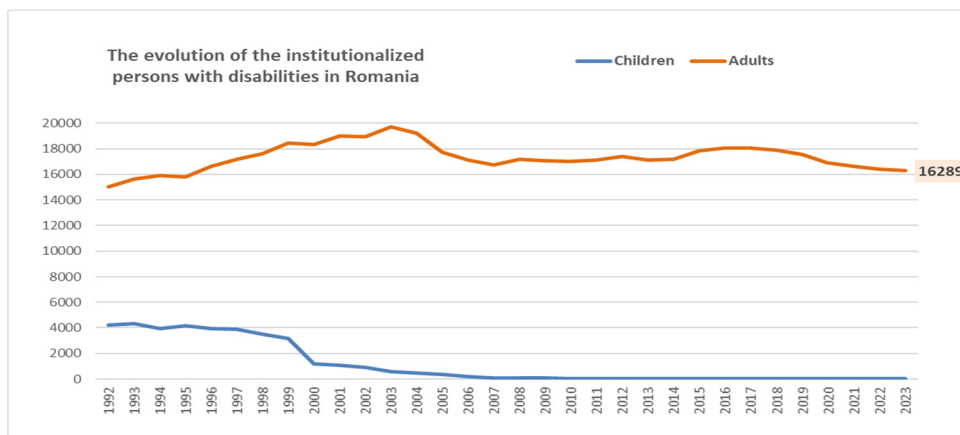
Source: own processing based on data from National Authority for Persons with Disabilities

Figure 4. The number of non-institutionalized persons with disabilities

People with non-institutionalized disabilities, without severe activity limitations, are an important labour resource, considering the fact that, currently, Romania is facing a labour shortage, with entrepreneurs increasingly bringing people from outside the European Union to fill job vacancies.

THE EMPLOYMENT OF PERSONS WITH DISABILITIES

Out of the total number of persons with disabilities registered by the authorities, 810,848 were adults with disabilities (91%) and 76,102 were children with disabilities (9%). Currently, there are no children with disabilities in the institutionalized system of protection and social assistance.

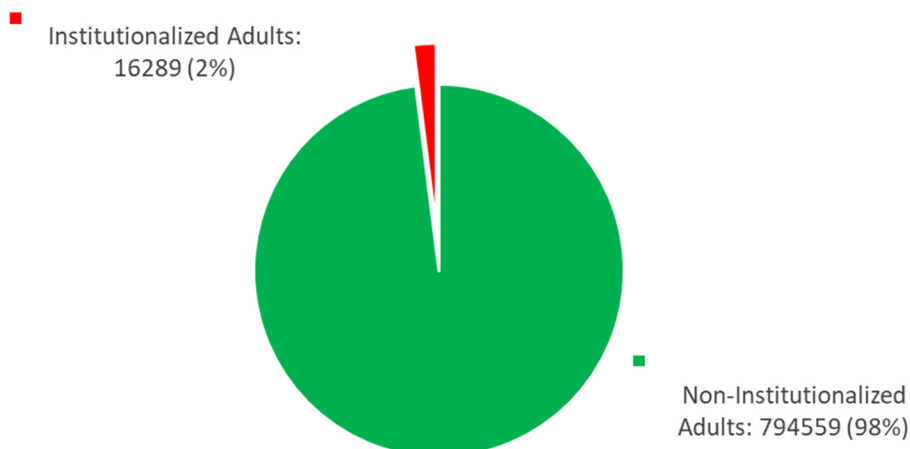


Source: own processing based on data from National Authority for Persons with Disabilities

Figure 5. The number of institutionalized persons with disabilities

Out of the total of 810,848 adults with disabilities, 16,289 individuals receive services within the institutionalized system, accounting for 2% of the total; while 794,559 adults with disabilities are non-institutionalized, representing 98% of the total adults with disabilities.

