

# Barriers to creating a digitally inclusive environment for the future use of eHealth for clients with mild intellectual disabilities at Baalderborggroep and Frion

MASTER THESIS HEALTH SCIENCES

University of Twente

Jara Hesselink

S2620251

First supervisor: Dr. JA van Til

Second supervisor: Dr. R Wolkorte

## **PREFACE**

Right now, you are reading the master's thesis titled "Barriers to creating a digitally inclusive environment for the future use of eHealth for clients with mild intellectual disabilities at Baalderborggroep and Frion". This thesis is written as the final product for the master Health Sciences at the University of Twente in Enschede. The thesis explores the challenges faced in creating a digitally inclusive environment for eHealth use among individuals with mild intellectual disabilities, focusing on the perspectives of both caregivers and clients. This research has been conducted and written from February 2024 to September 2024.

Working within real healthcare organizations like Baalderborggroep and Frion was enriching, providing me with the opportunity to address a practical issue directly. I hope that this research will contribute to improving digital inclusion and the effective implementation of eHealth technologies in the future. I am grateful to the staff and clients of these organizations who participated in my research. Their willingness to share their experiences and perspectives were of great importance for conducting this research.

This project was carried out under the supervision of Janine van Til and Ria Wolkorte from the University of Twente. I also received guidance from Mahgul Hosseini of Baalderborggroep and Yvonne Rietstra of Frion as my external supervisors. I want to thank them for their support and guidance over the past few months.

Jara Hesselink

16-09-2024

## ABSTRACT

**Background:** In a world increasingly driven by technology, it is essential to keep up with the latest developments. Individuals with mild intellectual disabilities face challenges when using modern technologies, such as a lack of technical skills that are required for using the internet or technologies. However, also for people with mild intellectual disabilities, digital inclusion is essential to increase their participation with society, self-esteem and well-being. Digital inclusion is also an important tool to ensure that clients can effectively engage with eHealth, which will become increasingly important in the future care of people with mild intellectual disabilities.

**Goal:** This study aims to identify the barriers to creating a digitally inclusive environment for future eHealth use among individuals with mild intellectual disabilities at Baalderborggroep and Frion. By understanding these barriers, strategies can be developed to overcome these barriers and ensure that eHealth technologies are effectively implemented and utilized in the future.

**Method:** A qualitative research design was conducted, involving interviews with clients and caregivers from Baalderborggroep and Frion. The study focused on the four dimensions of digital inclusion as proposed by van Dijk: material access, usage, attitude and motivation and digital skills. The interviews aimed to identify the barriers within these dimensions which make creating a digitally inclusive environment and therefore using eHealth difficult.

**Results:** The study identified several barriers to digital inclusion. While access to technology is generally not a problem, budget constraints and caregiver influence limit the access. Clients primarily use technology for entertainment, limiting their digital engagement in more functional applications. Positive attitudes towards technology are largely confined to fun uses, creating a motivational barrier for using technology for other purposes like eHealth. Also caregivers face several motivational barriers. Additionally, the digital skills of clients are often low according to caregivers, but high according to clients.

**Discussion/conclusion:** There is currently no digitally inclusive environment for the clients of Baalderborggroep and Frion. The discrepancy between clients' self-assessed skills and caregivers' assessments highlights a critical gap, necessitating training and support. The influence of caregivers underscores the need for consistent policies to ensure equitable access to technology. The fact that technology mostly is used for entertainment suggests that there is a need for interventions to expand clients' digital engagement beyond this. Overcoming the motivational barriers of both caregivers and clients is critical to the successful implementation of e-health. The lack of a digitally inclusive environment emphasizes the importance of solving barriers in the future to properly implement and use eHealth.

# CONTENTS

1. Introduction .....	4
1.1 Mild intellectual disabilities .....	4
1.2 Digital inclusion.....	5
1.3 Digital exclusion of people with intellectual disabilities .....	5
1.4 Technologies in healthcare.....	6
2. Method.....	8
2.1 Research Design.....	8
2.2 Research population .....	9
2.3 Ethical considerations.....	10
2.4 Data and privacy .....	10
3. Results .....	11
3.1 Material Access.....	11
3.2 Usage .....	12
3.3 Motivation and attitude.....	15
3.4 Digital skills.....	16
3.5 Future use of eHealth.....	18
4. Discussion .....	20
4.1 Key findings .....	20
4.2 Limitations and recommendations for future research .....	23
4.3 Conclusion.....	25
5. Literature .....	26
6. Appendix.....	29
Appendix 1: AI statement.....	29
Appendix 2: COREQ.....	30
Appendix 3: Interview schedule caregivers.....	33
Appendix 4: Interview schedule clients .....	36
Appendix 5: Codebooks .....	38

# 1. INTRODUCTION

In a world increasingly driven by technology, keeping up with the latest developments is essential to participate in today's society. For many people, this is already quite a challenge. However, people with an intellectual disability (ID) face even more challenges in meeting this demand, making it difficult for them to navigate the complexities of modern technology.

## 1.1 Mild intellectual disabilities

About 200 million people worldwide have IDs. This is about 2.5% of the world's population[1, 2]. ID is defined by cognitive deficits. This can be made measurable by measuring intelligence, usually with an intelligence quotient (IQ) score lower than 70. Next to a lower IQ score, people with IDs often have limitations in their functional and adaptive skills. Adaptive skills include the abilities to perform daily activities associated with a certain age[3]. People with IDs develop more slowly and experience difficulty understanding information. They often receive assistance in the areas of living, working and learning[4].

There are different levels for IDs. Namely, people with a mild intellectual disability, a moderate intellectual disability, a severe intellectual disability and people with a very severe intellectual disability[4].

Of all people worldwide with IDs, 85% have a mild ID[1, 2]. In the Netherlands, there are an estimated 370.000 people with a mild ID[5]. A mild ID expresses itself in an IQ score between 50 and 70. The people have reduced adaptive skills that shows themselves in a delay in conceptual skills such as reading, writing and arithmetic, social skills such as communicating and practical skills such as daily activities. A mild ID occurs during the developmental period and is not the result of external causes such as an accident[6].

A large proportion of people with mild IDs need support or care at some point. This may be with growing up, living, finding and keeping work, or with the onset of physical or psychological symptoms. The right care is very important to be able to support them well[6]. Frion and Baalderborggroep are organizations that offer such care. They provide care for various target populations. For adults with mild IDs, they offer outpatient counseling, employment support, day care and supported living[7, 8].

## **1.2 Digital inclusion**

According to Safari et al. digital inclusion refers to the ability of individuals and groups to access and use information and communication technology (ICT)[9]. The goal of digital inclusion is for everyone to have the opportunity to apply the technological developments that define everyday life. Being able to participate in these developments promotes equity in all areas of society[10]. Promoting digital inclusion focuses on improving digital skills and encouraging internet use. Van Dijk argued that unequal access to digital media, inadequate digital skills and differences in media use are factors that hinder digital inclusion[11]. He uses four different concepts for this purpose. These concepts represent the four stages required for technology adoption: material access, usage, attitude and motivation and digital skills. These stages determine positive and negative outcomes and provide a starting point for digital inclusion[10].

For people with IDs, digital inclusion is important because technology can contribute and provide opportunities for better participation in society[12]. The use of digital resources can lead to improved self-esteem and well-being, empowerment, social relationships and education[12, 13]. Technology can help them better participate in daily activities and can provide support in places such as school and work. In this way, they stay more closely involved in the community[14].

## **1.3 Digital exclusion of people with intellectual disabilities**

While other background variables such as age, gender and socioeconomic status are often included as factors for digital inequality, this is not yet often the case for IDs. This is remarkable because research does show that people with IDs use technologies less than the rest of the population[15]. Because of the significant limitations in their functional and adaptive skills, people with mild IDs have a higher risk of being digitally excluded[13, 16]. Those with IDs may experience social, economic and civic disadvantages because of this digital divide [17]. This is because the use of internet and technologies can provide more offline benefits, like communication and social interaction, for a large portion of the population than for those with IDs who have difficulty using this. As a result, the digital divide is growing[18, 19].

As mentioned earlier, there can be several advantages to using technology for this target group. There has been a small increase in the use of digital tools by people with IDs. However, there is still a digital divide[20]. Several studies have been done to explore what may lead to the digital inequality experienced by people with IDs. Chadwick et al. identified five factors contributing to the digital divide: the costs of internet access; societal attitudes; a lack of government strategy; limited access to support and training; and individual characteristics such as the severity of one's ID[13]. Lussier-Desrochter et al identified five other

factors that are associated with challenges for people with IDs to get digitally included: access to technological devices; the sensorimotor skills of the user; the cognitive requirements for using the internet or technology; the technical skills requirements for using the internet or technology; and the need for the users to understand social interactions[17]. These factors collectively underscore the multifaceted nature of digital exclusion in this target group.

## **1.4 Technologies in healthcare**

In healthcare, the number of eHealth applications has increased significantly in recent years[21]. EHealth can be defined as “The use of technologies to improve health, well-being, and healthcare”[22]. That eHealth will play an increasing role in healthcare in the Netherlands is also reflected in the “Integraal Zorg Akkoord”(IZA)[23]. In this agreement, it was agreed that eHealth will be used more to provide more targeted support or can replace scarce capacity of healthcare workers. eHealth can also give people more control over their own health. They aim to provide more digital care to people with IDs[23]. Also in the "Landelijke Akkoord Gehandicaptenzorg VGN-ZN 2022-2026," agreements were made to implement more technologies that are labor-saving for employees. In addition, the goal is to deploy more technologies that focus on the independence and autonomy of the clients appropriate to their needs[24]. eHealth has the potential to offer people with IDs greater independence and support their increasing need for personalized care[25, 26].

