



Digital inclusion

Intellectual Disability People

Research Report

PROJECT: Digital Inclusion for Intellectual Disability People

2021-2-ES01-KA210-ADU-000051007



Co-funded by
the European Union

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



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Introduction

The project "Digital Inclusion for Intellectual Disability People" aims to develop a methodology and the necessary tools that will enable organizations that work with people with intellectual disabilities to promote the use technology and digital devices when interacting with the target group. The objective is to facilitate the digital inclusion of people with intellectual disabilities as the global shift to the digital era has been steadily advancing in a fast pace. The need to foster the digital inclusion of the target group has never been more urgent.

Digital inclusion is one of the great challenges faced by organizations working with people with intellectual disabilities, making it necessary to raise awareness among companies that develop and produce digital content and software. Digital devices and subsequently applications and programs can have a positive impact on the lives of people with intellectual disabilities, as they can be used to facilitate communication, education and entertainment, among other things.

Therefore, the goal of the project is to facilitate the digital inclusion by researching the attitudes and habits of the target group, their families, and the people who work with them on a daily basis so as to understand the current state of affairs in the field and gain insights that will enable software companies to develop appropriate tools and methods that will improve digital accessibility for people with intellectual disabilities.

This research study will gather data directly from the target group, and will serve as the basis for the development of a methodology designed to enable the smooth transition of people with intellectual disabilities into a digital environment, and consequently enhance their quality of life.





Research methodology

The research study consisted of a compilation of questionnaires that aim to investigate the attitudes and habits of the target group, their families and their caregivers. In order to achieve this, the partnership has created three survey questionnaires, one for each group that will be investigated. The first part of the survey consists of demographic questions without collecting personally identifiable information.

The second part of the three surveys has its specifics depending on the group to which it is directed. In the survey for users, the questions aim to gather data about the use of digital devices by people with intellectual disabilities, such as the frequency of use, what kind of devices do they use, accessibility to such devices and purpose of use. In the survey for families, the aim is to investigate the attitudes of parents towards digital devices for their children, if the use of digital devices is encouraged and if they believe it can be beneficial for their children. In the survey for caregivers, the aim is to understand the viewpoint of caregivers and their attitudes toward using digital devices in their scope of work on a daily basis.

The survey consists of multiple choice questions, where respondents are given several options to choose from. In some questions, participants could select more than one answer. The last question in each of the surveys requires all the participants to give their opinion whether training workshops for people with intellectual disabilities are necessary to be implemented.

Description of the research design





The design of the current study is based on experimental data from respondents meeting the criteria for participation in the study, not limited by gender, race and ethnicity. A survey has been compiled in order to study the attitudes and habits of people with intellectual disabilities, their families and caregivers regarding the use of digital devices as well as the influence of the social environment on their choices. The quantitative part is based on the collection of numerical data encoded by a ranking scale and the use of mathematical statistical methods for their analysis. On the other hand, the qualitative part is based on the collection of textual data, textual presentation of individual answers and their further structuring using special analytical techniques. The respondents in the study were selected in accordance with the initially described criteria. Among the objectives of social research are description, explanation, assessment, comparison, analysis of the attitudes and habits of the target group towards digital transformation.

In the conducted empirical research, the instrument for collecting the information is the survey. A poll is preferred when the audience participating in the survey is over a large area. The method is suitable for examining prevailing attitudes towards a particular subject, in our case digital readiness and use of digital devices.

The computer survey is an option for obtaining overview information. With the help of the Internet, through specially prepared survey forms, a questionnaire on a certain topic can be made publicly available. The questionnaire is anonymous, but contains personal characteristics of the interviewee's gender, occupation and day center. To improve the effectiveness of the survey and reduce the probability of reluctance to answer or making it difficult for the respondents, an optimal number of questions has been selected. A computer-based survey can also be considered a faster and more efficient option for administering an empirical survey if all respondents have access to the Internet.





Description of the course of the research

The survey was conducted in parallel in all partner countries (Cyprus, Spain, Portugal). After the questionnaires were compiled, they were translated into all official languages of the participating countries from the English version. The next step is to compile an electronic survey card and send it to the respondents. The surveys were administered online through the google forms platform. A link with questionnaires has been provided for all respondents to complete. After the completion of the specified time for completing the surveys, a primary quantitative analysis was made in google forms. Further analysis of the quantitative data was done with MS Excel. Based on this quantitative analysis, a qualitative analysis and recommendations for future research are also made.

Also as part of the research we have included a bibliographic search of applied and theoretical studies that has allowed us to have a broader vision that can be applied to the development of the methodology and the following activities of the project.

Description of the respondents

The participants in the research consist of three different groups of respondents. The first group is people with intellectual disabilities, the second group is families of people with intellectual disabilities and the third group the caregivers that provide support to people with intellectual disabilities.

The respondents come from three different countries, Cyprus, Spain and Portugal where the participating organization are operating. Portuguese participants come from the day centers of AppaCMD, Spanish participants come from the day centers of Association Vale while respondents from Cyprus come from Apostolos Loukas day center.





From Cyprus, we received a total of 35 responses from users, 27 responses from families and 14 from caregivers. The totals from Spain were 47 responses from users, 25 responses from caregivers and 18 responses from families. From Portugal the responses were 159 from users, 65 responses from users and 118 responses from families. In conclusion, a total of 508 responses were collected during the administration of the survey.

Limitation of the study

Future research can identify and explore the impact of other types of interactions that could be significant, and additionally include in the study special education pedagogues to emphasize and discuss effective use of digital devices regarding education. A possible direction for further research could be to identify the types of interactions that occur between people with intellectual disabilities, their families and caregivers by utilizing digital devices outside of their normal settings.

Review of other studies and articles

E-inclusion for people with intellectual disabilities is a field of research of growing importance today. The rapid advancement of information and communication technologies (ICTs) has transformed multiple aspects of daily life, providing new opportunities for education, employment and social participation. However, this progress has also accentuated existing gaps, especially for those who face significant barriers in accessing and using these technologies (UNHCR, 2021; Mejia Cajamarca, 2018).





The concept of digital inclusion goes beyond simply providing access to technological devices; it involves ensuring that all people, regardless of their abilities, can use these tools effectively and autonomously. In the case of people with intellectual disabilities, this means adapting user interfaces, developing accessible content and providing ongoing training and support to ensure that these technologies can be fully exploited (de Souza Godinho & Cabero-Almenara, 2017).

The importance of e-inclusion is reflected in various regulatory frameworks and public policies at the global level. The United Nations Convention on the Rights of Persons with Disabilities underlines the right of persons with disabilities to equal access to information and communication technologies (United Nations, 2006). This international recognition has spurred multiple initiatives to promote digital accessibility and has catalysed an increase in academic research on the topic (Plena Inclusión, 2023).

Studies have shown that ICTs can be powerful tools to improve the quality of life of people with intellectual disabilities. These technologies can facilitate communication, promote inclusive education and increase social participation. For example, augmentative and alternative communication (AAC) applications allow people with speech difficulties to express their needs and desires, while adaptive learning platforms offer personalised educational opportunities that are tailored to individual abilities (de Souza Godinho & Cabero-Almenara, 2017; Redalyc, n.d.).