Adults with Disabilities in Romania, 2023

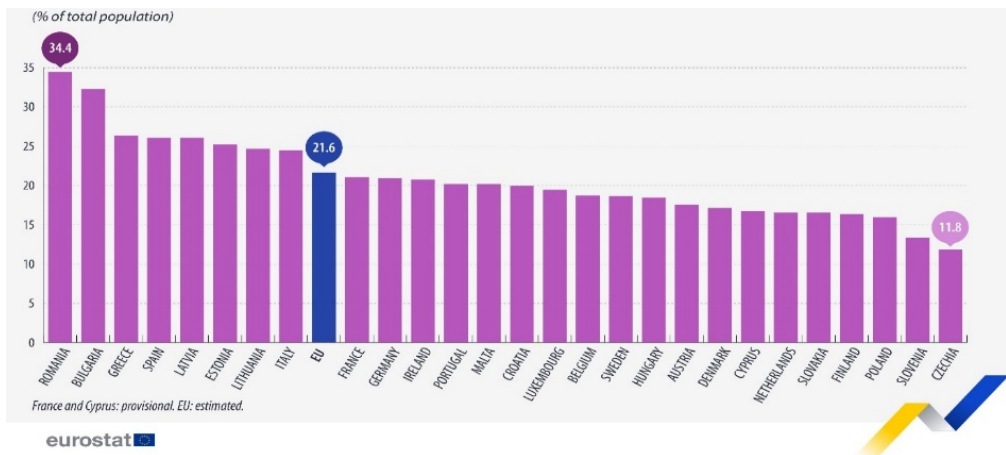


Source: own processing based on data from National Authority for Persons with Disabilities

Figure 6. The number of non-institutionalized persons with disabilities

According to Eurostat (2021), 21.7% of the EU population was at risk of poverty or social exclusion, meaning they lived in households facing at least one of the three risks: poverty, severe material deprivation, or living in households with very low work intensity. Persons with disabilities are more affected by poverty compared to individuals without any activity limitations. In the EU, 29.7% of persons with disabilities aged 16 and over were at risk of poverty or social exclusion, compared to 18.8% of persons without disabilities. According to the same European statistics, in Romania, 45% of persons with disabilities aged 16 and over are at risk of poverty or social exclusion, compared to 30% of persons without activity limitations.

Recently, Eurostat (2022) updated the statistical indicator describing the situation of poverty or social exclusion, with Romania being the poorest country in Europe, with a share of 34.4% of people at risk of poverty or social exclusion - a social context that further exacerbates the situation of persons with disabilities.

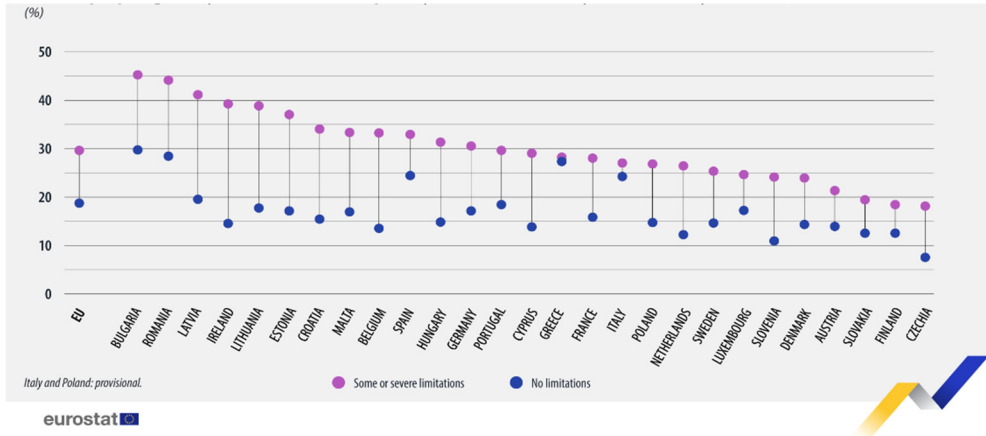


Source: Eurostat

Figure 7. The share of people at risk of poverty or social exclusion in EU (2022)

Eurostat (2021) also show that 45% of people aged 16 years or over from Romania are at risk of poverty or social exclusion by level activity limitation, according to the figure 8. The integration of people with disabilities on the labour market is very important, not only from the perspective of respecting the rights stipulated by international, European or national regulations, but also because their employment in vacant jobs contributes to reducing the labour shortage. Official statistics show that households with low labour intensity (unemployed people who are not looking for a job even though they have the availability to work) are affected by poverty. Households with higher labour intensity (employed persons) are less likely to be exposed to the risk of poverty or social exclusion.