However, using eHealth technologies can be challenging and presents further challenges for people with IDs. This is because the technologies often do not match the complex needs and living conditions of people with IDs[27]. Since the digital environment is changing so rapidly, people with IDs often need support in using eHealth because they have difficulty gaining digital skills and using digital devices or the internet[17]. These problems can complicate the actual implementation and use of eHealth[28].

Baolderborggoep and Frion currently use hardly any eHealth in their residential groups and day care that is directly used by clients. However, due to the emerging importance and use of eHealth in health care, it is important that the organizations can implement eHealth properly in the future. In addition, it is then desirable that no problems arise with the use of this technologies. For this, it is important to create a digitally inclusive environment. Visits to the organizations to observe daily practice show that this is not always the case yet. Therefore, this research will focus on the barriers that currently exist in creating this digitally inclusive environment.

The importance of identifying the barriers is that if these barriers are identified they can be anticipated before new eHealth is implemented. Consideration can be given to which barriers can be resolved. Perhaps it will happen that the barriers for this target group cannot be solved and complete digital inclusion can not be achieved. Then it can be considered which eHealth is the best fit and despite the barriers are most appropriate for this target group. As digital inclusion includes several factors, such as material access, usage, attitude and motivation and digital skills, the research will be conducted based on these factors. This is done through the following research question:

*“What are the barriers to creating a digitally inclusive environment for the future use of eHealth by individuals with a mild intellectual disability at Baalderborggroep and Frion?”*



## **2. METHOD**

### **2.1 Research Design**

To investigate the barriers to creating a digitally inclusive environment for using eHealth among clients at Frion and Baalderborggroep in the future, a qualitative descriptive study was conducted. Qualitative descriptive studies are suitable for scientific research where a description of phenomena is required. This approach allows for a full, detailed account of participants' experiences and perspectives without extensive interpretation. It is useful for exploring complex concepts such as digital inclusion, where it is essential to understand the context and nuances of user experiences[29]. This research has focused on the experiences of both clients and employees to create a comprehensive picture. To ensure the quality of this study, the research design is reported using the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines[30] (see appendix 2).

#### **2.1.1 Interviews**

Semi-structured interviews were conducted with both caregivers and clients. The topics discussed during the interviews are based on van Dijk's model and were: material access, usage, attitude and motivation, and digital skills[10, 11]. While van Dijk's Model provided structure, there was room to delve deeper into certain topics or deviate from the model to discuss other emerging subjects. For the interviews with clients, language level A2 was used to match their language comprehension. The interview guides can be found in Appendix 3 and 4. A pilot interview was conducted with a caregiver and helped refine the questions to ensure clarity for the respondents. The pilot interview is also used in the results. The interviews were conducted by the author of this study.

The goal was to conduct a total of sixteen interviews. Eight with clients and eight with caregivers. Interviews with clients were planned to take place at day care centers and were designed to last approximately twenty minutes. To ensure the comfort of the clients, a supervisor was required to be nearby during the interviews. Interviews with caregivers could take place either online or on-site. These interviews were intended to last between 30 tot 45 minutes. Audio recordings were made of the interviews.

#### **2.1.2 Analysis**

The recorded interviews were transcribed using Amberscript. Data-analysis was performed using Atlas.ti. A deductive approach was used with codes derived from Dijk's model of digital inclusion. The factors of the model served as the basis for coding the data from the interviews. Data was coded by one researcher.

## **2.2 Research population**

The research population consisted of two groups. The first group were the clients. The following inclusion criteria applied to this group:

- Clients have mild intellectual disabilities;
- The clients live in a residential group or go to day care at Frion or the Baalderborggroep;
- Clients have the age of 18 or older;
- Clients demonstrate verbal communication skills assessed by qualified staff familiar with their communication abilities as sufficient for participating in structured interviews using understandable language (e.g., level A2 or equivalent).

The second group were the employees. The following inclusion criteria applied to this group:

- Working at Frion or Baalderborggroep;
- Working with clients with a mild intellectual disability;
- Working in day care or residential groups.

### **2.2.1 Recruitment**

Recruitment of caregivers was done through a combination of criterion sampling and convenience sampling[31]. An email was sent to all daycare and residential locations for clients with mild IDs of Baalderborggroep and Frion. The email provided an explanation of the purpose and execution of the study. After this did not yield enough responses, calls were made to various locations to talk about the research and ask for participants.

Recruitment of clients was done through snowball sampling[31]. Calls were made to various locations of day care centers and residential locations of Frion and Baalderborggroep. During the telephone conversations with caregivers, an explanation about the study was first given, after which they were asked whether any of them know cognitively competent clients who would like to participate in the study. After this, agreements were made with various locations for the interviews. An explanation of the research in A2 language level was then sent by email to the locations so that they could hand it over to their clients. In this way, the clients were aware of the purpose and implementation of the research.

Prior to the study, the researcher had no further contact with the respondents.

## **2.3 Ethical considerations**

Because human-related research has been conducted, approval was requested from the Faculty BMS Ethics Committee (BMS-EC) of the University of Twente (request number: 240372). Participants were well informed about the purpose of the study. This was explained to the healthcare professionals in the recruitment email and repeated at the start of the interviews. Clients received a letter explaining the purpose and procedures, allowing them to review it at their leisure and share it with family members or healthcare providers if necessary. Clients were also informed in advance by their supervisors about the purpose of the study. Clients were able to decide for themselves whether they wanted to participate in the study.

During interviews with clients, the appropriate language level was used to ensure understanding. Participants gave verbal consent to participate in the study and to record the meetings. It was made clear to them that the study was voluntary and that they could discontinue their participation at any time.

The burden of the interview was minimized by limiting the interviews with clients to twenty minutes, considering their concentration span and potential for overstimulation. The interviews with the caregivers lasted 35 minutes so as not to demand too much time from them at a time when they are already experiencing a lot of work pressure. The caregivers were also allowed to choose the day, time and location, with the option to conduct it online.

## **2.4 Data and privacy**

Participants remained anonymous during this study. They were informed of this prior to the study. After completion of the study, the anonymized transcripts and recordings will be stored on the University of Twente's secure P drive for at least ten years. The data will only be available to the researcher and supervisors from the University of Twente.

### 3. RESULTS

This section presents the findings from the interviews conducted with both caregivers and clients at Baalderborggroep and Frion. The findings are categorized based on the themes identified in the codebooks, which are also the factors of van Dijk's model[10]. Each theme contains different categories that will first be briefly explained in each paragraph (table 1 to table 4). The extensive codebook can be found in Appendix 5. Insights from both perspectives are used to provide a comprehensive overview of the barriers to creating a digitally inclusive environment for the future use of eHealth by individuals with a mild ID.

A total of 17 interviews were conducted, eight with caregivers and nine with clients. The caregivers all worked at different locations. One of them worked at a daycare location and the other at residential locations. The interview with clients were conducted at three different daycare locations.

The results include quotes from respondents. They are named with a number. Respondents number 1 through number 8 represent the caregivers and number 9 through number 17 represent the clients.

#### 3.1 Material Access

This section explores the types of technologies that are available to clients with a mild ID and the factors influencing their access to the technologies.

Table 1: Material access

<b>Theme</b>	<b>Category</b>	<b>Explanation</b>
<b>Material Access</b>	Types of technologies	Refers to the various electronic and digital devices available to clients
	Access to technologies	Refers to the various factors affecting clients' accessibility to technologies

##### 3.1.1 Types of technologies

The clients with a mild ID generally have access to the same technologies as other people *“Yes, when you really talk about the group with a mild ID, they actually have the same things that other people then actually have as well”*(R.7). However, most caregivers mention that the types of technologies clients have, can be very different for each client. All clients have a television, a radio and/or music box and a mobile phone. For the younger clients this is almost always a smartphone while older clients more often have a simple cell phone. The majority of clients also have access to a tablet and/or laptop. The younger clients, especially

males, sometimes also own a game computer such as a PlayStation. There is one client that has a smartwatch.

### 3.1.2 Influence on access

Two main factors influence whether clients have access to all technologies. The first factor is rules. Clients mention that they decide which technologies they access at home and when. *“I can decide that for myself” (R.17)*, but at the day care center there are rules. For instance, access to technologies, such as their mobile phone, is only allowed during break time. Caregivers indicate that as long as no problems occur, clients have autonomy regarding their access to technology. However, when problems such as overuse or misuse of technologies causes clients to harm themselves or others, access to technology can be limited by rules. The caregivers at their residential facilities often give advice, but the legal representative or guardian, which are often family members or a designated mentors have the final decision on whether clients get access to a particular technology or whether access is denied *“We as counselors can of course give advice and say what we think about it, but ultimately they decide it themselves or so the legal representative” (R.6)*. However, the “Wet Zorg en Dwang” does play an important role here in order to properly protect clients’ rights according to some of the caregivers.

The second factor is money. Some clients have a limited budget that makes it impossible for them to purchase technologies.

## 3.2 Usage

This section outlines the various purposes for which clients with mild IDs use technologies, including economic, cultural, social, medical, and entertainment activities.

Table 2: Usage

Theme	Category	Explanation
Usage	Economic purposes	Refers to activities where technology is used for financial activities
	Cultural purposes	Refers to activities where technology is used for cultural engagement and expression
	Social purposes	Refers to activities where technology is used to maintain and build social connections
	Medical and health purposes	Refers to activities where technology is used to manage health, access medical records,

	or participate in health-related exercises
Entertainment purposes	Refers to activities where technology is used for leisure and enjoyment
Use of e-Health	Refers to e-Health that is currently already in use by clients

### 3.2.1 Economic purposes

Almost all clients use technology for limited economic purposes. Most clients use their debit card to pay in shops. One client indicated that he paid with his mobile phone or smartwatch. Clients themselves do not report any difficulty with payments.. However, caregivers indicate that it can be difficult for clients to estimate the value of money on a card and that regular guidance is required.