However, the effective implementation of these technologies faces several challenges. Lack of accessibility in devices and software, insufficient specific training and lack of continuous technical support are persistent barriers that need to be addressed. Furthermore, it is crucial that digital inclusion initiatives not only focus on technological adaptation, but also foster a cultural shift towards acceptance and support for people with intellectual disabilities in all areas of life (Mejia Cajamarca, 2018).





In this context, this section is based on a comprehensive review of the academic literature and the analysis of case studies on eInclusion. The studies and projects analysed provide a comprehensive overview of effective strategies, challenges faced and future opportunities to promote full and equitable digital inclusion.

The aim of this section is to provide a robust theoretical framework and practical recommendations for improving digital accessibility and inclusion of people with intellectual disabilities. In doing so, it seeks to contribute to the development of policies and practices that not only facilitate access to technology, but also promote active and meaningful participation in the digital society. This effort is essential not only for reasons of equity and social justice, but also because a truly inclusive society is beneficial for all its members (UNESCO, 2016).

In conclusion, the digital inclusion of people with intellectual disabilities is an urgent priority in today's technological age. Through collaboration between governments, educational institutions, non-governmental organisations and the technology industry, effective solutions can be developed and implemented to ensure that no one is left behind in the digital revolution (UNHCR, 2021).

A key study in this area is Redalyc, which analyses how digital technologies can improve the autonomy and inclusion of people with intellectual disabilities, especially in emergency situations. This work highlights the importance of having adapted digital tools that users can use independently, thus improving their well-being and safety (Redalyc, n.d.). This study is essential to understand how ICTs can be a crucial support in critical situations, promoting a more effective integration of people with intellectual disabilities into society.

The research by Souza Godinho and Cabero-Almenara (2017) provides a systematic review on how digital accessibility in education can remove barriers and promote the inclusion of people with disabilities. This study highlights the need to integrate





information and communication technologies in the educational setting to facilitate the learning and personal development of students with special needs. Digital accessibility not only improves access to education, but also fosters the active and equal participation of these students in the academic environment. This work is essential to understand how inclusive educational policies and accessible technologies can transform the educational experience of people with intellectual disabilities.

Mejía Cajamarca's (2018) work investigates the views of academic leaders and students with intellectual disabilities on the challenges and strategies for advancing inclusive education in universities. This article highlights the importance of adopting inclusive pedagogical approaches and providing adequate support to students with disabilities to ensure their academic success and full integration into university life. This study has provided a detailed overview of barriers and facilitators in the university context, highlighting the need for a holistic approach to inclusion.

Plena Inclusión has carried out a significant project focused on improving digital accessibility and inclusion of people with intellectual disabilities through online tools and resources (Plena Inclusión, n.d.). This project highlights how technology can be a powerful enabler for social inclusion, providing people with intellectual disabilities with the skills and access needed to actively participate in the digital society. This work has been instrumental in developing strategies to promote digital autonomy and social inclusion through accessible platforms and online educational resources.

Another study by Plena Inclusión (2023) presents guidelines and resources on augmentative and alternative communication systems to ensure accessibility in the judicial field for people with intellectual disabilities. This work addresses the importance of ensuring that all people, regardless of their abilities, can exercise their legal rights fully and effectively. This study has been crucial to understanding how adaptations in the





justice system can promote fairness and access to justice for people with intellectual disabilities.

The Spanish Journal of Disability publishes academic research and reflections on disability, including issues of e-inclusion. This journal provides a platform for the dissemination of studies and innovative practices that promote the inclusion of people with disabilities in various areas of social life (CEDID, 2024). Articles published in this journal have been instrumental in providing a theoretical and empirical framework on best practices in eInclusion.

An article in Redalyc examines the process of inclusion of people with disabilities in higher education, highlighting the need for greater efforts to integrate inclusive measures to facilitate access and participation of these students (Redalyc, n.d.). This study highlights existing barriers and proposes strategies to overcome them, promoting more equitable and accessible education.

The UNHCR (2021) report on digital access and inclusion for persons with disabilities underlines the importance of providing accessible digital tools and promoting inclusive policies that facilitate the participation of persons with disabilities in the digital society. The report provides practical recommendations for improving accessibility and usability of digital technologies. This work has been essential for the development of policies and practices that promote digital inclusion globally.

Espinoza (2019) discusses university educational inclusion and the legislative and practical challenges to achieve true inclusion of students with intellectual disabilities. This study emphasises the importance of inclusive policies and institutional support to ensure that all students have equal opportunities for academic success.





The UNESCO report (2016) highlights the importance of physical and digital accessibility in schools for educational inclusion. This document provides guidance on how ICT can be used to support the learning of students with disabilities, promoting inclusive and quality education for all.

Plena Inclusión offers free online courses on participation and cognitive accessibility for people with intellectual disabilities (Plena Inclusión, n.d.). These courses provide a valuable opportunity for users to develop digital skills and integrate more fully into the digital society.

An article in UNAM's Revista Digital Universitaria highlights the role of ICTs in the inclusion of persons with disabilities, promoting a culture of respect and dignified treatment (UNAM, n.d.). This study highlights the opportunities that ICTs offer to improve the quality of life and social participation of persons with disabilities.

This Plena Inclusión project organises seminars on how technology helps people with intellectual disabilities to become more independent and included in the community (Plena Inclusión, n.d.). The seminars provide practical training in the use of digital technologies and promote social inclusion.

Fundación Mente Clara's study (n.d.) analyses the use of ICTs to promote educational inclusion and how these technologies can be adapted to the diverse needs of students. This work provides a solid basis for understanding how ICTs can be effectively integrated into the educational environment.

Plena Inclusión Madrid provides an analysis of the needs of people with intellectual disabilities and proposes strategies to improve their social and labour inclusion (Plena Inclusión Madrid, n.d.). This study provides a comprehensive overview of the barriers and opportunities for the digital and social inclusion of people with intellectual disabilities.





Digital inclusion for people with intellectual disabilities has gained significant importance in the current context due to the rapid advancement of information and communication technologies (ICTs). These technologies have transformed many aspects of everyday life, creating new opportunities in areas such as education, employment and social participation. However, this transformation has also highlighted existing gaps, especially for those who face significant barriers in accessing and using these technologies.

It is critical to understand that digital inclusion goes beyond simply providing access to technological devices. It involves ensuring that all people, regardless of their abilities, can use these tools effectively and autonomously. For people with intellectual disabilities, this means developing adapted user interfaces, accessible content and providing ongoing training and support. This approach not only improves their quality of life, but also promotes their autonomy and active participation in society.

Various regulatory frameworks and public policies underline the right of these people to equal access to information and ICTs. This framework has driven global initiatives and increased academic research on the topic, promoting greater digital accessibility.

Despite the benefits offered by ICTs, the effective implementation of these technologies faces significant challenges. Lack of accessibility in devices and software, insufficient specific training and lack of ongoing technical support are persistent barriers. In addition, it is crucial that eInclusion initiatives promote a cultural shift towards acceptance and support for people with intellectual disabilities in all areas of life.

Analysis of studies and practical inclusion projects provides a comprehensive understanding of effective strategies and challenges faced. This knowledge is essential for developing policies and practices that not only facilitate access to technology, but also encourage active and meaningful participation in the digital society. This effort is fundamental not only for reasons of equity and social justice, but also because a truly inclusive society benefits all its members.