THE EMPLOYMENT OF PERSONS WITH DISABILITIES



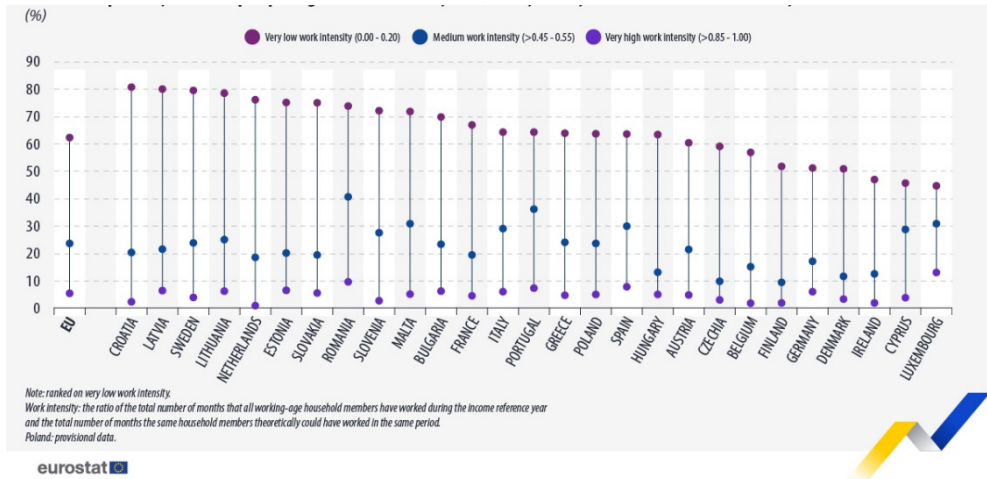
Source: Eurostat

Figure 8. The share of people aged 16 years or over at risk of poverty or social exclusion by level activity limitation (2021)

Low pay, underemployment (part-time work), low education is among the causes influencing this aspect of work. The issue of poverty, severe material deprivation, and the lack of policies and assistive technologies for persons with disabilities constitute barriers to employment in comparison to individuals without any activity limitations. Although a job does not guarantee an escape from poverty, it does create conditions for improving the quality of individual life (in terms of independence/autonomy) and community inclusion. Increasing the employment of persons with disabilities reduces their dependence on the support of others, as well as social marginalization or exclusion. Currently, Romania is facing a labour crisis due to declining birth rates, emigration, and an aging population. Therefore, the socio-professional integration of persons with disabilities could generate economic benefits in the medium and long term.

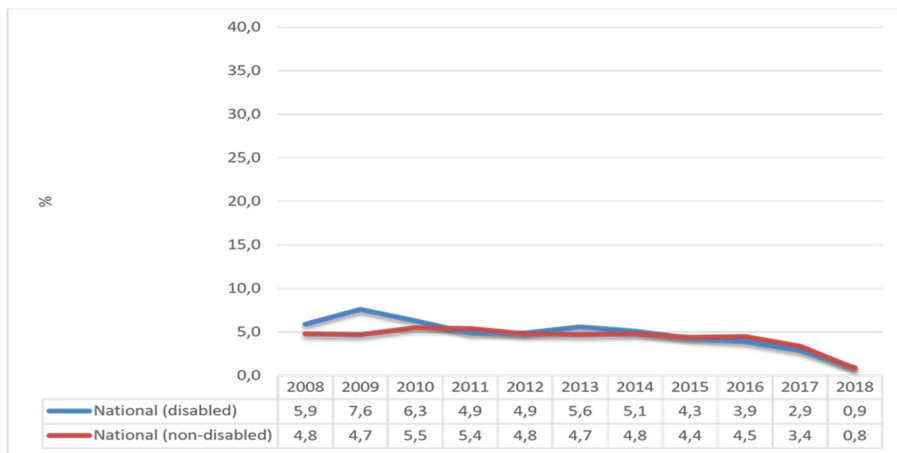
The latest data from the European Commission/Eurostat shows that only 51.3% of people with disabilities in the European Union are employed, compared to 75.6% of people without disabilities. For women with disabilities, the figure is even lower, with an average employment rate of only 49%. Young people with disabilities aged 20-29, meanwhile, have an average employment rate of just 47.4%. Only 20% of women with disabilities work full-time, compared to 29% of men with disabilities. The employment rates among persons with disabilities are significantly lower in each EU member state. Data presented in the European Commission's 2022 report on people with disabilities, cited by the European Disability Forum, shows that 51.3% of people with disabilities are employed, compared to 75.6% of those without disabilities. The employment situation for persons with disabilities varies widely among EU member states. The employment rate of people with disabilities is lowest in Ireland (32.6%), Greece (32.6%) and Croatia (37%). In contrast, the highest employment rates of people with disabilities are in Denmark (60.1%), Latvia (60.8%) and Estonia (64.9%). According to the same EDF report, in Romania, the