Healthcare providers indicate that a small proportion of clients use technology for economic purposes in other ways. There is a group that orders things online with guidance and a group that can do this independently. A smaller group also sometimes sells things online. Selling is always with guidance. Only few clients use online banking independently. *“Two, two here, who are quite high level, they arrange that themselves, they can order things themselves, for example via bol.com or something or do internet banking themselves. So there are only two who do that”* (R.6). But usually these matters have been taken over by legal guardians.

### 3.2.2 Cultural purposes

Clients do not mention use of technology for cultural purposes. Healthcare providers indicate that a small proportion of their clients use technology to attend online church services, stream concerts or view sites or videos about sexual orientation.

### 3.2.3 Social purposes

Technology and the internet are often used by clients for social purposes *“Yes, the internet is used a lot, of course, because that is the basis of many social contacts”*(R.1). This applies both to clients who make extensive use of technologies and to clients who only own a simple telephone. This last group mainly uses technologies to call or send a text message to friends and family.

Most of the clients who own a smartphone use various forms of social media to get in touch with family and friends. WhatsApp is the most common social tool for sending messages or pictures or making video

calls. Facebook is also widely used, mostly on a mobile phone. Sometimes a laptop or tablet is used for this. Use of other forms of social media, such as Instagram, Snapchat and TikTok is less common.

Finally, caregivers report that clients also use technologies and the internet to connect with others they do not yet know. For example, dating- and chat sites are used or they play games with online friends *“We have one client who is looking for friends online, say via such a platform, a kind of site, he has all kinds of contacts with them online” (R.5).*

### **3.2.4 Medical and health purposes**

Healthcare providers indicate that most clients have no desire to use technology for health or medical purposes. They prefer to use technology for fun things. A few healthcare providers said that a few clients read ‘Ons’ or other online medical records. This is often too difficult. *“They don’t read the files themselves, we always do that together, so they can access them. But we actually always do that together with them, because it is often very complicated” (R.7).* Medical matters are usually arranged by the caregivers themselves.

Some caregivers said that technologies are sometimes used to get clients active in a fun way. For example, there are clients with a step goal on a pedometer, clients dance to music or exercise based on videos that they imitate. One client also said that she watched and imitated sports videos on her tablet. Several (female) clients said they enjoyed dancing to music. Otherwise, clients did not mention any activities that fall under medical or health purposes.

### **3.2.5 Entertainment purposes**

In addition to social purposes, technology is most often used by clients for entertainment. Both caregivers and the clients themselves indicate that they do this a lot. In particular, many simple games are played on mobile or tablet. Clients also indicate that they enjoy playing simulation games. Male clients in particular play shooting games or car games on game consoles.

In addition to games, clients also watch many videos on YouTube or streaming services. They often do this on a tablet, laptop or via a smart TV. Many clients indicate that they often look up songs or use Spotify.

There are many differences to note when it comes to following the news. There are caregivers who indicate that it gives clients too much stimuli and that they do not understand it and there are caregivers who say that clients are better informed than they are. *“Another person also watches the news, but also consciously does not, because it gives them a lot of stimuli, because they often do not understand it” (R.5).* *“But mainly, the news on TV or on... They sometimes know how to tell me the news better (R.8)”*. When the news is followed,

it is often on TV and, according to the caregivers, a few clients look it up on the internet or apps. Finally, there are some clients who indicate that they write texts on a computer/laptop.

### 3.2.6 Use of e-Health

In most cases, caregivers indicated that clients do not yet use e-Health. Two caregivers did indicate that they use 'Mijn Eigen Plan' for some clients. This is a kind of agenda that provides daily structure. One was on a personal app and the other was on a shared board for all clients. One other caregiver also indicated that they have a 'Tovertafel' at the location. This is usually used for playing games or drawing on the big screen.

## 3.3 Motivation and attitude

This section explores the motivations and attitudes of clients and their caregivers towards the use of technologies by clients.

Table 3: Motivation and attitude

Theme	Category	Explanation
Motivation and attitude	Motivation of clients	Refers to the attitude that clients themselves have towards the use of technologies and why
	Motivation of caregivers	Refers to the attitude that caregivers have towards the use of technologies by clients and why

### 3.3.1 Motivation of clients

The clients mostly reported positive motivations for using technologies. They mentioned that they enjoy playing games and listening to music. It helps them relax *“When I'm angry, I can calm down myself, in my apartment” (R.9)*. One client indicated that it is fun, but only if it is not difficult.

Caregivers mention that the attitude of clients is mainly positive, unless they don't get it, the technology or internet isn't working properly, or it's not for fun things. Then they get a more negative attitude. But often their clients enjoy using technology so much that it can be difficult to curb this use. This can provide resistance. It has been stated several times that clear agreements reduce resistance. *“We do have to limit some of them, but because there are generally fixed agreements, we know what the agreements are, so the resistance is a little less” (R.3)*.



### 3.3.2 Motivation of caregivers

The clients believe that their caregivers generally have a positive view of their technology use. They also indicate that their caregivers are often willing and able to help them when problems arise.

The caregivers also see many positive things, such as that technology fills a large part of the clients' day with entertainment and technology helps them to make contacts and make their small world a little bigger.

However, according to them, there are also several disadvantages to the use of technologies by clients. It is mentioned multiple times that addiction is a major risk, and that difficult guidance questions arise as to whether and how to curb use. There are also doubts about internet security and whether clients can deal with the risks in a responsible manner. It is also noted that many caregivers fear losing human contact if more technology is introduced.

It is stated several times that the attitude of colleagues varies greatly *“I think that.. we should be even stricter in slowing it down and I also have many colleagues who say yes, just let it go, so we are very different in this regard” (R.5)*. Respondents indicate that younger colleagues in particular have a more positive attitude towards technology use by clients than older colleagues. This is also because they often do not have strong digital skills themselves and are not confident about them.

### 3.4 Digital skills

This section explores the digital skills of clients. The skills are divided into operational skills, information literacy skills and communicative skills.

Table 4: Digital skills

<b>Theme</b>	<b>Category</b>	<b>Explanation</b>
<b>Digital skills</b>	Operational skills	Refers to the ability to perform basic actions with technology, such as turning devices on and off, using touchscreens, and operating buttons
	Information literacy skills	Refers to the ability to effectively find, evaluate, and understand information from digital sources
	Communicative skills	Refers to the ability to effectively use technology for sending messages, making calls, and interacting on social media

### **3.4.1 Operational skills**

According to the caregivers the operational skills of clients with a mild ID vary greatly. Most clients have sufficient skills to use technologies when they are already ready for use and properly set up. Switching devices on and off, using touchscreens and operating the correct buttons usually do not pose any problems. A small group of clients are more skilled and can install devices themselves and solve minor problems, such as restoring Wi-Fi connections. On the other hand, there is also a group of clients, especially elderly people who make little use of technologies, who have difficulty with all operational skills. This group often requires a lot of support. Caregivers indicate that clients' skills can improve through good explanation and guidance from employees *“If you explain that, I think that a large part of it will be accomplished, but then you have to explain it, perhaps explain it very often or make a picto sheet, step-by-step plan, but I do think that it can be learned” (R.4).*

Clients indicate less often that they have difficulty with operational skills. In almost all questions about operational skills, they indicate that they find it easy to perform the action.

### **3.4.2 Information literacy skills**

According to the caregivers, information skills differ greatly between clients. However, the majority have difficulty with this. Some clients do not use search functions such as Google at all or do not know how to do so. About half try to look something up sometimes, and this occasionally works. Typing in the search bar can be difficult due to a lower language level, but is often still possible because Google will find "something". *“I think Google is very smart, because people sometimes write very unusually, but it works, it often turns out fine” (R.4).* Some clients use the speech function because typing is too difficult. Clients often click on the first available site, find it difficult to understand the information and are not critical of the quality of the information. This is because reading comprehension is difficult due to a delay in reading and writing.

Clients are divided about their information skills. About half indicate that they easily look up things on the internet and find what they are looking for. The other half finds it difficult or needs help, especially because reading and difficult words are difficult. Some find searching the internet easy and use it often, for example searching for images, while others indicate that they do not like the internet or do not use it at all.

### **3.4.3 Communication skills**

Clients' communication skills vary, but simple actions such as calling and sending messages often work well. This especially applies to younger clients and clients with a higher level. Older clients are less skilled because they have done this less often. Sometimes, it can be difficult to interpret messages correctly for

clients or to express themselves properly in a message, because their language level is lower. Help is needed with this.

A large proportion of younger clients are reasonably skilled in maintaining a social media profile, but this often leads to problems. Caregivers indicate that clients sometimes stalk or harass others online or are stalked or harassed themselves on social media. Clients are not always aware of what they post or send and do not see the consequences. Because their disability is not always visible on social media, they are sometimes extra vulnerable *“And the danger that of course also lies in it, look, I am now with a girl, with a young woman and my previous facility too, say very beautiful young women, but with an intellectual disability, if they present themselves on the internet. You can't actually see that they have a intellectual disability” (R.4)*. As a result, social media is sometimes protected by parents or caregivers, and some websites have limited access.