In short, the digital inclusion of people with intellectual disabilities is an urgent priority that requires the collaboration of governments, educational institutions, non-governmental organisations and the technology industry. Only through a concerted and sustained effort can effective solutions be developed and implemented to ensure that no one is left behind in the digital revolution, thus ensuring a more just, equitable and inclusive society.

Quantitative Analysis

In this section we are going to make an analysis of all the data collected during the research phase, through surveys to users of the day centres for people with intellectual disabilities, their relatives and the carers of the partner organisations.

1. Spain

The following responses were collected during the administration phase of the survey and provide meaningful insight on the attitudes and habits of people with intellectual disabilities, their families and caregivers regarding the use of digital devices in Spain. The overall total of responses was 90.

I. Users

The first question, gender-related, was answered by a total of 47 participants, out of which 25 were women, accounting for 53.18%, and 22 were men, representing 46.81%.





	Responses	Percentage
Female	25	53,19
Masculine	22	46,81
Total	47	100, 0

The next question, "**Do you make use of digital devices in your daily life?**" was answered by the 47 participants. Out of these, 38 (80.9%) responded affirmatively, while 9 (19.1%) answered negatively.

	Responses	Percentage
Yes	38	80,9
No	9	19,1
Total	47	100

If you answered yes, **which of the following digital devices do you use?**

	Responses	Percentage
Laptop/ Computer	7	12,5
Tablet	10	17,8
Smartphone	31	55,3
Smartwatch	1	1,8
Game console	6	10,7
All of the above	1	1,8
Total	56	100





As evident from the provided responses, the most commonly used device among the surveyed users is the smartphone (mobile) at 55.3%, followed by the tablet at 17.8%, and in third place, the laptop/computer at 12.5%.

Regarding this question, there is also the inquiry: **"Do you find it easy to access digital devices?"** To this, 55.3% of the responses indicated that accessing devices from home was indeed easy.

	Responses	Percentage
Only at home	26	55,3
Only at the day centre	5	10,6
Both	16	34
Total	47	100

Continuing on the topic of the question, **"Where do you use the devices?"** We observe that 61.7% utilise them at home, whereas 8.5% use them at the day centre, and 29.8% utilise them from both locations.

	Responses	Percentage
At home	29	61,7
At the day centre	4	8,5
Both	14	29,8
Total	47	100

Concerning the question, **"What kind of tools do you use on these devices?"** The responses provided by the users were as follows:





	Responses	Percentage
Entertainment applications (Youtube, Netflix, etc.)	34	42
Assisted communication software	1	1,2
Social media	11	13,6
Messaging platforms	32	39,5
Educational programmes	1	1,2
All of the above	2	2,5
Total	81	100

It is evident that the majority of users allocate their digital devices primarily for entertainment applications, accounting for a total of 42%. Following closely is the usage directed towards messaging platforms, making up 39.5%.

The upcoming pair of questions explores how digital devices are used, both at home and at the day centre.

As for the first question: **When you are at home, what do you use digital devices for?**

	Responses	Percentage
To educate and learn	1	1,6
To entertain me	27	42,2
To communicate with my family and friends	29	45,3
All of the above	7	11
Total	64	100





Most users primarily use digital devices to communicate with family and friends, accounting for 45.3% of the total. Conversely, nearly matching this percentage at 42.2%, devices are used for entertainment. On the other hand, a mere 1.6% of users employ digital devices as educational and learning tools.

Moving on to the next question, quite similar to the previous one: **When you are at the day centre, what do you use digital devices for?**

	Responses	Percentage
Education and learning	8	14,8
Socialise	3	5,5
Entertainment	21	38,9
Communication with teachers and friends	19	35,1
All of the above	3	5,5
Total	54	100

In this scenario, the usage of devices is primarily intended for entertainment purposes, accounting for a higher percentage at 38.9%. On the other hand, 35.1% allocate it as a means to stay in touch with teachers and friends.

The evident takeaway here is that users' context plays a pivotal role in shaping their utilisation of digital devices. Nevertheless, it is clear that whether at the day centre or at home, users tend to allocate a significant portion of device usage for entertainment purposes.

Another question of great significance is: **How many hours a day do you spend using digital devices?**





Here is a breakdown of the responses we received:

	Responses	Percentage
No use.	3	6,4
30 minutes max.	9	19,1
Between 1-2 hours.	14	29,8
Between 2-3 hours.	8	17,1
Between 3-4 hours.	4	8,5
5 hours or more.	9	19,1
Total.	47	100

Looking closely at the responses, a notable trend emerges: a significant majority of users, comprising 29.8%, allocate 1-2 hours daily.

As we approach the end of the user-directed questions, we reach the query: **Do you believe that technology and digital tools assist you in your daily life?**

Nearly half of the survey participants (46.8%) have answered in the affirmative.

	Responses	Percentage
Yes, very much.	22	46,8
Yes, sometimes.	13	27,7
Somewhat.	3	6,4
Not at all.	9	19,1
Total	47	100





Lastly, concerning the question: **Would you be interested in participating in training workshops about the use of new technologies?**

	Responses	Percentage
Yes	34	72,3
No	10	21,3
I am not sure	3	6,4
Total	47	100

The majority of users would be willing to participate in training workshops (72.3%), in contrast to 21.3% who show reluctance.

II. EMPLOYEES

As for the responses obtained from employees, a total of 25 have been accounted for, with 92% (23) attributed to women and 8% (2) attributed to men.

	Responses	Percentage
Female	23	92
Masculine	2	8
Total	25	100





Regarding the question, "**Do you promote the use of new technologies and digital tools in the daily activities of your workplace?**" The provided responses are as follows.

	Responses	Percentage
Yes, all the time	4	16
Medium use	8	32
Somewhat	13	52
Not at all	0	0
Total	25	100

More than half of the responses (52%) reflect a low level of promotion for the use of new technologies in the classroom, whereas only 16% indicate an emphasis on engaging and familiarising young people with the use of digital tools.

The next question is related to the users' accessibility to the internet at the day centre. For this, the employees provided the following responses:

	Responses	Percentage
Yes, very easy	9	36
Somewhat easy	12	48
Not at all	4	16
Total	25	100

For 48% of the surveyed employees, the internet access available to users at the day centre is deemed "somewhat easy," while 36% (9) indicate it's "very easy," and 16% (4) state that users face significant difficulty in accessing it.





This question is followed by the inquiry about **the typology of devices used by those users who do have easy access to the internet.**

	Responses	Percentage
Smartphone	14	22,2
Tablet	15	23,9
Desktop computer	10	15,6
Laptop	19	30,1
Video game console	0	0
Smartwatch	5	7,9
Total	63	100

Looking closely at the collected answers, it can be observed that the majority of users opt for laptop usage, accounting for 30.1%, followed by tablets at 23.9%. Conversely, none of the respondents reported using a video game console.

The question: **In your opinion, do you believe that the centre has an adequate number of digital devices to cater to the needs of all users?**

	Responses	Percentage
Yes, more than enough.	1	4
Enough.	6	24
No, not at all.	18	72
Total	25	100

Most of the employees (72%) who responded to this question believe that the day centre lacks an adequate number of digital devices, while only 4% consider the available devices to be sufficient.