employment rate for persons with disabilities is 46.3%, and the disability employment gap compared to the employment rate of persons without any limitations is 30.4 percentage points (which is 6 percentage points higher compared to the EU average of 24.4 percentage points).



Source: Eurostat

Figure 9. At-risk-of-poverty rate for people aged less than 65 years, analysed by household work intensity (2021)

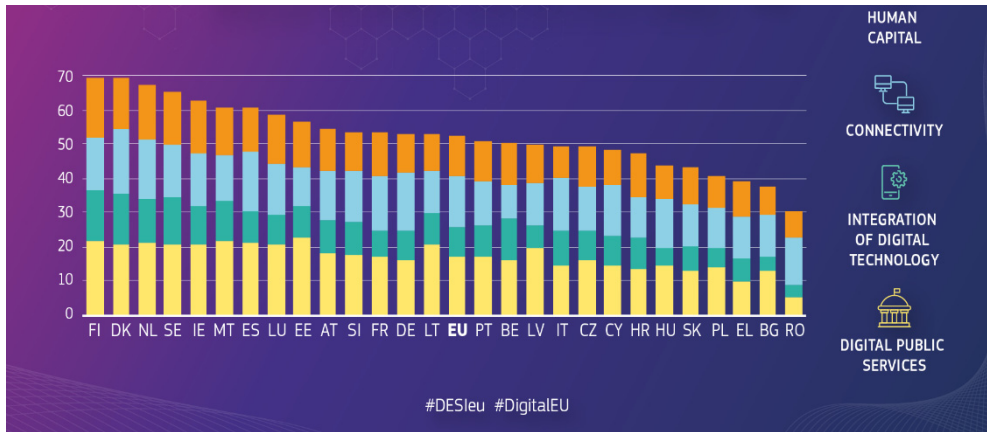


Source: Gîrlescu's processing by EU-SILC 2018 Release 2020 version 1

Figure 10. National trends in unemployment rate, by disability status (aged 20-64)

According to the 2022 edition of the *Digital Economy and Society Index* (DESI), Romania ranks last among the 27 EU member states in several indicators in the „human capital” category, with the lowest share of individuals with basic digital skills (28%) in the EU. In 2021, the highest percentage of people aged 16-74 with

minimum basic digital skills was recorded in the Netherlands and Finland (both 79%), followed by Ireland (70%). At the other end of the scale, the lowest percentage was recorded in Romania (28%), Bulgaria (31%) and Poland (43%). As for the positive aspects mentioned in the DESI 2022 Report regarding Romania, it stands out for its high positions in terms of the proportion of women employed as ICT specialists (2nd place) and ICT graduates (4th place) in the EU.



Source: European Commission <https://digital-strategy.ec.europa.eu/ro/policies/desi>

Figure 11. The Digital Economy and Society Index (2022)

The National Institute of Statistics (INS) conducts an annual survey on the population's access to information and communication technology. According to the 2022 edition of the research (data collected in 2021), we learn that 80.8% of households in Romania have access to home internet, showing an increase of 2.6 percentage points compared to 2020, with 60.2% of these households concentrated in urban areas. The COVID-19 pandemic has increased the population's interest in internet connectivity and accessing online services provided by commercial or public digital platforms. Households with dependent children have a much higher frequency of internet connectivity, with 98.8% of households with children accessing the internet at home, compared to only 70.8% of households without dependent children.