While caregivers suggest that clients are often unaware of these problems, the interviews indicate that clients generally report no difficulties in using communication tools or social media and simply enjoy using them. Occasionally it is mentioned that reading and typing messages is difficult. What was striking was that one client clearly indicated that she was aware of phishing and receiving unwanted messages and knew how to deal with them *“Well, you don't respond to that, then I'll just go straight to the caregivers. To say that. There was a lot of money in there and stuff” (R.12)*.

### **3.5 Future use of eHealth**

The themes of Dijk's model were discussed during the interviews. At the end, employees were asked which theme, or possibly something completely different, they thought would be the biggest barrier with the implementation and use of eHealth in the future. The barrier that was mentioned most often, three times, is the motivation of clients. Reasons for this were that clients only want to use technology if it is for fun purposes, and not for things like medical matters.

The motivation of caregivers was twice cited as a major barrier, with reasons including fear of risk, fears that technology could replace human roles, resistance to change and lower skill levels among older colleagues. The skills of clients were also mentioned twice as the biggest barrier. The respondents think the operational and information skills of clients are not sufficient. A consequence of this is that clients do not understand things and their motivation for use decreases. Finally, one respondent mentioned that the differences between clients with a mild ID is the biggest barrier. Some of the group can handle more than we think, and some we overestimate. This makes it difficult to find suitable eHealth for all clients in the target group.

During interviews with employees, various solutions emerged from the employees to possibly overcome these barriers. Providing training to both employees and clients on the use of eHealth is important and really necessary. Using simple language and keeping eHealth instruments simple and manageable are crucial for effective adoption by clients. In addition, it was indicated that time that is freed up by employees through the use of eHealth is spent on the same client group so that no attention is lost to client groups. Finally, having a backup plan is important in case a technology does not work properly.

Feedback from healthcare providers on specific eHealth tools, such as the “Calendar clock app” and a medication dispenser, provided further clues. The calendar clock app is considered useful for daily planning and overview and can be used both actively and passively. The difference between the clients became clear again here. However, some clients may experience it as childish, while for other clients, it may be too difficult. Despite these challenges, the app can be effective if it is tailored to individual needs and supported by appropriate training. The medication dispenser offers more independence for clients and reduces the burden on caregivers. Clear notifications and reminders will create an additional group of clients who can keep medication under their own management. It is especially useful for clients with a higher degree of independence. However, it is not always suitable for high-risk medications because it cannot be checked whether they are actually taken.

## 4. DISCUSSION

### 4.1 Key findings

This study explored the barriers to creating a digitally inclusive environment for future eHealth use among individuals with mild IDs at Baalderborggroep and Frion. The key findings are discussed below in relation to the existing literature, along with practical implications for improving digital inclusion.

#### 4.1.1 Material access

Clients generally have access to a wide range of technologies, and obtaining new technologies is often not a significant issue. Most clients own multiple devices, such as smartphones, tablets and computers. However, when barriers do arise, they are typically related to budget constraints or the influence of caregivers and family members. These individuals can sometimes limit access or impose restrictions based on their own views of what is appropriate. That other people have influence on access is consistent with research by Bigby and Wiesel in which they found that caregivers and family interrupt interaction and activities with technologies based on their own ideas about what is appropriate[32]. Other articles also show that people with IDs, who are typically more economically disadvantaged, commonly mentioned costs as a barrier to access to internet and/or technologies [28].

The budgetary constraints mean that some clients cannot afford all the technologies they may need for digital inclusion. This economic inequality prevents equal opportunities for clients to use digital tools both now and in the future, particularly as eHealth is expected to play an increasingly central role in healthcare for people with IDs. This could increase the digital divide between clients with sufficient financial resources and those without. This could limit the ability of economically disadvantaged clients to fully benefit from future eHealth innovations, potentially affecting their access to healthcare services and overall well-being. To address this issue, healthcare organizations could explore options such as subsidizing the cost of essential technologies for economically disadvantaged clients. Additionally, providing alternative, cost-effective solutions, such as community-based digital resources or shared devices, could help ensure that all clients have the necessary tools to participate in eHealth initiatives.

As mentioned, the caregivers' influence on access to technologies can be powerful. Although de “Wet Zorg en Dwang” provide guidance for managing the use of restrictive measures in healthcare settings, many caregivers have different opinions on how strictly these guidelines should be applied, particularly when it comes to technology use. As a result, access for people with IDs largely depends on who the caregiver is and how they view technologies and what rules they set. In order to create equality between at least all clients, this will have to be made clearer in the future. One way to do this is to set the same rules and

protocols for all locations of the healthcare organizations, making sure that these guidelines are clearly communicated and followed. At the same time, it's important to balance standard rules with allowing clients to make their own choices. While having consistent rules is necessary for fairness, clients should still be able to decide how they use technology, as long as their choices are safe. Standard rules should clearly state when caregivers can step in, how they should do it, and what role family members play. This approach is crucial for maintaining a personalized approach that addresses the individual differences among clients. It ensures clients can have a say in their technology use while following the same rules for when caregivers need to get involved. This balance helps accommodate personal needs within a structured framework.

#### **4.1.2 Usage**

There are only a few clients who use the technologies for all purposes outlined in van Dijk's model. Most clients would therefore be considered as not digitally included in terms of usage according to this model. Besides entertainment and communication, they should gain more experience in using technologies for other purposes. Literature supports the finding that people with IDs use technology or the internet primarily for entertainment, with limited involvement in more functional applications like education of daily activities[15, 33, 34]. This limited use can cause challenges for future eHealth adoption, as insufficient experience with diverse digital applications may hinder their ability to effectively engage with and benefit from healthcare technologies.

That clients miss out on the broader benefits of technology, such as education and more functional use, suggests that there is a need for interventions to expand clients' digital engagement beyond entertainment. One effective approach could be implementing tailored educational programs or workshops that introduce clients to various educational apps and online resources, designed to align with their interests and learning preferences. An example of such a solution is “Steffie.nl”, an educational platform that offers interactive and accessible content specifically designed for people with IDs[35].

#### **4.1.3 Motivation**

In terms of motivation, clients mainly have a positive attitude about using technologies. According to caregivers, a barrier is that clients only have a positive attitude towards technologies when they are used for fun purposes. This can cause problems with the adoption of eHealth, which requires more functional use of technologies. This is particularly problematic for clients themselves, as it may limit their ability to benefit from digital health interventions, potentially hindering their access to essential healthcare services and support in the future.

The motivation of caregivers themselves can also be a barrier to creating a digitally inclusive environment, because they are not always open to change, are afraid of losing human actions to technologies and are not always skilled with technologies. This is particularly true for older employees.

Löfgren-Martenson also found that caregivers see more disadvantages about technology use than clients themselves[36]. This can be a problem because the lack of support and motivation from others is a social environmental barrier to accessing and using technologies by people with IDs[37, 38]. Caregivers should promote participation in activities with technologies, because this can lead to social and digital inclusion[39].

Overcoming the double motivational barrier is critical to the successful implementation of eHealth. Despite this resistance, addressing these issues is crucial because the use of eHealth is expected to become increasingly integral to disability care, as outlined in agreements with organizations and government plans, such as the IZA. These agreements emphasize the need to incorporate more technology to address challenges like staff shortages and improve care efficiency. A way to do so, is to offer comprehensive training for the caregivers to improve their digital skills and confidence. It is also important to show how technologies, especially eHealth, can enhance and not replace personal interactions. Additionally, introducing clients to easy-to-use and enjoyable technology for health could help change their attitudes and make it easier for them to start using eHealth solutions in the future. Addressing clients motivation is the most important first step, as this barrier is most frequently mentioned by caregivers when asked which barrier they believe is the greatest.

#### **4.1.4 Digital Skills**

The digital skills of clients also form a barrier to the a digitally inclusive environment and so the implementation and use of eHealth in the future. The finding in our study that the operational skills of a lot of clients are lacking aligns with the studies of McClimens and Gordon, which indicates that people with IDs have difficulties with basic ICT tasks[40, 41]. This study also aligns with a recent literature review, where it was also concluded that it is necessary to increase the competencies of people with IDs in the domains of digital literacy because they are insufficient for effectively navigating and utilizing digital tools and resources. To overcome this, it is also important to start at a young age and increase the digital literacy skills of the teachers[42].

Moreover, Janero et al. also found a lack in communication skills of people with IDs. This can lead to unsafe online communication, increasing the vulnerability to cyberbullying on social media[43]. The fact that this problem exists was also clearly evident in the interviews. Only here it was often mentioned that the clients themselves also harass others online.

So, substantial improvements are needed in every form of skill for a large part of the clients. This is extra difficult because there is a discrepancy between the assessment of the digital skills of clients themselves and what healthcare providers estimate about their skills. This is remarkable because it highlights a significant mismatch in understanding between clients and providers regarding digital competence. Clients may overestimate their capabilities, which can lead to frustration and reluctance when using future eHealth. Healthcare providers may misunderstand the capabilities of the clients, resulting in lower expectations and suboptimal use of clients capabilities. Bridging this gap is essential to ensure clients receive the right support and training for using eHealth. One way to address this issue is to implement standardized assessments of clients' digital skills. These assessments would involve both the clients themselves and their healthcare providers. By evaluating and discussing clients' digital abilities, both parties can develop a shared understanding of their actual skills and needs. This process helps ensure that the support and training provided are specifically tailored to each client's level of competence.

#### **4.1.5 Variation among clients**

A notable finding in this study is the variability among clients in all aspects of digital inclusion. Although all clients are individuals with a mild ID, there is a wide range of digital skills, the purposes for which technology is used, and the motivation to use technologies. This variability was caused by several factors, including age, with younger clients generally having higher digital literacy and greater enthusiasm for new technologies compared to older clients. However, even within the same age group, there are differences in digital competencies and interests, underscoring the heterogeneity within the population. While these variations are evident in our findings, existing literature rarely addresses these differences in depth. Most studies tend to focus on the general experiences of people with IDs without delving into the diversity within this group.