Shifting focus to the next question, "**Do you use any digital device or tool when working with individuals with intellectual disabilities?**" Here are the responses shared by the workers:

	Responses	Percentage
Yes	20	80
No	5	20
Total	25	100

In this case, 80% of the surveyed workers do utilise digital tools to enhance learning, while the remaining 20% do not use them.

For those who do utilise digital devices, the most commonly used ones are as follows:

	Responses	Percentage
Mobile phone	9	20,4
Tablet	14	31,8
Laptop	12	27,3
Communicator	1	2,3
Speakers	2	4,5
Projector	2	4,5
TV	2	4,5
Arasaac	1	2,3
Teams	1	2,3
Total	44	100

Despite the range of tools and devices employees use, the tablet is predominantly the most used, accounting for 31.8% of the total.





Regarding the question, "**What is the purpose of using digital devices and tools at the centre?**" The provided responses are as follows.

	Responses	Percentage
For educational activities	1	4
For communication	6	24
For entertainment	5	20
For therapy	0	0
All of the above	13	52
Total	25	100

Over half of the surveyed participants incorporate digital tools into their sessions for various purposes, including education, therapy, entertainment, and communication.

Regarding the question, "**Do you believe that the use of digital devices improves the lives of individuals with intellectual disabilities?**"

	Responses	Percentage
Yes, very much	16	64
Yes, something	8	32
No, not at all	0	0
I am not sure	1	4
Total	25	100

Among the majority (64%), a prevailing notion is that the incorporation of new technologies is perceived as a positive element in the lives of individuals with intellectual disabilities.





A question closely tied to this is: **Do you believe that offering training and workshops on the use of digital tools and new technologies is essential for individuals with intellectual disabilities?**

	Responses	Percentage
Yes, absolutely	15	60
Something important	10	40
No, it is not important	0	0
I am not sure	0	0
Total	25	100

More than half of the respondents (60%) express a strong belief in the significance of using and learning digital tools, and there are no respondents who regard them as unnecessary.

Lastly, the survey intended for employees concludes with the following question: **Do you believe that it is necessary to develop more specific digital tools for individuals with intellectual disabilities?**

	Responses	Percentage
Yes, very much.	24	96
No, not really.	0	0
I am not sure	1	4
Total	25	100

Once again, it can be observed that day centre employees endorse new technologies as tools that can enhance various aspects of the learning process. A striking 96%





believe that the development of specific digital tools tailored for individuals with intellectual disabilities is necessary.

III. FAMILIES

Finally, the surveys conducted with the various families yield a total of 18 respondents, comprising 10 women (55.6%), 6 men (33.3%), and 2 (11.1%) who do not identify with any of the aforementioned options.

	Responses	Percentage
Female	10	55,6
Masculine	6	33,3
DK/NA	2	11,1
Total	18	100

The subsequent question asked was: **Does your child have easy access to digital devices at home?**

	Responses	Percentage
Yes	9	50
No	9	50
Total	18	100

In the following table, we observe a balance (50%-50%) between the easy access and lack thereof that young individuals have in their homes.

Regarding the question, "**Does your child have their own device with internet access?**" The responses provided by the families were as follows.

	Responses	Percentage
Yes	10	55,6





No	8	44,4
Total	18	100

More than half (55.6%) have responded affirmatively to this question, while 44.4% indicate that their children do not possess personal devices with internet access.

In direct continuation from the prior inquiry, the next question delves into the specific devices that are used.

	Responses	Percentage
Smartphone	5	33,3
Tablet	7	46,7
Desktop computer	1	6,7
Laptop	1	6,7
Video game console	0	0
Smartwatch	1	6,7
Total	15	100

Examining the collected responses, the most commonly used device, accounting for nearly half of the respondents (46.7%), is the tablet, followed by 33.3% using a smartphone or mobile.

The next question is: **Do you encourage your child to use digital devices and technology at home?**

	Responses	Percentage
Yes, very much	2	11,1
Yes, sometimes	7	38,9
No, not at all	9	50
Total	18	100





In this scenario, once again, we are faced with a rather neutral question, where 50% responded affirmatively, indicating that the parent encourages the use of new technologies for their child, while the other 50% responded negatively, signifying the opposite approach.

The following question is based on the underlying intention for encouraging the utilisation of digital devices.

	Responses	Percentage
To communicate using augmentative and alternative communication programmes	2	14,3
For entertainment and leisure	8	57,1
For educational activities	2	14,3
For exercise and therapy	2	14,3
All of the above	0	0
Total	14	100

Based on the provided responses, it becomes evident that the predominant reason parents promote the utilisation of digital devices in their children is for entertainment and recreational purposes, accounting for 57.1% of the total.

The next question is: **How often does your child use digital tools?**

	Responses	Percentage
Every day	5	27,8
At least twice a week	6	33,3





Never	7	38,9
Total	18	100

Notable resemblances emerge in the attained outcomes, though in this instance, a significant 38.9% emphasise that their child refrains from using digital tools altogether. Meanwhile, 33.3% reveal a frequency of digital tool usage at least twice a week, and a final 27.8% engage with some digital tools on a daily basis.

Moving on to the inquiry, **"Do you regard the utilisation of digital tools and technology as significant for individuals with intellectual disabilities?"**

	Responses	Percentage
Yes, very much	6	33,3
Something important	8	44,4
No, not at all	0	0
I am not sure	4	22,2
Total	18	100

Analysing the obtained responses, it is evident that the majority, with 33.3%, consider the use of digital tools in individuals with intellectual disabilities of notable importance. Additionally, 44.4% consider it to be somewhat important, while 22.2% are uncertain about the significance of using these devices.

On the other hand, there is also a question about **the tools and applications that the children of the surveyed individuals use the most**. The following are the responses collected.

	Responses	Percentage
Mobile phone	2	13,3
Tablet	4	26,7





Social media	3	20
Computer	1	6,7
Radio	1	6,7
None	4	26,7
Total	15	100

Among these responses, a dead heat is apparent, with both the tablet (26.7%) and the absence of any device use sharing an equal percentage.

Continuing with the provided responses, social media platforms (WhatsApp, YouTube, Facebook) emerge as the most utilised applications and tools, accounting for 20%. In contrast, the computer and radio, both at 6.7%, occupy the lower end.

Finally, the question posed to the family members was: **Do you believe that individuals with intellectual disabilities should participate in training workshops on the use of new technologies?**

	Responses	Percentage
Yes, definitely	15	83,3
No, not at all	0	0
I am not sure	3	16,7
Total	18	100

The responses obtained from this question clearly demonstrate that 83.3% of the surveyed parents believe that their children's participation in workshops and training sessions on new technologies would be beneficial for both their personal and professional development. On the other hand, only 16.7% express uncertainty.





2. Cyprus

The following responses were collected during the administration phase of the survey and provide meaningful insight on the attitudes and habits of people with intellectual disabilities, their families and caregivers regarding the use of digital devices in Cyprus. The overall total of responses was 76.

I. USERS

The first question, gender-related, was answered by a total of 35 participants, out of which 17 were women, accounting for 48.6%, and 18 were men, representing 51.4%.

	Responses	Percentage
Female	17	48,6
Masculine	18	51,4
Total	35	100, 0

The next question, "**Do you make use of digital devices in your daily life?**" was answered by the 35 participants. Out of these, 33 (94.3%) responded affirmatively, while 2 (5.7%) answered negatively.