In 2021, the majority of internet users in Romania were constant users, with 94.3% of individuals aged 16 to 74 using the internet in the three months prior to the research. Among them, 82.3% use the internet daily or almost daily, and 15.6% use it on a weekly basis. A percentage of 86.8% of users have performed file copying or moving (e.g., documents, data, images, videos) between folders, devices (e.g., via emails, Messenger, WhatsApp, USB, cable, or cloud), 62.5% have downloaded or installed software programs or applications, and 42.1% indicated that they have modified the settings of software, applications, or devices (e.g., language settings, colours, text size, menu). Pupils and students primarily use the internet for social networking (93.1%) and making voice or video calls over the internet (90.9%).

Currently, there are no available official statistics or research on the level of education and digital skills training for people with disabilities in Romania. However, despite Romania having a high-quality digital infrastructure (advanced equipment and high-speed internet accessible to 80% of households), over 70% of individuals aged 16 to 74 lack basic digital skills, including people with disabilities. This situation creates a barrier for accessing decently paid jobs in an increasingly technology-driven labour market.

5. Data analysis from the interviews

The analysis of the data from the interviews is structured on the following levels: (1) the role of digital skills in the employment of people with disabilities; (2) the impact of assistive technologies in ensuring quality at the workplace for employees with disabilities; (3) how employers contribute to ensuring reasonable accommodation for people with disabilities in Romania.

5.1. The role of digital skills in the employment of people with disabilities

Out of the 24 respondents from participating companies in the research, 15 (63%) believe that the lack of digital skills is not a barrier to the employment of people with disabilities, while 9 (38%) respondents consider that the lack of these skills can be a problem in the labour market. Overall, the representatives of the interviewed companies do not reject the idea of hiring people with disabilities but condition their selection and recruitment on the necessary skills required for the vacant positions. One respondent suggests that their own company could create a retail store for their products and hire individuals with hearing disabilities. In this context, to perform job duties such as communication, customer relations, and product sales, digital communication skills and the ability to operate information systems (online platforms) for customer relationship management are necessary.

When asked about the development of training programs in the field of digital skills, 8 respondents (33%) stated that their own companies conduct such activities, while 16 (67%) stated that they have not organized such programs for employees. Respondents/company representatives who organize training programs in digital skills state that these programs are intended for all employees, not just those with limitations or disabilities. For individuals with disabilities in protected units, training courses for using the Microsoft Office package have been provided. One of the participating organizations in the research has organized vocational training courses specifically for individuals with intellectual disabilities. One company is a provider of authorized courses by the National Qualifications Authority (ANC) in the field of information and communications technology (ICT). One respondent stated that their organization utilizes Artificial Intelligence (AI) algorithm-based technologies for software development.

Interview respondents have appreciated that, in terms of digital skills related to internet usage and digital devices (such as tablets, smartphones, etc.), young people, including those with disabilities, have basic competencies. The

process of developing/learning digital skills is often carried out independently or through knowledge transfer from individuals who already possess the required knowledge and skills to others who are willing to learn.

At present, public authorities and employers are not fully aware of the potential of the workforce represented by people with disabilities who are available and actively seeking employment. Increasing the employment of people with disabilities can contribute significantly to addressing the growing demand for labour in Romania, a country heavily affected by declining birth rates, external migration, and an aging population.

5.2. Assistive technologies and the impact on employment of people with disabilities

Out of the total of 24 respondents in the interview survey, 6 (25%) respondents stated that their company/organization has information about the use of assistive technologies, while 18 (75%) do not have such information. Regarding the use of assistive technologies, the respondents who answered „yes” indicated the following situations:

- in manufacturing, employees use assistive technologies mainly for communication, but they are also used for documentation processes;
- in a company/organisation where assistive technology (mime-gesture interpretation application) is available for those employees and customers with hearing disabilities;
- there is also the situation of a company where out of 35 employees, 19 (55%) benefit from assistive technologies in the workplace.

One of the interview respondents believes that employees with disabilities cannot perform at their full potential because the institutions and organizations they work for lack assistive technologies and adapted workplaces to meet their needs. The case of individuals with autism spectrum disorders (ASD) is given as an example, for whom electronic tablets or picture-based communication boards could be acquired to facilitate communication. Additionally, the suggestion is made to develop communication programs in the Romanian language, similar to those available in English.