The observed variability in digital inclusion among clients with mild IDs emphasizes the need for personalized approaches. Given the diverse levels of digital skills, motivation, and technology use, support strategies should be customized to meet the unique needs of each client. Developing individualized training programs and further research into these differences will enhance the effectiveness of digital tools and eHealth services, ensuring that all clients can benefit from technological advancements.

## **4.2 Limitations and recommendations for future research**

This study has several limitations that should be taken into account when interpreting the results.

First, the generalizability of the results is limited due to the small sample size. The research was only conducted within two organizations, which means that the results may not represent the broader population



of people with mild IDs. Because research was conducted at a small sample size, data saturation was not achieved. This limitation affects the external validity, as the results may not be applicable to other settings or groups. Expanding the sample size and diversity would enhance the generalizability of the findings.

Selection bias is also a possible limitation, because recruitment relies on convenience and snowball sampling. This may have ensured that mainly participants who were more available or found it more enjoyable to participate participated. It is likely that mainly people with an affinity with technologies were overrepresented. To improve external validity, future studies should employ more randomized sampling methods to capture a broader and more representative sample.

Using semi-structured interview schedules could also be a potential bias. There was a lot of variation in how questions were answered. Some respondents shared much more information than others. The same topics were also not discussed in every interview. This variation could lead to inconsistencies in the data. This makes it difficult to ensure that the findings are repeatable under similar circumstances. To enhance reliability, future research should standardize interview protocols and consider using multiple interviewers to maintain consistency.

Furthermore, there was a discrepancy in the answers between clients and employees. The discrepancy can affect the internal validity of the study because it suggests potential misunderstandings. The inconsistency in responses questions if the data accurately reflects the true digital skills and experiences of the participants. One possible explanation for this is that clients may not fully recognize their limitations or lack awareness of their own skill gaps, while caregivers, who are more familiar with the range of digital tasks and potential issues, may have a clearer understanding of what clients are struggling with. This difference in insight could lead to caregivers perceiving clients' skills as lower than clients themselves do. Understanding whether clients are unaware of their own limitations or if caregivers have a more informed view is crucial for interpreting the findings and ensuring that support and training are appropriately tailored to actual needs.

The subjectivity of qualitative analysis can cause possible researcher bias in coding and interpreting the data. Particularly because this was done by only one researcher. This can affect both the reliability and internal validity of the study, as personal biases may influence the interpretation of results. To improve this, future research should involve multiple researchers involved in coding and interpretation of the data.

Given the significant variability among clients in digital skills, technology use, and motivation, and the limited exploration of these differences in existing literature, future research should delve deeper into these individual variations. There is a notable gap in understanding how differences among people with mild IDs impact digital inclusion.

Finally, further research will have to be conducted into specific solutions for the identified barriers. It is crucial to research and evaluate which interventions are most effective to overcome these barriers. This approach will help develop strategies to increase digital inclusion among clients. Because it is likely that total digital inclusion among this target group may not be feasible, research will have to be conducted into forms of eHealth that take the barriers found into account. This includes researching existing forms of eHealth or designing new forms that take into account the different levels of access, digital skills and motivation ensuring that they remain accessible and functional for all users.

These recommendations aim to address the current gaps and improve the implementation and efficacy of eHealth solutions for individuals with mild IDs.

### **4.3 Conclusion**

In conclusion, there is currently no digitally inclusive environment for the clients of Baalderborggroep and Frion. Main causes are budget limitations, the influence of caregivers, and the gap between clients' and caregivers' assessments of digital skills. Although access to technology is generally available, clients predominantly use it for entertainment rather than for broader functional applications, which hinders the adoption of eHealth. Additionally, clients' overestimation of their own digital skills compared to caregivers' underestimation creates a mismatch in support and training.

The importance of creating a digitally inclusive environment to properly implement and use eHealth in the future underscores the need to address these barriers. A comprehensive approach is needed to tackle these issues and effectively enhance digital inclusiveness. This approach should include training for both clients and caregivers, standardized assessments of digital skills, clearer guidelines for the use of technology and personalized strategies to promote the use of technology beyond entertainment to support broader eHealth applications.

## 5. LITERATURE

1. Mitra S, Yap J. The disability data report. Fordham Research Consortium on Disability: New York: Disability Data Initiative; 2021.
2. American Association on Intellectual and Developmental Disabilities: Definition of intellectual disability. <https://www.aaidd.org/intellectual-disability/definition> (2020). Accessed 23-02-2024.
3. Committee to Evaluate the Supplemental Security Income Disability Program for Children with Mental Disorders, Board on the Health of Select Populations; Board on Children Y, and Families,, Institute of Medicine, Division of Behavioral and Social Sciences and Education, The National Academies of Sciences E, and Medicine,. Clinical Characteristics of Intellectual Disabilities. Mental Disorders and Disabilities Among Low-Income Children. Washington: National Academies Press (US); 2015.
4. ZonMw: Verstandelijke beperking. <https://www.zonmw.nl/nl/verstandelijke-beperking> (n.a.). Accessed 12-2-2024.
5. Woittiez I, Eggink E, Ras M. Het aantal mensen met een licht verstandelijke beperking: een schatting. Den Haag 2019.
6. Landelijke Kenniscentrum LVB: Over een LVB. <https://www.kenniscentrumlvb.nl/over-lvb/> (n.a.). Accessed 12-2-2024.
7. Frion: Over ons. <https://frionzorg.nl/over-ons> (n.a.). Accessed 19-02-2024.
8. Baalderborggroep: Over ons. <https://www.baalderborggroep.nl/over-ons> (n.a.). Accessed 19-02-2024.
9. Safari MC, Wass S, Thygesen E. Digital technology design activities—A means for promoting the digital inclusion of young adults with intellectual disabilities. *British Journal of Learning Disabilities*. 2023;51(2):238-49. doi: <https://doi.org/10.1111/bld.12521>.
10. van Deursen A. Trendrapport Digitale Inclusie: Kerncijfers en beleidsaanbevelingen. 1 ed: University of Twente; 2023. p. 79.
11. van Dijk J. The Deepening Divide: Inequality in the Information Society. Thousand Oaks, California: 2005. doi:10.4135/9781452229812.
12. Attrill-Smith A, Fullwood C, Keep M, Kuss DJ. The Oxford handbook of cyberpsychology. Oxford University Press; 2019.
13. Chadwick D, Wesson C, Fullwood C. Internet Access by People with Intellectual Disabilities: Inequalities and Opportunities. *Future Internet*. 2013;5(3):376-97.
14. Wehmeyer ML, Davies DK, Stock SE, Tanis S. Applied cognitive technologies to support the autonomy of people with intellectual and developmental disabilities. *Advances in Neurodevelopmental Disorders*. 2020;4:389-99.
15. Ramsten C, Martin L, Dag M, Hammar LM. Information and communication technology use in daily life among young adults with mild-to-moderate intellectual disability. *Journal of Intellectual Disabilities*. 2020;24(3):289-308.
16. Internet Use by People with Intellectual Disability: Exploring Digital Inequality—A Systematic Review. *Cyberpsychology, Behavior, and Social Networking*. 2021;24(8):503-20. doi: 10.1089/cyber.2020.0499.
17. Lussier-Desrochers D, Normand CL, Romero-Torres A, Lachapelle Y, Godin-Tremblay V, Dupont M-È, et al. Bridging the digital divide for people with intellectual disability. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*. 2017;11(1):Article 1. doi: 10.5817/CP2017-1-1.
18. van Deursen AJ, van Dijk JA. The digital divide shifts to differences in usage. *New Media & Society*. 2014;16(3):507-26. doi: 10.1177/1461444813487959.
19. van Deursen AJAM, Helsper EJ. The Third-Level Digital Divide: Who Benefits Most from Being Online? *Communication and Information Technologies Annual. Studies in Media and Communications: Emerald Group Publishing Limited*; 2015. p. 29-52.