	Responses	Percentage
Yes	33	94.3
No	2	5.7
Total	35	100





If you answered yes, **which of the following digital devices do you use?**

	Responses	Percentage
Laptop/ Computer	23	69.7
Tablet	16	48.5
Smartphone	15	45.5
Smartwatch	2	6.1
Game console	5	15.2
All of the above	0	0
Total	61	100

As evident from the provided responses, the most commonly used device among the surveyed users is the laptop/computer at 69.7.%, followed by the tablet at 48.5%, and in third place, the smartphone at 45.5%.

Regarding this question, there is also the inquiry: "**Do you find it easy to access digital devices?**" To this, 71.4% of the responses indicated that accessing devices from both home and day center was indeed easy.

	Responses	Percentage
Only at home	4	11.4
Only at the day centre	6	17.1
Both	25	71.4
Total	35	100





Continuing on the topic of the question, "**Where do you use the devices?**" We observe that 22.9% utilise them at home, whereas 17.1% use them at the day centre, and 60% utilise them from both locations.

	Responses	Percentage
At home	8	22.9
At the day centre	6	17.1
Both	21	60
Total	35	100

Concerning the question, "**What kind of tools do you use on these devices?**" The responses provided by the users were as follows:

	Responses	Percentage
Entertainment applications (Youtube, Netflix, etc.)	32	91.4
Assisted communication software	1	2.9
Social media	7	20
Messaging platforms	6	17.1
Educational programmes	11	31.4
All of the above	2	5.7
Total	35	100

It is evident that the majority of users allocate their digital devices primarily for entertainment applications, being selected by 91.4% of the respondents. Second most popular response was education programs with 31.4%. followed by social media and messaging platform at 20% and 17.1% respectively.





The upcoming pair of questions explores how digital devices are used, both at home and at the day centre.

As for the first question: **When you are at home, what do you use digital devices for?**

	Responses	Percentage
To educate and learn	5	14.3
To entertain me	32	91.4
To communicate with my family and friends	9	25.7
All of the above	3	8.6
Total	35	100

Most users primarily use digital devices for entertainment purposes, as it was selected by 91.4% of the respondents. Communication with family and friends was selected by 25.7%, while only 14.3% of users employ digital devices as educational and learning tools.

Moving on to the next question, quite similar to the previous one: **When you are at the day centre, what do you use digital devices for?**

	Responses	Percentage
Education and learning	18	51.4
Socialize	3	8.6
Entertainment	27	77.1
Communication with teachers and friends	0	0
All of the above	6	17.1





Total	35	100
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In this scenario, the usage of devices is primarily intended for entertainment purposes, accounting for a higher percentage at 77.1%. On the other hand, 51.4% allocate it as a means to learn.

The evident takeaway here is that users' context plays a pivotal role in shaping their utilisation of digital devices. Nevertheless, it is clear that whether at the day centre or at home, users tend to allocate a significant portion of device usage for entertainment purposes.

Another question of great significance is: **How many hours a day do you spend using digital devices?**

Here is a breakdown of the responses we received:

	Responses	Percentage
No use.	0	0
30 minutes max.	0	0
Between 1-2 hours.	7	20.1
Between 2-3 hours.	13	37.1
Between 3-4 hours.	9	25.7
5 hours or more.	6	17.1
Total.	35	100





Looking closely at the responses, a notable trend emerges: a significant majority of users, comprising 37.1%, allocate 2-3 hours daily while 25.7% allocates between 3-4 hours daily.

As we approach the end of the user-directed questions, we reach the query: **Do you believe that technology and digital tools assist you in your daily life?**

Only 5 responses were in the negative as only 14.3% of respondents selected not at all or limited help.

	Responses	Percentage
Yes, very much.	16	45.7
Yes, sometimes.	14	40
Somewhat.	4	11.4
Not at all.	1	2.9
Total	35	100

Lastly, concerning the question: **Would you be interested in participating in training workshops about the use of new technologies?**

	Responses	Percentage
Yes	25	71.4
No	4	11.4
I am not sure	6	17.1
Total	35	100





The majority of users would be willing to participate in training workshops (71.4%), in contrast to 28.5% who show reluctance.

II. EMPLOYEES

As for the responses obtained from employees, a total of 14 have been accounted for, with 78.5% (11) attributed to women and 21.5% (3) attributed to men.

	Responses	Percentage
Female	11	78.5
Masculine	3	21.5
Total	14	100

Regarding the question, "**Do you promote the use of new technologies and digital tools in the daily activities of your workplace?**" The provided responses are as follows.

	Responses	Percentage
Yes, all the time	5	35.7
Medium use	7	50
Somewhat	2	14.3
Not at all	0	0
Total	14	100

50% of the respondents reported medium use which is the highest percentage for the question, followed by 35.7% who reported that they encourage it all the time. Only 14.3% are reluctant to promote digital devices at the center.





The next question is related to the users' accessibility to the internet at the day centre. For this, the employees provided the following responses:

	Responses	Percentage
Yes, very easy	8	57.1
Somewhat easy	6	42.9
Not at all	0	0
Total	14	100

For 57.1% of the surveyed employees, the internet access available to users at the day centre is deemed "very easy," while 42.9% (6) indicate it's "somewhat easy," while no one 0% believes that users face significant difficulty in accessing it.

This question is followed by the inquiry about **the typology of devices used by those users who do have easy access to the internet.**

	Responses	Percentage
Smartphone	5	35.7
Tablet	3	21.4
Desktop computer	14	100
Laptop	10	71.4
Video game console	0	0
Smartwatch	1	7.1
Total	14	100

Looking closely at the collected answers, it can be observed that the users mostly have access to desktop computers and laptops while other devices are not available to all.





The question: **In your opinion, do you believe that the centre has an adequate number of digital devices to cater to the needs of all users?**

	Responses	Percentage
Yes, more than enough.	1	7.1
Enough.	9	64.3
No, not at all.	4	28.6
Total	14	100

Most of the employees (71.4%) who responded to this question believe that the day centre has an adequate number of digital devices, while only 28.6% consider the available devices to be sufficient.

Shifting focus to the next question, "**Do you use any digital device or tool when working with individuals with intellectual disabilities?**" Here are the responses shared by the workers:

	Responses	Percentage
Yes	11	78.6
No	3	21.4
Total	14	100

In this case, 78.6% of the surveyed workers do utilise digital tools to enhance learning, while the remaining 21.4% do not use them.

For those who do utilise digital devices, the most commonly used ones are as follows:





	Responses	Percentage
Mobile phone	4	28.6
Tablet	6	42.9
Laptop	7	50
Communicator	0	0
Speakers	1	7.1
Projector	0	0
TV	0	0
Arasaac	0	0
Teams	0	0
Total	14	100

Despite the range of tools and devices employees use, tablets and laptop are the most used, accounting for the higher percentage totals.

Regarding the question, "**What is the purpose of using digital devices and tools at the centre?**" The provided responses are as follows.

	Responses	Percentage
For educational activities	3	21.4
For communication	0	0
For entertainment	0	0
For therapy	0	0
All of the above	11	78.6
Total	14	100





Almost all of the surveyed participants incorporate digital tools into their sessions for various purposes, including education, therapy, entertainment, and communication.