Adapting to the workplace depends on individual needs and the specific nature of each person's disability. Equally important is the support provided to employers by experts in adapting the workplace for people with disabilities.

The acquisition of assistive/medical equipment is still problematic, and the current legislation does not fully cover these needs. The reimbursement process is excessively bureaucratic, and employers do not make use of this reimbursement system.

To enable individuals with disabilities to access vacant job positions, it is necessary to provide basic assistive devices, such as accessibility devices (ramps, low curbs, adapted restrooms), mobility aids, navigation/orientation/guidance devices in the environment, tactile materials for floors and stairs, hearing devices,

including facilities for free and adapted transport from the disabled person's home to the workplace.

5.3. Reasonable Accommodation

Out of the total of 24 respondents in the interview survey, 11 (46%) stated that their company/organization has a standardized procedure for reasonable accommodations for employees with disabilities, while 13 (54%) of the respondents said that they do not have such a human resources policy/procedure. The respondents who answered „yes” to the question regarding the human resources policy for standardizing accommodations for people with disabilities made the following clarifications:

- employees with disabilities in the institution have all the necessary facilities as per the current legislation;
- the company/organization provides a work schedule adapted to the needs of employees with disabilities, with reasonable accommodations in the workspace (office), as well as other devices (laptops) that are adapted;
- one respondent stated that their organization does not have sufficient funds to implement the human resources policy that includes reasonable accommodations for people with disabilities;
- the workspaces of the organization are made accessible with ramps, wheelchairs, adapted elevators, personalized markings for employees with Down syndrome, and accessible cash registers for employees with disabilities working as cashiers.

In response to the question 'whether the organization/company has a policy for making the recruitment processes accessible, 13 (54%) respondents answered affirmatively, while 11 (46%) stated that there are no such provisions. In order to make the selection and recruitment processes accessible for people with disabilities, the following tools are highlighted:

- the recruitment process involves a telephone interview, practical assessment at the company/organization's premises, and a final interview. The adapted recruitment procedure considers the physical and motor abilities of the candidates;
- for young people with disabilities from the public protection system, a recruitment procedure tailored to their special needs is utilized;
- the evaluation of candidates with mobility disabilities takes place in accessible workspaces, and job interviews include questions presented in Easy Reading format;
- the interview guide for hiring, job descriptions, and work schedule are made accessible;
- easy-to-understand language is used, work samples are adapted for individuals with disabilities, interviews are adapted (with support persons), accompanied visits to occupational health, and the adaptation of safety and security instructions in the workplace.

The following facilities provided to companies/organizations for employees with disabilities are also worth mentioning:

- provision of mentoring by a team trained in the inclusion of people with disabilities;
- screen reader for individuals with visual impairments/blindness;
- specific working conditions are ensured for inclusion, considering the vulnerability/disability of the person, as well as fair remuneration (proportionate to the work performed) compared to other team members in similar positions;
- employees with intellectual disabilities receive psychological counselling, social assistance services, and medical support;
- free transportation from home to the workplace is provided.

Regarding the level of awareness among companies/organizations about the public legal framework and government programs that support the provision of reasonable workplace accommodations for people with disabilities, 7 (29%) respondents stated that they are familiar with the relevant legal provisions, while 17 (71%) respondents stated that they are not familiar with such information.

6. Conclusions

In order to inform public policies, strategies, and programs aimed at increasing the employment of people with disabilities, there is a need for statistical data and research focused on the needs of people with disabilities. The available official statistics do not provide a comprehensive description of the issues and needs faced by people with disabilities in Romania. The exact number of employed individuals with disabilities and how many of them have the status of „employee” is not known. There is a need to maintain a form of training by attracting trainers/teachers who understand the issues related to the socio-professional inclusion of people with disabilities.

Currently, most departments within a company require employees with basic and advanced skills in the field of information and communications technology. Computer literacy, internet navigation, and online communication are considered basic digital skills. In other words, it is believed that disability itself is not an obstacle to employing individuals with special needs, but rather the lack of technical/digital skills adapted to the requirements of the vacant position. Currently, individuals with disabilities who possess digital skills can engage in remote working.