20. Alfredsson Ågren K, Kjellberg A, Hemmingsson H. Digital participation? Internet use among adolescents with and without intellectual disabilities: A comparative study. *New Media & Society*. 2020;22(12):2128-45.
21. van Calis JFE, Bevelander KE, van der Crujisen AWC, Leusink GL, Naaldenberg J. Toward Inclusive Approaches in the Design, Development, and Implementation of eHealth in the Intellectual Disability Sector: Scoping Review. *J Med Internet Res*. 2023;25:e45819. doi: 10.2196/45819.
22. van Gemert-Pijnen L, Kelders SM, Kip H, Sanderman R. eHealth research, theory and development: a multi-disciplinary approach. Routledge; 2018. p. 356.
23. Ministerie van Volksgezondheid Welzijn en Sport. Integraal Zorg Akkoord - Samen werken aan gezonde zorg. 2022.
24. Vereniging Gehandicaptenzorg Nederland, Zorgverzekeraars Nederland. Transitie naar een toekomstbestendige gehandicaptenzorg. Landelijk Akkoord gehandicaptenzorg VGN-ZN 2022-20262022.
25. Burke SM. The Use of Technology by Adolescents With Intellectual and Developmental Disabilities. *J Pediatr Nurs*. 2017;37:134-5. doi: 10.1016/j.pedn.2017.06.019.
26. Vázquez A, Jenaro C, Flores N, Bagnato MJ, Pérez MC, Cruz M. E-Health Interventions for Adult and Aging Population With Intellectual Disability: A Review. *Front Psychol*. 2018;9:2323. doi: 10.3389/fpsyg.2018.02323.
27. Watfern C, Heck C, Rule C, Baldwin P, Boydell KM. Feasibility and Acceptability of a Mental Health Website for Adults With an Intellectual Disability: Qualitative Evaluation. *JMIR Ment Health*. 2019;6(3):e12958. doi: 10.2196/12958.
28. Hoppestad BS. Current perspective regarding adults with intellectual and developmental disabilities accessing computer technology. *Disabil Rehabil Assist Technol*. 2013;8(3):190-4. doi: 10.3109/17483107.2012.723239.
29. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health*. 2000;23(4):334-40. doi: 10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g.
30. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007;19(6):349-57. doi: 10.1093/intqhc/mzm042.
31. Moser A, Korstjens I. Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*. 2018;24(1):9-18. doi: 10.1080/13814788.2017.1375091.
32. Bigby C, Wiesel I. Mediating Community Participation: Practice of Support Workers in Initiating, Facilitating or Disrupting Encounters between People with and without Intellectual Disability. *J Appl Res Intellect Disabil*. 2015;28(4):307-18. doi: 10.1111/jar.12140.
33. Chadwick DD, Fullwood C. An Online Life Like Any Other: Identity, Self-Determination, and Social Networking Among Adults with Intellectual Disabilities. *Cyberpsychol Behav Soc Netw*. 2018;21(1):56-64. doi: 10.1089/cyber.2016.0689.
34. Caton S, Chapman M. The use of social media and people with intellectual disability: A systematic review and thematic analysis. *Journal of Intellectual and Developmental Disability*. 2016:1-15. doi: 10.3109/13668250.2016.1153052.
35. Stichting Leer Zelf Online: Steffie legt uit. <https://www.steffie.nl/> (n.a.). Accessed 04-09-2024.
36. Löfgren-Mårtenson L. Love in Cyberspace: Swedish Young People with Intellectual Disabilities and the Internet1. *Scandinavian Journal of Disability Research*. 2008. doi: 10.1080/15017410701758005.
37. van Dijk J, Hacker K. The Digital Divide as a Complex and Dynamic Phenomenon. *The Information Society*. 2003;19(4):315-26. doi: 10.1080/01972240309487.
38. World Health Organization: International Classification of Functioning, Disability and Health. (2001). Accessed 22-07-2024.
39. Simplican SC, Leader G, Kosciulek J, Leahy M. Defining social inclusion of people with intellectual and developmental disabilities: An ecological model of social networks and community participation. *Research in Developmental Disabilities*. 2015;38:18-29. doi: <https://doi.org/10.1016/j.ridd.2014.10.008>.

40. McClimens A, Gordon F. People with intellectual disabilities as bloggers:What's social capital got to do with it anyway? *Journal of Intellectual Disabilities*. 2009;13(1):19-30. doi: 10.1177/1744629509104486.
41. McClimens A, Gordon F. Presentation of Self in E-veryday Life: How People Labelled with Intellectual Disability Manage Identity as They Engage the Blogosphere. *Sociological Research Online*. 2008;13(4):40-52. doi: 10.5153/sro.1774.
42. Arsić B, Vušović M, Vlajković J. Digital literacy of people with intellectual disability. 2024.
43. Jenaro C, Flores N, Vega V, Cruz M, Pérez MC, Torres VA. Cyberbullying among adults with intellectual disabilities: Some preliminary data. *Res Dev Disabil*. 2018;72:265-74. doi: 10.1016/j.ridd.2017.12.006.

## 6. APPENDIX

### Appendix 1: AI statement

Here is a statement following the standards of the University of Twente:

*"During the preparation of this work, I used ChatGPT, DeepL, and Google Translate to assist with translating words and sentences from Dutch to English, as well as to ensure proper sentence structure and grammatical accuracy. After using these tools, I thoroughly reviewed and edited the content as needed, taking full responsibility for the final outcome."*

## Appendix 2: COREQ

Table 5: COREQ

No. Item	Guide questions/description	Reported on Page #
<b>Domain 1: Research team and reflexivity</b>		
<i>Personal Characteristics</i>		
<b>1. Inter viewer/facilitator</b>	Which author/s conducted the inter view or focus group?	8
<b>2. Credentials</b>	What were the researcher's credentials? E.g. PhD, MD	0
<b>3. Occupation</b>	What was their occupation at the time of the study?	0
<b>4. Gender</b>	Was the researcher male or female?	female
<b>5. Experience and training</b>	What experience or training did the researcher have?	0
<i>Relationship with participants</i>		
<b>6. Relationship established</b>	Was a relationship established prior to study commencement?	9
<b>7. Participant knowledge of the interviewer</b>	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	9
<b>8. Interviewer characteristics</b>	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	1
<b>Domain 2: study design</b>		
<i>Theoretical framework</i>		
<b>9. Methodological orientation and Theory</b>	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	8
<i>Participant selection</i>		

<b>10. Sampling</b>	How were participants selected? e.g. purposive, convenience, consecutive, snowball	9
<b>11. Method of approach</b>	How were participants approached? e.g. face-to-face, telephone, mail, email	9
<b>12. Sample size</b>	How many participants were in the study?	11
<b>13. Non-participation</b>	How many people refused to participate or dropped out? Reasons?	/
<i>Setting</i>		
<b>14. Setting of data collection</b>	Where was the data collected? e.g. home, clinic, workplace	11
<b>15. Presence of non-participants</b>	Was anyone else present besides the participants and researchers?	8
<b>16. Description of sample</b>	What are the important characteristics of the sample? e.g. demographic data, date	11
<i>Data collection</i>		
<b>17. Interview guide</b>	Were questions, prompts, guides provided by the authors? Was it pilot tested?	8-10
<b>18. Repeat interviews</b>	Were repeat inter views carried out? If yes, how many?	No
<b>19. Audio/visual recording</b>	Did the research use audio or visual recording to collect the data?	8
<b>20. Field notes</b>	Were field notes made during and/or after the inter view or focus group?	/
<b>21. Duration</b>	What was the duration of the inter views or focus group?	8
<b>22. Data saturation</b>	Was data saturation discussed?	22
<b>23. Transcripts returned</b>	Were transcripts returned to participants for comment and/or correction?	/

<b>Domain 3: analysis and findings</b>		
<i>Data analysis</i>		
<b>24. Number of data coders</b>	How many data coders coded the data?	8
<b>25. Description of the coding tree</b>	Did authors provide a description of the coding tree?	8
<b>26. Derivation of themes</b>	Were themes identified in advance or derived from the data?	8



<b>27. Software</b>	What software, if applicable, was used to manage the data?	8
<i>Reporting</i>		
<b>29. Quotations presented</b>	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	11-19
<b>30. Data and findings consistent</b>	Was there consistency between the data presented and the findings?	11-19
<b>31. Clarity of major themes</b>	Were major themes clearly presented in the findings?	11-19
<b>32. Clarity of minor themes</b>	Is there a description of diverse cases or discussion of minor themes?	11-19

## Appendix 3: Interview schedule caregivers

- Voorstellen
- Uitleg waarom het interview over dit thema gaat
- Digitale inclusie toelichten
- Uitleggen hoe het interview eruit gaat zien en hoe lang het gaat duren
- Anonimiteit, je mag altijd stoppen
- Vragen of er nog vragen zijn
- Vragen of het opgenomen mag worden

### Opname starten

- Nogmaals vragen of het opgenomen mag worden

### Start interview

Table 6: Interview schedule caregivers

<b>Thema</b>	<b>Vragen</b>
<b>Materiele toegang</b>	<ul style="list-style-type: none"><li>- Hebben cliënten toegang tot technologieën?<ul style="list-style-type: none"><li>o Mobiel / tablet / laptop</li><li>o Hoe vaak? Welke ?</li></ul></li><li>- Mogen cliënten zelf bepalen wanneer zij toegang hebben tot de technologieën?<ul style="list-style-type: none"><li>o Wie hebben daar invloed op?</li></ul></li><li>- Ervaren jullie problemen voor cliënten om toegang te krijgen tot de technologieën?</li></ul>
<b>Gebruik</b>	<ul style="list-style-type: none"><li>- Welke technologieën gebruiken cliënten?<ul style="list-style-type: none"><li>o Thuis of tijdens werk</li><li>o Mobiel, laptop, tablet, eHealth, apps?</li></ul></li><li>- Hoe vaak gebruiken de cliënten de technologieën?</li><li>- Voor welke doeleinden gebruiken de cliënten de technologieën?<ul style="list-style-type: none"><li>o Economisch (kopen/verkoop, trainingen of cursussen volgen, financiën)</li></ul></li></ul>