Regarding the question, "**Do you believe that the use of digital devices improves the lives of individuals with intellectual disabilities?**"

	Responses	Percentage
Yes, very much	8	57.1
Yes, something	6	42.9
No, not at all	0	0
I am not sure	0	0
Total	14	100

Among the majority (100%), a prevailing notion is that the incorporation of new technologies is perceived as a positive element in the lives of individuals with intellectual disabilities.

A question closely tied to this is: **Do you believe that offering training and workshops on the use of digital tools and new technologies is essential for individuals with intellectual disabilities?**

	Responses	Percentage
Yes, absolutely	7	50
Something important	7	50
No, it is not important	0	0
I am not sure	0	0
Total	14	100





All of the respondents (100%) express a strong belief in the significance of using and learning digital tools, and there are no respondents who regard them as unnecessary.

Lastly, the survey intended for employees concludes with the following question: **Do you believe that it is necessary to develop more specific digital tools for individuals with intellectual disabilities?**

	Responses	Percentage
Yes, very much.	14	100
No, not really.	0	0
I am not sure	0	0
Total	14	100

Once again, it can be observed that day centre employees endorse new technologies as tools that can enhance various aspects of the learning process. A striking 100% believe that the development of specific digital tools tailored for individuals with intellectual disabilities is necessary.

III. FAMILIES

Finally, the surveys conducted with the various families yield a total of 27 respondents, comprised of 17 women (63%), and 10 men (37%).

	Responses	Percentage
Female	17	55,6
Masculine	10	33,3
DK/NA	0	0
Total	27	100





The subsequent question asked was: **Does your child have easy access to digital devices at home?**

	Responses	Percentage
Yes	21	77.8
No	6	22.2
Total	27	100

In the following table, we observe that 77.8 of respondents reported easy access to digital devices at home.

Regarding the question, "**Does your child have their own device with internet access?**" The responses provided by the families were as follows.

	Responses	Percentage
Yes	17	63
No	10	37
Total	27	100

More than half (63%) have responded affirmatively to this question, while 37% indicate that their children do not possess personal devices with internet access.

In direct continuation from the prior inquiry, the next question delves into the specific devices that are used.

	Responses	Percentage
Smartphone	10	50
Tablet	15	75
Desktop computer	6	30





Laptop	5	25
Video game console	3	15
Smartwatch	1	5
Total	27	100

Examining the collected responses, the most commonly used device, accounting for nearly half of the respondents (75%), is the tablet, followed by 50% using a smartphone.

The next question is: **Do you encourage your child to use digital devices and technology at home?**

	Responses	Percentage
Yes, very much	3	11,1
Yes, sometimes	15	55.6
No, not at all	9	33.3
Total	27	100

In this scenario, once again, the majority (66.7%) responded that they do encourage the use of digital devices while only (33.3%) expressed a different approach.

The following question is based on the underlying intention for encouraging the utilization of digital devices.

	Responses	Percentage
To communicate using augmentative and alternative communication programmes	2	9.5
For entertainment and leisure	16	76.2
For educational activities	11	52.4





For exercise and therapy	1	4.8
All of the above	4	19
Total	27	100





Based on the provided responses, it becomes evident that the predominant reason parents promote the utilisation of digital devices in their children is for entertainment and recreational purposes, accumulating for 76.2% based on the responses. Educational activities were selected by half of the respondents while a small percentage (19%) selected all of the above.

The next question is: **How often does your child use digital tools?**

Notable resemblances emerge in the attained outcomes, though in this instance, a significant 25.9% emphasise that their child refrains from using digital tools altogether. Meanwhile, 18.5% reveal a frequency of digital tool usage at least twice a week, and a final 55.6% engage with some digital tools on a daily basis.

Moving on to the inquiry, **"Do you regard the utilisation of digital tools and technology as significant for individuals with intellectual disabilities?"**

Analyzing the obtained responses, it is evident that the majority, with 55.6%, consider the use of digital tools in individuals with intellectual disabilities of notable importance. Additionally, 25.9% consider it to be somewhat important, while 14.8% are uncertain about the significance of using these devices.

On the other hand, there is also a question about **the tools and applications that the children of the surveyed individuals use the most**. The following are the responses collected.

	Responses	Percentage
Mobile phone	7	13,3
Tablet	6	26,7
Social media	4	20
Computer	10	6,7





Radio	0	0
None	0	0
Total	27	100

Among these responses, a dead heat is apparent, with both the tablet (26.7%) and the absence of any device use sharing an equal percentage.

Continuing with the provided responses, social media platforms (WhatsApp, YouTube, Facebook) emerge as the most utilised applications and tools, accounting for 20%. In contrast, radio at 6.7%, occupies the lower end.

Finally, the question posed to the family members was: **Do you believe that individuals with intellectual disabilities should participate in training workshops on the use of new technologies?**

	Responses	Percentage
Yes, definitely	22	81.5
No, not at all	1	3.7
I am not sure	4	14.8
Total	27	100

The responses obtained from this question clearly demonstrate that 81.5% of the surveyed parents believe that their children's participation in workshops and training sessions on new technologies would be beneficial for both their personal and professional development. On the other hand, only 16.7% express uncertainty.

3. Portugal





The following responses were collected during the administration phase of the survey and provide meaningful insight on the attitudes and habits of people with intellectual disabilities, their families and caregivers regarding the use of digital devices in Portugal. The overall total of responses was 342.

I. Clients

The sample consists of 159 valid questionnaires, 74 (46.5%) of which are female, 84 (52.8%) are male and 1 (0.6%) is a case that prefers not to say.

		Frequency	Percentage
Valid	Female	74	46,5
	Male	84	52,8
	I'd rather not say	1	0,6
	Total	159	100,0

The question: **Do you use digital devices in your daily life?**

59 respondents (37.1%) answered no, and 100 respondents (62.9%) answered yes.

		Frequency	Percentage
Valid	No	59	37,1
	Yes	100	62,9
	Total	159	100,0





If yes, what devices do you use?				
		Answers		Percentage of cases
		N	percentage	
	Computer	49	35,8%	63,6%
	Tablet	23	16,8%	29,9%
	Smartphone	56	40,9%	72,7%
	Smartwatch	2	1,5%	2,6%
	Games console	7	5,1%	9,1%
Total		137	100,0%	177,9%

In those who answered in the affirmative, the smartphone was the equipment that users use the most, followed by the computer and the tablet.

Regarding the place where they have access to devices, 10 (6.3%) reported only at home, 64 (40.3%) reported only in the Center and 85 (53.5%) reported at home and in the Center.

		Frequenc y	Percentage
Valid	At home and in the centre	85	53,5
	Only in the centre	64	40,3
	Only at home	10	6,3
	Total	159	100,0

On the question: Where do you usually use digital devices?





19 users (11.9%) refer to the house, 73 users (45.9%) in the center and 67 users (42.1%) in both locations.

		Frequency	Percentage
Valid	Both	67	42,1
	In the centre	73	45,9
	At home	19	11,9
	Total	159	100,0

The most commonly used type of tools are entertainment applications (96) followed by educational programs (63) and social networking applications (45) and messaging (41).

What kind of digital tools do you use on these devices?				
		Answers		Percentage of cases
		N	percentage	
\$P7_APP ^a	Entertainment applications such as Youtube/Netflix	96	37,5%	60,4%
	Assisted communication software	9	3,5%	5,7%
	Social networking applications	45	17,6%	28,3%
	Messaging platforms	41	16,0%	25,8%





	Educational programmes	63	24,6%	39,6%
	All described	2	0,8%	1,3%
	Total	256	100,0%	161,0%

In the question when you are at home what do you use digital technologies for?