The development of digital skills among people with disabilities is typically conducted within the associations/organizations they belong to, rather than through formal training courses within the public education system. In addition to these programs, there are vocational training courses offered through non-reimbursable funded projects by various NGOs or employment agencies, where individuals with disabilities are eligible as a target group.

To address the integration of people with disabilities into employment, the development of a system of counselling services, vocational guidance, mediation, and job placement in the labour market is necessary. To increase the employment of people with disabilities, the interview respondents propose the following steps:

- assessing competences and professional skills from a young age to identify the individual's potential and guide them towards fields of activity where they can fully realize their potential;
- developing qualification programs in a profession (trade) and continuous professional training, taking into account the socio-psychological assessments from the previous point.

The idea that the associative environment promoting the rights of persons with disabilities in Romania is not sufficiently developed is accredited. It does not represent a unified, coherent, and strong voice capable of advocating for legislative changes. Additionally, the National Authority for the Protection of the Rights of Persons with Disabilities (ANPDPD), under the coordination of the Ministry of Labour and Social Solidarity, lacks sufficient power to initiate and support proposals for public policies aimed at protecting the rights of persons with disabilities.

The limitations in implementing reasonable accommodation for people with disabilities resulting from the analysis of the interviews conducted are summarised as follows:

- the bureaucratic and insufficient reimbursement system to cover the needs of people with disabilities;
- regulation of reimbursement requests for hygiene and sanitary materials, medical devices;
- reimbursement of expenses related to education and vocational training programs adapted to the needs of people with disabilities;
- obstacles generated by the mentality of people with disabilities: passivity and dependence on the public welfare and social assistance system, lack of good practice models regarding employees with disabilities, lack of parental support, the need for scholarships and educational incentives for children with disabilities;
- low level of awareness among employers regarding current legislation, lack of knowledge about incentives for hiring people with disabilities, ignorance of the role played by people with disabilities in increasing workforce participation;
- public authorities show concern for the issues faced by people with disabilities but often fail to effectively address many of their problems.

The main limitations/costs mentioned for providing reasonable accommodations to employees with disabilities are as follows: lack of financial resources, lack of a dedicated workspace, insufficient workspace, outdated social infrastructure requiring costly renovations and modifications, high prices of

equipment purchase, bureaucracy, and difficult communication with public authorities.

Acknowledgments: this article uses data from empirical research conducted by „Alături de Voi” (ADV) Foundation in Romania, as part of a larger project on the rights of people with disabilities on the labour market in the European Union managed by European Disability Forum (EDF). The interviews were conducted with companies/organizations in Romania that employ people with disabilities, including authorized protected units, social enterprises, social insertion enterprises; the interviews for the EDF report were conducted with companies/organizations that do not necessarily employ persons with disabilities. Therefore, this article does not constitute the research report sent by ADV to EDF. The opinions expressed in this text are those of the authors and do not necessarily reflect the views of EDF and ADV.