	<ul style="list-style-type: none"> <li>○ Sociaal (berichten, foto's sturen, videobellen, nieuwe contacten maken online)</li> <li>○ Cultureel (informatie opdoen over seksuele, religieuze achtergronden)</li> <li>- Persoonlijk (medische zorg, het lezen van nieuws, vermaak zoals gamen)</li> </ul>
<b>Motivatie en Attitude</b>	<ul style="list-style-type: none"> <li>- Wat is de houding van de cliënten tegenover het gebruik van technologie? <ul style="list-style-type: none"> <li>○ Positief, negatief (voorbeelden)</li> </ul> </li> <li>- Ervaar je weerstand bij cliënten bij het gebruik van technologieën?</li> <li>- Is het moeilijk het gebruik van technologie bij cliënten, indien nodig, af te remmen?</li> <li>- Wat is je houding/ houding van collega's tegenover het inzetten van technologieën voor cliënten?</li> </ul>
<b>Digitale vaardigheden</b>	<ul style="list-style-type: none"> <li>- Hoe groot zijn volgens jou de operationele vaardigheden van cliënten? <ul style="list-style-type: none"> <li>○ Apps installeren, verbinding maken met internet, apparaten met elkaar verbinden, knoppen/ Touch gebruiken</li> </ul> </li> <li>- Hoe groot zijn volgens jou de informatievaardigheden van cliënten? <ul style="list-style-type: none"> <li>○ Navigeren door sites en apps, zoekbalken gebruiken, zoekwoorden definiëren, informatie selecteren</li> </ul> </li> <li>- Hoe groot zijn volgens jou de communicatieve vaardigheden van cliënten? <ul style="list-style-type: none"> <li>○ Gebruik van communicatie apps/tools, (gepaste) berichten sturen/ontvangen, gepast emoticon gebruik, online profielen maken</li> </ul> </li> </ul>
<b>Presentatie voorbeelden</b>	<p>Presentatie met twee voorbeelden van eHealth: Kalender Klok app en Medicijn dispenser</p> <ul style="list-style-type: none"> <li>- Zou zo'n vorm van eHealth bij jullie ingezet kunnen worden?</li> <li>- Welke barrières die we net hebben besproken zouden problemen kunnen geven bij het inzetten van deze technologie?</li> </ul>
<b>Conclusie</b>	<ul style="list-style-type: none"> <li>- Welke barrière is volgens jou het grootst en zal in de toekomst het meeste problemen veroorzaken bij de</li> </ul>

---

implementatie van meer technologieën in  
de zorg?

---

## Appendix 4: Interview schedule clients

Wat leuk dat je mee wilt doen aan mijn onderzoek. Daar help je me heel erg mee. Mijn naam is Jara en ik doe onderzoek samen met Baalderborggroep / Frion. Ik wil graag weten of jij technologie gebruikt, zoals een telefoon of computer.

Ik zal wat vragen stellen over:

- Welke technologieën je gebruikt en waarvoor.
- Hoe vaak je ze gebruikt en of je ze leuk vindt.
- Of je ze zelf gebruikt of hulp krijgt van bijvoorbeeld je begeleider
- Of er regels zijn voor het gebruik van technologie.

Het gesprek duurt ongeveer 15 min. Al je wilt stoppen, kan dat altijd. Dit mag je dan gewoon zeggen. Alles wat je hier verteld blijft ook geheim en zal ik tegen niemand anders vertellen.

Heb jij nog vragen voordat we beginnen?

Ik zou dit gesprek ook graag op willen nemen, zodat ik het later nog eens kan terugluisteren. Vind je dat goed?

\*\*\* Opname starten

Vind je het goed dat ik dit gesprek opneem?

Dan gaan we nu beginnen met de vragen die ik voor jou heb.

Table 7: Interview schedule clients

Thema	Vragen
<b>Gebruik</b>	<ul style="list-style-type: none"> <li>- Welke technologieën gebruik je?               <ul style="list-style-type: none"> <li>o Mobiel, laptop, tablet</li> <li>o Op werk? (Kassa, bediening)</li> </ul> </li> <li>- Hoe vaak gebruik je ... (de technologieën benoemen)</li> <li>- Waarvoor gebruik je de technologie?               <ul style="list-style-type: none"> <li>o Dingen online kopen/verkopen, geld pinnen</li> <li>o Agenda, afspraken maken</li> <li>o Voor contact met anderen, zoals bellen, berichten, foto's sturen</li> <li>o Persoonlijk (voor je gezondheid, het nieuws lezen, gamen)</li> </ul> </li> </ul>
<b>Motivatie en Attitude</b>	<ul style="list-style-type: none"> <li>- Hoe vind je het om ... (de technologieën) te gebruiken?               <ul style="list-style-type: none"> <li>o Vind je dit leuk of niet leuk? Waarom?</li> </ul> </li> <li>- Vinden de begeleiders de technologieën leuk?</li> </ul>
<b>Materiële toegang</b>	<ul style="list-style-type: none"> <li>- Kan jij de technologieën gebruiken op elk moment als je dat zou willen? Of zijn er regels wanneer dit wel of niet mag?</li> <li>- Hoe vaak zou je (de technologie) willen gebruiken als je dit zelf mocht kiezen?</li> </ul>
<b>Digitale vaardigheden</b>	<ul style="list-style-type: none"> <li>- Lukt het goed om zelf (de technologie) te gebruiken, of vraag je hierbij hulp?</li> <li>- Zijn er dingen die je moeilijk vindt bij het gebruiken van (de technologie)</li> <li>- Weet je goed welke knoppen je moet gebruiken en hoe je het apparaat aan en uit zet bijvoorbeeld?</li> <li>- Lukt het jou om informatie te vinden, dingen op te zoeken op internet? (Het OV gebruiken, Google Maps)</li> <li>- Lukt het jou om berichten te sturen? Of om te videobellen? Of om online vrienden te maken?</li> <li>- Lukt het jou om foto's of filmpjes te maken?</li> </ul>

## Appendix 5: Codebooks

Table 8: Codebook caregivers

Theme	Category	Subcategory
<b>1. Toegang</b>	Toegang soorten technologieën	Smartphone
		Hetzelfde als normale mensen
		Oortjes/koptelefoon
		Simpele mobiel
		Laptop
		(Smart)tv
		Radio
		Smartwatch
		Spelcomputers
		Stappenteller
		Sterioinstallatie
		Tablet/iPad
		Verschilt per client
		Afspraken met begeleiding
		Invloed toegang tot technologieën
	Anderen geen invloed	
	Begeleiders advies geen beslissing	
	Begeleiders overleggen met mentor	
	Bewindvoerder	
	Budget	
	Cliënt bepaald zelf indien mogelijk	
	Cliënten bepalen zelf	
	Cliënten zelf veel inbreng	
	Dagbesteding heeft regels	
	Familie/verwanten	
	Geen regels	
	Ouders	
Overleg met andere bewoners		
Gedragskundige		
Niveau heeft invloed		
Wet zorg en dwang		
Wettelijke vertegenwoordiger		
Zelf bepalen tenzij problemen		
Te veel prikkels		
<b>2. Gebruik</b>	Economische doeleinden	Begeleiding /ouders kopen online voor client
		Pinnen
		Bij uitzondering economische doeleinden

	Eigen rechtspersonen zelfstandig online kopen
	Marktplaats
	Enkelen online bankieren
	Enkelen bestellen online
	Geen grenzen bij online kopen
	Online kopen onder begeleiding
	Mobiel internetbankieren
	Niet goed met geld omgaan
	Onder begeleiding marktplaats
	Online kopen
	Online vakantie boeken
Culturele doeleinden	Baarderborg sferdiensten
	Concert streamen
	Sites/filmpjes seksuele doeleinden
	Nauwelijks
	Niet voor culturele doeleinden
	Online kerkdiensten
Sociale doeleinden	Bellen
	Contact met familie/vrienden
	Berichten sturen
	Online contacten maken
	Datingsites
	Facebook
	Foto's sturen
	Gamen met anderen
	Instagram
	Liever bellen dan videobellen
	Niet vaak videobellen
	Sms'en
	Sociale media
	Tiktok
	Vaker appen dan bellen
	Videobellen gebeurt veel
	Whatsapp met familie/vrienden/begeleider
	YouTube kanaal
Medische / gezondheidsdoeleinden	Enkele leest ONS
	Geen behoefte aan inzage dossiers
	Gezondheid op smartwatch
	Medisch dossier te moeilijk
	Medische zaken door begeleiding
	Meelezen in ONS
	Patiëntendossier ziekenhuis inzien



		Sporten met filmpjes
		Stappenteller
		Dansen op muziek
	Vermaak	Boeken typen in Word
		Films kijken
		Gamen
		Games op mobiel
		Jeugdjournaal
		Journal is meer voor structuur
		Netflix
		Nieuws te veel prikkels
		Nieuwsupdates op mobiel
		Nieuws op tv
		Nieuwssites / apps
		Nieuws verschilt erg per cliënt
		Normale tv kijken
		Oudere doelgroep geen games
		Simulatiespellen/filmpjes
		Spelletjes zijn simpel
		Spotify
		Weer opzoeken
		YouTube
	Huidige EHealth gebruik	Beleef Tafel
		Mijn eigen plan app
		Mijn eigen plan bord
		Passief gebruik mijn eigen plan
	Tijd gebruik	Drie tot vier uur per dag
		Geen zicht op
		Hoe meer op de kamer hoe meer gebruik
		Meer dan drie uur per dag
		Mobiel elke dag
		Zoals bij iedereen
		Soms uren achter elkaar
		Verschilt per client
		Urenlang
		Verslaving
<b>3. Motivatie en attitude</b>	Motivatie cliënten	Afremmen is geen probleem
		Afremmen is lastig
		Dag mee doorkomen
		Fijn
		Gameverslaving
		Geen weerstand ervaren
		Klein deel lastig af te remmen
		Makkelijk contact maken
		Liefst hele dag
		Ouderen steeds vaker behoefte aan tablets
		Met afspraken goed af te remmen