The use for entertainment is the most referred with 83 cases, but also to communicate with family friends (43 cases).

When you're at home, what do you use digital technologies for?				
		Answers		Percentage of cases
		N	percentage	
	For entertainment	83	39,9%	52,2%
	To communicate with family and friends	43	20,7%	27,0%
	All described	9	4,3%	5,7%
	Not applicable	61	29,3%	38,4%
	Total	208	100,0%	130,8%

In the center, the answers are similar, with the most referred to entertainment 99 cases, followed by education and learning 46 cases and communication with teachers and friends in third with 30 cases.

When you're at the centre, what do you use digital technologies for?		
		Answers





	N	percentage	Percentage of cases	
	For education and learning	46	21,0%	28,9%
	For socialising	21	9,6%	13,2%
	For entertainment	99	45,2%	62,3%
	To communicate with teachers and friends	30	13,7%	18,9%
	All described	6	2,7%	3,8%
	Not applicable	17	7,8%	10,7%
Total	219	100,0%	137,7%	

The question how many hours a day do you use digital equipment? It was grouped into classes and most use more or less (42.1%).

		Frequen cy	Percentag e
Valid	Not used	21	13,2
	Half an hour or less	67	42,1
	Between half an hour and an hour	33	20,8
	Between one and two hours	22	13,8
	More than two hours	16	10,1
	Total	159	100,0

The question believes that technology and digital tools help in your day to day?





69 users said yes, followed by 43 users who said yes in some way.

		Frequency	Percentage
Valid	No	18	11,3
	A little	29	18,2
	Yes, somehow	43	27,0
	Yes, very	69	43,4
	Total	159	100,0

And 108 users report that they would like to participate in workshops or training courses on the use of new technologies.

		Frequency	Percentage
Valid	No	31	19,5
	I'm not sure	20	12,6
	Yes	108	67,9
	Total	159	100,0

II. Employees

The sample of collaborators is composed of 65 valid questionnaires, 57 (87.7%) female, 7 (10.8%) male and 1 (1.5%) who prefer not to say.

	Frequency	Percentage
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Valid	I'd rather not say	1	1,5
	Female	57	87,7
	Male	7	10,8
	Total	65	100,0

The majority, 50.8% (33 responses) report that they encourage the use of new technologies and digital tools in their daily activities in the place where they work and only 12.3% (8 responses) report that they never encourage.

		Frequency	Percentage
Valid	Never	8	12,3
	Not much	11	16,9
	Sometimes	13	20,0
	Yes	33	50,8
	Total	65	100,0

For 64.6% of respondents there are not enough devices in the center.

		Frequency	Percentage
Valid	No	42	64,6
	Enough	21	32,3





	Yes, more than enough	2	3,1
	Total	65	100,0

The use of digital tools is used, in roughly the same percentages, for educational activities, communication and entertainment.

		Frequency	Percentage
Valid	For educational activities	12	18,5
	For communication	13	20,0
	For entertainment	10	15,4
	For therapy	4	6,2
	For all those described	26	40,0
	Total	65	100,0

The vast majority (61.5%) believe that FD greatly improves the lives of people with ID, that training provision is absolutely essential (61.5%) for people with ID, and that it is necessary to develop more FD for people with ID (93.8%).

		Frequency	Percentage
Valid	I'm not sure	3	4,6
	Yes, a little	22	33,8
	Yes, very	40	61,5





	Total	65	100,0
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46.2% of respondents say that customers have easy access to digital equipment. Among the equipment are the computer (40.8%), the laptop (22.5%) and the smartphone (23.9%).

		Frequency	Percentage
Valid	No	18	27,7
	Sometimes	17	26,2
	Yes	30	46,2
	Total	65	100,0

If yes, please indicate which device(s)				
		Answers		Percentage of cases
		N	percentage	
If so, which devices? ^a	Smartphone	17	23,9%	39,5%
	Tablet	7	9,9%	16,3%
	Computer	29	40,8%	67,4%
	Laptop computer	16	22,5%	37,2%
	Smartwatch	2	2,8%	4,7%
Total		71	100,0%	165,1%

To the question: Do you use a digital device to work with people with ID, 58.5% of respondents answer yes and 41.5% say no.





		Frequency	Percentage
Valid	No	27	41,5
	Yes	38	58,5
	Total	65	100,0

The computer is the tool or device they find most useful in their daily work (56.9%).

What digital tools and/or devices do you find most useful in your daily work with people with intellectual disabilities? Name a few.				
		Answers		Percentage of cases
		N	percentage	
What tools do you find most useful? ^a	Smartphone	4	5,6%	7,4%
	Tablet	17	23,6%	31,5%
	Computer	41	56,9%	75,9%
	Laptop computer	7	9,7%	13,0%
	Games console	2	2,8%	3,7%
	Other	1	1,4%	1,9%
Total		72	100,0%	133,3%

III. Families

The sample of collaborators is composed of 118 valid questionnaires, 79 (66.9%) female, 36 (30.5%) male and 3 (2.5%) who prefer not to say.





70.3% of respondents report that their child has access to digital equipment at home, however, 63.6% report that their child does not have their own equipment with internet access.

		Frequency	Percentage
Valid	No	35	29,7
	Yes	83	70,3
	Total	118	100,0

Of those who report that their child has their own equipment with internet access, the smartphone is the most suitable followed by the tablet and computer.

		Frequency	Percentage
Valid	No	75	63,6
	Yes	43	36,4
	Total	118	100,0

Of those who report that your child has their own equipment with internet access, the smartphone is the most suitable followed by the tablet and computer.

If yes, please indicate which equipment.				
		Answers		Percentage of cases
		N	percentage	
What equipment? ^a	Smartphone	28	34,6%	58,3%
	Tablet	19	23,5%	39,6%
	Computer	13	16,0%	27,1%





	Laptop computer	12	14,8%	25,0%
	Games console	8	9,9%	16,7%
	Smartwatch	1	1,2%	2,1%
Total		81	100,0%	168,8%

Most families do not encourage the use of digital devices and technologies at home (64.4%). Of those who answer: Yes, sometimes (24.6%) and Yes, a lot (11%), report that it is for fun and leisure (59.6%).

		Frequency	Percentage
Valid	No	76	64,4
	Yes, sometimes	29	24,6
	Yes, very	13	11,0
	Total	118	100,0

If yes, please indicate the purpose.				
		Answers		Percentage of cases
		N	percentage	
For what purpose?	Communicate through augmentative and alternative communication programmes	5	9,6%	12,5%
	For fun and leisure	31	59,6%	77,5%





	For educational activities	9	17,3%	22,5%
	For exercise and therapy	3	5,8%	7,5%
	All described	4	7,7%	10,0%
Total		52	100,0%	130,0%

To the question: How often does your child use digital tools, 57.6% of respondents say they never use it and 30.5% say they use it every day.

		Frequenc y	Percentage
Valid	Never	68	57,6
	At least 2x/week	14	11,9
	Every day	36	30,5
	Total	118	100,0

Even though they do not encourage the use of IT, family members consider the use of digital technologies and tools by people with ID to be very important (53.4%).