References

- Achiței, A. (2022). Cum arată angajarea persoanelor cu dizabilități în unități protejate și ce putem face pentru a crește rata de angajare [What does the employment of people with disabilities look like in sheltered establishments and what can we do to increase the employment rate], <https://alaturidevoi.ro/analiza-cum-arata-sectorul-de-angajare-a-persoanelor-cu-dizabilitati/>.
- Achitei, A, Tompea, D.A., & Atesoaiie, M.R. (2019). The Employment of People With Disabilities from Romania - Challenges and Solutions. *Anuarul Universității „Petre Andrei” din Iași, Fascicula: Asistența Socială, Sociologie, Psihologie*, 23, 1-17. <https://doi.org/10.18662/upasw/22>.
- Angheliescu, A. , Bușcă M., Constantin A., Andone I, Angheliescu L.-A., Onose G. (2016). Employment of People with Disabilities in Romania. *International Archives of Medicine*, Vol. 9 No. 365, <https://doi.org/10.3823/2236>.
- Baciu, E.-L, Lazăr, T.-A. (2017). Between Equality and Discrimination: Disabled Persons in Romania. *Transylvanian Review of Administrative Sciences*, No. 51 E/2017, pp. 5-19, <https://doi.org/10.24193/tras.51E.1>
- Buchanan, J., Hammersle, H. (2023). European Human Rights Report, Issues 7. The Right to Work: the employment situation of persons with disabilities in Europe. *European Disability Forum*, https://www.edf-feph.org/content/uploads/2023/05/hr7_2023_press-accessible.pdf.
- Bungău, S., Țiți, D.-M., Popa, V.-C., Sabău, A., Cioca, G. (2019). Practices and Attitudes regarding the Employment of People with Disabilities in Romania. *Occupational Health and Safety Management*, No. 170/ June 2019, https://www.researchgate.net/publication/333045075_Practices_and_attitudes_regarding_the_employment_of_people_with_disabilities_in_Romania.
- European Disability Forum (2022), Analysis of data from Eurostat, Disability employment gap by level of activity limitation and sex (source EU-SILC), retrieved 18 July 2022, <https://ec.europa.eu/eurostat/databrowser>.
- European Commission (2021). Strategy for the Rights of Persons with Disabilities 2021-2030, <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8376&furtherPubs=yes>.
- European Commission (2021). European comparative data on Europe 2020 and persons with disabilities Labour market, education, poverty and health analysis and trends, [file:///C:/Users/user/Downloads/KE-07-21-079-EN-N%20\(1\).pdf](file:///C:/Users/user/Downloads/KE-07-21-079-EN-N%20(1).pdf).

- Girlescu, O.-G. (2021). European Semester 2020-2021 country fiche on disability equality. Romania, <https://ec.europa.eu/social/BlobServlet?docId=23953&langId=en>.
- Grammenos, S. (2022). European comparative data on Europe 2020 and persons with disabilities: Labour market, education, poverty, and health analysis trend, developed under Contract VC/2020/0273 with the European Commission, Luxembourg: Publications Office of the European Union, <https://ec.europa.eu/social/main.jsp?catId=1540&langId=en>.
- National Authority for the Protection of the Rights of Persons with Disabilities (2019), Facilitating the Employment of Persons with Disabilities, <https://anpd.gov.ro/web/proiecte/proiecte-europene/facilitarea-insertiei-pe-piata-muncii/>.
- National Institute of Statistics (2022), Access of the population to information and communication technology, <https://insse.ro/cms/ro/tags/accesul-populatiei-la-tehnologia-informatiei-si-comunicatiilor>.
- Meager, N. & Higgins, T. (2011). Disability and Skills in a Changing Economy. London, England: UK Commission for Employment and Skills.
- Ministry of Research, Innovation and Development (2022), National Strategy for Research, Innovation and Smart Specialization 2022-2027, <https://www.mcid.gov.ro/transparenta-decisionala/strategia-nationala-de-cercetare-inovare-si-specializare-inteligenta-2022-2027/>.
- Ministry of Labour and Social Solidarity (2021), National Strategy for Employment 2021-2027, <https://mmuncii.ro/j33/index.php/ro/minister-2019/strategii-politici-programe/6333-sn-ocupare-forta-munca-2021-2027>.
- Ministry of Labour and Social Solidarity (2022), National Strategy for the Protection of the Rights of Persons with Disabilities, <https://mmuncii.ro/j33/index.php/ro/minister-2019/strategii-politici-programe/6813-strategie-nationala-drepturi-persoane-dizabilitati-o-romanie-echitabila-2022>.
- Presidency of Romania (2023). Educated Romania. Project of the President of Romania, <http://www.romaniaeducata.eu/rezultatele-proiectului/>.
- Tkacz, E. (2022). Disability and Poverty in Romania, <https://borgenproject.org/disability-and-poverty-in-romania/>.
- World Bank (2021), Diagnosis of the Situation of Persons with Disabilities in Romania, <https://anpd.gov.ro/web/wp-content/uploads/2023/01/Diagnoza-situatiei-persoanelor-cu-dizabilitati-in-Romania.pdf>.
- World Health Organization & UNICEF (2022). Raport global privind tehnologia asistivă, <https://www.unicef.org/romania/media/11311/file/Raport%20global%20privind%20tehnologia%20asistiv%C4%83.pdf>.