	Positief
	Positief als het iets oplevert
	Stoppen soms lastig
	Voor medische zaken biedt weerstand
	Leuk
	Verbale agressie bij afremmen
	Verschil in afremmen
	Weerstand bij onbegrip
	Weerstand bij opruimen
	WZD om af te remmen
Motivatie medewerkers	Afremmen/gebruik lastige begeleidingsvragen
	Bang dat cliënten zich verliezen
	Bang dat echte aandacht verdwijnt
	Gameverslaving risico
	Gemakkelijk
	Helpen met technologie is leuk
	Jongere collega's staan meer open
	Meningsverschillen
	Online shoppen is handig
	Positief
	Sociale wereld wordt groter voor ze
	Strenger zijn op gebruik
	Helpt bij activeren
	Twijfels over internetveiligheid
	Weerstand bij medewerkers
	Zelfstandig contacten leggen
<b>4. Digitale vaardigheden</b>	<b>Operationele vaardigheden</b>
	Zijn goed
	Opstarten door begeleiding
	Touch screen gaat goed
	Aan – en uitzetten gaat goed
	Als technologie gereed is gaat het goed
	Hulp nodig bij DigiD
	Bijna alles zelfstandig
	Cliënten zonder ervaring niet vaardig
	De helpt redt zich
	Gebruiksklaar maken lukt niet
	Kan verbeteren door goede uitleg/begeleiding
	Vaardig met spelcomputers
	Veel ondersteuning nodig
	Verschilt erg
	Zelfstandig als klaar staat

	Informatievaardigheden	Opzoeken gaat makkelijk
		Eerste beste link
		Google vindt vaak wel iets
		Googlen gaat goed
		Heel moeilijk
		Informatie begrijpen ze niet
		Verschilt heel erg
		Lastig door achterstand lezen en schrijven
		Opzoeken gebeurt weinig
		Picto's ipv tekst
		Spelling is lastig
		Spraakberichten i.p.v. typen
	Communicatievaardigheden	Begrijpen alleen duidelijke berichten
		Bellen gaat goed
		Berichten begrijpen is lastig
		Vrij goed
		Enkele client goede vaardigheden
		Communiceren met picto's
		Goed
		Hulp bij social media (profielen)
		Lager niveau minder vaardig
		Niet bewust van wat ze posten
		Simpele smileys en picto's
		Hulp bij sociale interactie
		Spraakberichten
		Vaak typen soms spraak
		Whatsapp zelfstandig
		Stalken op sociale media
		Beperking niet zichtbaar op sociale media
		Sociale media afgeschermd door ouders/begeleiding
		Sommige sites beperkt
		Sociale media zorgt voor problemen
		Pikante foto's sturen
		Beperking niet altijd zichtbaar
<b>5. Inzet e-Health toekomst</b>	Grootste barrière	R: Motivatie medewerkers
		U: Bang voor risico's
		U: Bang technologie neemt over
		U: verandering is lastig
		U: Oudere collega's minder vaardig
		R: Vaardigheden

	U: Bedienen en informatie verwerken
	U: Geen motivatie als ze het niet snappen
	R: Verschillen tussen cliënten
	U: Overschatten vaardigheden groot deel
	R: motivatie van cliënten
	U: Niet voor leuke dingen
	U: Geen behoefte aan meer zelfstandigheid
Adviezen toekomst	Inzet cursussen over gebruik
	Goede begeleiding nodig om weerstand cliënten te verminderen
	Simpele taal
	Klein en simpel
	Vrijgekomen tijd weer aan zelfde groep besteden
	Zorgen voor plan B
Inzet Kalender Klok app	Actief gebruik
	Passief gebruik
	Deel heeft baat bij
	Goed voor dagprogramma
	Handiger dan plannen via Whatsapp
	Helpend
	Kan werken
	Laagdrempelig in te zetten
	Lastig voor oudere collega's
	Niet stoer
	Papier werkt soms beter
	Sceptisch of altijd werkt
	Sommigen actief, sommigen passief
	Te kinderachtig voor een deel
	Tijden uitschrijven in letters
	Verschilt erg
	Voor mensen met autisme
	Alleen als ze ervaring hebben met technologie
	Alleen voor zelfstandige cliënten
Medicijndispenser	Alsnog vergeten
	Begeleiding moet controle houden
	Cliënten zijn leerbaar
	Extra groep in eigen beheer
	Geen controle op inname
	Heel handig

	Voor hoger niveau
	Kan niet zonder toezicht
	Meer zelfstandigheid
	Niet 24/7 thuis
	Niet voor risico medicatie
	Uitproberen
	Verlicht zorgmedewerkers
	Voor een (klein) deel
	Duidelijke meldingen nodig
	Graag inzetten

Table 9: Codebook clients

<b>Theme</b>	<b>Category</b>	<b>Subcategory</b>		
<b>Toegang</b>	Gebruikte technologieën	Computer		
		Fototoestel		
		IPad		
		Koptelefoon		
		Laptop		
		Mobiel		
		Muziek box		
		Nintendo Switch		
		Vaste telefoon		
		Playstation		
		Radio		
		Smartwatch		
		Tablet		
		Televisie		
			Regels	Begeleider zegt als het weg moet Computer door familie weggehaald
				Geen mobiel gezamenlijke momenten
				Geen regels
		In pauzes gebruik toegestaan		
		Op werk afspraken		
		Op werk eerst vragen		
		Thuis geen regels		
	Gebruik zonder regels	Hele dag spelletjes op mobiel		
		Na tijdje zelf wel uit doen		
		Niet vaker		
		Ook zonder begeleider zelf uit doen		
		Vaker voor spelletjes		
<b>Gebruik</b>	Betalen	Apple watch		
		Mobiel		
		Pinpas		

	Cash
	Pinpas met begeleider/ouders
Internet / google gebruik	Foto's zoeken
	Geen internetgebruik
	Plaatjes zoeken
	Informatie medicijnen opzoeken
	Puzzelantwoorden zoeken
	Muziek zoeken
	Online shoppen
	Weetjes opzoeken
Laptopgebruik	Vaak 's avonds
	Informatie opzoeken
	Vaak gebruiken
	Liedjes opzoeken
	Muziek luisteren
	YouTube
	Nieuws op Facebook
	Spelletjes
	Teksten schrijven
	Twee uur per dag
Mobielgebruik	Agenda
	Bellen
	Spelletjes
	Facebook
	Foto's / plaatjes sturen
	Geen berichten sturen
	Geen smartphone
	Google Maps
	Hoe vaak verschilt per dag
	Instagram
	Mobiel is soms lastig
	Muziek
	Nieuws lezen
	Sms sturen
	30 min per dag thuis
	Tiktok
	Vaak gebruiken
	Videobellen
	Wekker zetten
	Snapchat
Smartwatch gebruik	Berichten ontvangen
	Oproepen ontvangen
	Betalen
Spelcomputer gebruik	Xbox
	Playstation
	Nintendo Switch
	Fortnite
	Met anderen gamen
	GTA

		Hulp bij Xbox
		Koptelefoon voor praten
		Lang per dag
		Verslaafd
	Tablet/iPad gebruik	Spelletjes
		Filmpjes
		Internet
		Sporten met filmpje
		In de pauzes
		S' avonds gebruiken
		YouTube
		Zingen/muziek
	Technologie op werk	Geen technologie
		Muziek tussen het werk om rustig te worden
		Playstation op werk
		Telefoon opnemen en doorverbinden
		In de pauzes op mobiel
	TV gebruik	Elke avond
		Formule 1 kijken
		Nieuws kijken
		Iedere dag tv
		YouTube
		Jeugdjournaal
		Muziek streamen
		Netflix
		Teletekst
		Normaal tv kijken
		Voetbal kijken
<b>Motivatie / Attitude</b>	Motivatie cliënten	Niet leuk als moeilijk is
		Spelletjes het leukst
		Geen negatieve dingen
		Helpt ontspannen
		iPad en telefoon het leukst
		Laptop het leukst
		Leerzaam
		Muziek maakt rustig
		Tot rust komen
		Ouders helpen is leuk
		Phishing berichten vervelend
		Playstation en iPad het leukst
		Last van ongewenste filmpjes
		Technologie gebruiken is fijn/leuk
		Leuk voor eventjes
		Belangrijk
		Xbox het leukst
	Motivatie Medewerkers	Vinden het goed

		Meer mensen bereiken
		Leerzaam
		Helpen goed
		Kijken blij
		Kunnen niet altijd helpen
		Lossen problemen op
		Vinden het leuk
		Om hulp vragen
		Verlies menselijk contact
<b>Digitale vaardigheden</b>	Operationele vaardigheden	Beltegoed opwaarderen moeilijk
		Aan – en uitzetten gaat goed
		Foto maken is moeilijk / lukt niet
		Foto maken gaat goed
		Hulp bij meldingen
		Hulp bij snoertjes
		Hulp bij Xbox
		Hulp vragen aan moeder
		Hulp vragen als er geen internet is
		Installeren soms moeilijk
		Typen lukt niet goed
	Informatievaardigheden	Cadeaus vinden is moeilijk
		Gebruikt geen internet
		Geen problemen met zoeken
		Internet is niet fijn
		Google gebruiken gaat goed
		Lezen is moeilijk
		Moeilijke namen/woorden zijn lastig
		Met hulp ook nog lastig
		Op internet zoeken is moeilijk
		Op internet zoeken is makkelijk
		Plaatjes zoeken is makkelijk
	Communicatieve vaardigheden	Hulp met berichten sturen
		Bellen gaat goed / is makkelijk
		Berichten sturen en lezen is moeilijk
		Berichten sturen gaat goed / is makkelijk
		Facebook is makkelijk
		Foto's sturen is makkelijk
		Gamen met andere online
		Geen berichten sturen
		Geen hulp bij videobellen
		Kleine letters moeilijk lezen
		Typen is moeilijk dus spraakbericht



---

Videobellen gaat goed / is  
makkelijk

---

Videobellen is raar

---

Weet gevaren van phishing

---

Zinnen schrijven is moeilijk

---