		Frequenc y	Percentage
Valid	I'm not sure	17	14,4
	No	7	5,9
	Yes, a little	31	26,3
	Yes, very	63	53,4
	Total	118	100,0





56 respondents report that their child does not use any digital tool/application, the most used equipment are the computer, the smartphone and the television.

Which digital tools/applications does your child use the most?				
		Answers		Percentage of cases
		N	percentage	
Which FD does your child use the most? ^a	None	56	45,2%	48,3%
	Television	10	8,1%	8,6%
	Smartphone	14	11,3%	12,1%
	Computer	20	16,1%	17,2%
	Tablet	9	7,3%	7,8%
	Games console	3	2,4%	2,6%
	Other	12	9,7%	10,3%
Total		124	100,0%	106,9%

The vast majority of respondents (83.1%) reported that they think it is important for people with intellectual disabilities to participate in training on the use of new technologies and 16.1% say they are not sure.

		Frequenc y	Percentage
Valid	I'm not sure	19	16,1
	No	1	,8
	Yes	98	83,1
	Total	118	100,0





Qualitative analysis from research

The overwhelming majority of users use digital devices in their daily life. Especially in Cyprus where an impressive 94.3 % answered yes and in Spain where the percentage of positive answers was at 80%. Portugal on the other hand, had the lowest percentage with 62.4%, a trend that indicates that users in Portugal are not very fond of digital devices. Overall, it is a pleasant fact that most users are already familiar with digital devices and utilize them daily. This will be extremely helpful when implementing a methodology for digital inclusion of people with intellectual disabilities.

Users in all countries use a variety of devices for various purposes, with the majority opting for laptops , tablets and smartphones.

Regarding accessibility to digital devices, users in Cyprus and Portugal recorded the highest percentages as the overwhelming majority answered that access to digital devices is easy both at home and at the center. Spain on the other hand shows a different trend, where only 34% answered that they have easy access at home and at the center. This indicates a gap in the in the availability and accessibility to such devices and must be addressed accordingly.

Entertainment apps are the most selected answer when using digital devices by users in all countries. Educational tools were not the among the highest percentages in all of the countries, a worrying fact that devices are not utilized for educational purposes.

Adding to the previous observation, we see that entertainment seems to be the purpose of using digital devices by the target group when at home and at the





center. Communication with family and friend comes second in all countries. Again, we notice that education is not among the top two answers, and it is indicative on the approach that must be followed in order to reverse the current trend.

An important conclusion drawn from the responses of users, is the fact that in all countries, the majority of respondents (more than 70%) are interested to participate in training workshop about digital devices and digital accessibility. This is a very encouraging trend as the users themselves express the desire to learn more and be digitally included.

Employees encourage the use of digital devices when at the workplace at a satisfactory rate in Cyprus and Spain. Data show that 0% of employees responded in the opposite direction. Contrary to that, in Portugal there is a very small percentage of employees who do not promote a digital environment at work.

Day centers that cater to people with intellectual disabilities are not sufficiently equipped with digital devices, as caregivers in Spain and Portugal have indicated in their responses. Employees in Cyprus indicated that there are just enough devices, while a significant percentage indicated otherwise. This is an important issue since the availability of tools and devices is paramount to digital inclusion and participation.

The overwhelming majority of caregivers in all partner countries utilize digital devices when working with people with intellectual disabilities.

A combination of educational activities, entertainment and communication apps is the main purpose of using devices when working with the target group.





Almost all caregivers believe that digital devices improve the lives of people with intellectual disabilities in Spain, Portugal and Cyprus while the overwhelming majority believes that the provision of training workshops to people with intellectual disabilities regarding the use of digital devices is essential.

There is a great need for further development of tools specifically designed for people with intellectual disabilities, as indicated by the answers of the respondents.

Families provide easy access to digital devices at high percentages in Portugal and Cyprus. In Spain, there is a 50-50 split in responses as half of the respondents indicated that their child does not have easy access.

On the other hand, not all parents encourage their children to use digital devices, especially in Spain and Portugal where the percentages of those who do not encourage it are higher. In Cyprus, the situation is a little bit better, even though a significant percentage that do not encourage the use exists.

The majority of parents in Cyprus, Portugal and Spain encourage the use of digital devices for entertainment and educational purposes, with entertainment being the highest percentage.

The utilization of digital devices is regarded as very important by the majority of parents in all participating countries. In Portugal, a small deviation exists as some parents seem to think otherwise.

Laptops, computers, tablets and smartphones are the most used devices by the target group.





The provision of training workshops for people with intellectual disabilities is supported by the majority of parents. This trend is in line with the responses of users and caregivers, as there is a consensus from all three groups that have answered the same question.





Conclusions

The survey scope spans three key sectors: the centre's day users, their families, and the employees.

It was observed that the users engage in frequent daily use of digital devices, primarily smartphones followed by tablets, with an average usage of 1 to 2 hours. Their usage is divided between entertainment applications and messaging platforms. Moreover, the majority express interest in participating in workshops on the use of new technologies. As a result, the proposal to host a range of workshops aimed at enhancing digital literacy is being presented.

The outcomes of the second survey targeting the employees reveal that half of them exhibit minimal encouragement towards the utilisation of new technologies in the classroom. However, the majority assert that internet accessibility within the day centre is satisfactory. Concerning device usage, there exists a disparity when compared to the earlier user survey, wherein laptops emerge as the most commonly employed devices, followed by smartphones and tablets. Nevertheless, it is noteworthy that there is a consensus indicating an inadequate provision of digital devices within the centre, insufficient to cater to all user needs. Hence, the acquisition of a greater number of digital devices becomes crucial to effectively meet the requirements of all users.

The majority of the employees utilise digital devices to enhance the learning process, with tablets being the most widely used, closely followed by laptops. As a conclusion, most of them express the necessity for the development of more digital tools tailored for individuals with intellectual disabilities, as well as an expansion of educational offerings concerning their usage. Thus, in alignment with the previous survey, the augmentation





of educational opportunities to enhance learning through the utilisation of various digital tools and devices emerges as a crucial consideration. The final survey targeting families yields results indicating that half of the families do not have easy access to digital devices at home for their intellectually disabled children, a response that aligns with those who possess their own internet-enabled devices, where half confirm having access.

The adoption of digital devices and technology within the familial sphere carries distinct characteristics—placing a notable emphasis on leisure and entertainment for individuals with intellectual disabilities. Yet, within this prevailing scenario, a unanimous sentiment resonates: the majority of family members recognize the profound role of digital tools and technology. This collective understanding converges upon the indispensability of empowering individuals with intellectual disabilities through dedicated workshops on embracing new technologies. Consequently, the overarching directive emerges: to enhance the accessibility of digital resources, bolster avenues for training, and foster a diversified landscape of applications for individuals with intellectual disabilities.

Across all surveys, the significance of workshops focused on new technology usage has been prominently highlighted. It has become evident that access to digital devices is often limited. Therefore, there is an imperative need to foster the creation of these workshops, developing resources that are specifically tailored to the needs of individuals with intellectual disabilities. Additionally, facilitating access to digital devices for individuals with intellectual disabilities and promoting a diversified utilisation of various digital tools, with a primary emphasis on learning, communication, and skill development, are crucial endeavours.





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