

## DRAFTING THE ACCESSIBILITY OF FINANCIAL SERVICES IN THE LIGHT OF EMPIRICAL RESEARCH

Maja JOKIEL<sup>1</sup>, Grzegorz JOKIEL<sup>2\*</sup>, Agnieszka MŁODZIŃSKA-GRANEK<sup>3</sup>

<sup>1</sup> Wrocław University of Economics and Business; maja.jokiel@ue.wroc.pl, ORCID: 0000-0002-7041-4474

<sup>2</sup> Wrocław University of Economics and Business; grzegorz.jokiel@ue.wroc.pl, ORCID: 0000-0003-3657-3989

<sup>3</sup> SWPS University; amlodzinska-granek@swps.edu.pl, ORCID: 0000-0002-7327-9036

\* Correspondence author

**Purpose:** The purpose of this article is to present the main conclusions of the 2024 survey of respondents' level of understanding of the content of financial contracts. On the basis of these conclusions, directions for supporting people with special needs in the area of using financial services such as personal accounts or cash loans are formulated.

**Design/methodology/approach:** The research was conducted using CAWI (Computer Assisted Web Interview) and CAPI (Computer Assisted Personal Interview) methods on a group of 600 respondents. This included 300 so-called 'average customers', 150 older people 65+ and 150 people with disabilities. In addition, focus groups were conducted with 11 deaf people assisted by two sign language interpreters.

**Findings:** The main finding of the research is the falsification of the hypothesis that simplifying the language in which financial contracts are written will significantly increase the level of understanding by respondents. In the light of the research, it turned out that the level of understanding of the content of these contracts, as tested by a specially designed test, is not correlated with the degree of simplification of the language in which these contracts are written. No statistically significant differences in the form of correct answers to the test questions were noted between the groups of respondents:

- a) those reading the contract in its original version (the level of vagueness of the text scored 14 on the Gunning Fog Index),
- b) those reading a simplified version of the contract with a FOG level of 10,
- c) reading a simplified contract up to FOG level 8.

The lack of differences applied to all groups of respondents.

**Practical implications:** This paper therefore outlines other ways to make financial services accessible than simply simplifying the language in contracts. Among these are:

- a) simplifying contracts as much as possible in terms of their layout and content,
- b) using technology to help focus the reader's attention on the key points of the contract,
- c) extending support to the entire process of using an account or repaying a loan, and not just the point at which the contract is signed,
- d) enhancing the role of education in the financial area.

**Originality/value:** The findings of the research falsified the common and intuitive belief that simplifying the language used in the content of financial contracts will significantly improve understanding of contracts among respondents. This finding directs efforts to ensure the accessibility of financial services to the other areas characterised above.

**Keywords:** accessibility of financial services, use of plain language in contracts , universal design.

**Category of the paper:** Research article - presenting research findings.

## 1. Introduction

A study was commissioned by the Ministry of the Fund and Regional Policy together with the Financial Ombudsman to assess the comprehensibility of contracts used in the financial sector. Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on accessibility requirements for products and services imposes a number of obligations on retail banking service providers (as defined in Article 3(28) of the Directive - in particular banks) to ensure that the services provided are accessible to persons with disabilities and other persons who experience functional limitations such as the elderly.

The main objective of the research was to assess the level of understanding of the contracts used in the financial sector.

The research question was: How does the use of plain language affect the recipient's level of understanding of these documents?

This involved verifying the level of comprehension of the content of contracts by both the so-called 'average' consumer and a person with special needs, i.e. elderly people, people with intellectual disabilities, people on the autism spectrum and people with visual and hearing disabilities.

The primary research hypotheses were that:

1. The more simplified the contract in terms of language, the more comprehensible it will be to respondents.
2. People with special needs (i.e. people with disabilities and older people) will have more need to simplify these contracts in order to better understand their provisions than 'average customers'.
3. People with special needs will find it more difficult to understand the contracts than 'average customers'.

However, the results of the quantitative research falsified these hypotheses.

## 2. Description of the sample and research methods

In preparation for the implementation of the requirements of this EP Directive 2019/882, 600 respondents were quantitatively surveyed in three groups:

1. so-called average consumers/customers (N = 300),
2. people with disabilities (N = 150),
3. older people 65+ (N = 150).

The research was conducted in the summer of 2024 in the form of a CAWI (Computer Assisted Web Interview) survey and a CAPI (Computer Assisted Personal Interview) interview, which was particularly used with people with disabilities and older people.

Respondents were qualified using the Polish National Panel organization (<https://www.panelnarodowy.pl/>), which brings together those willing to participate in the research. The sample selection was a random quota. First, representative quotas were determined for the relevant categories of respondents (here, the elderly 65+, people with disabilities and so-called "average customers"). Then, respondents meeting the criteria to fill these quotas were randomly selected. Invitations are emailed to respondents/panellists registered with the Polish National Panel, which currently has 170,000 registered panellists. Due to the random nature of the invitations sent to a broad group of potential respondents, the survey sample selection process can be considered to ensure that the sample is representative and, thus, that the conclusions can be generalized to the entire population.

In addition, a focus survey was conducted with a group of deaf people. The survey was conducted at the headquarters of the Opole branch of the Polish Association of the Deaf with the participation of 11 deaf people from the Opole and Lower Silesia provinces<sup>1</sup>. The duration of the qualitative research was 2 hours with the participation of two PJM (Polish Sign Language) interpreters. The focus interview was conducted on the basis of an individual conversation with the respondents. This interview was free-form and used a categorised set of questions without suggestive answers. Three moderators (qualitative researchers) actively participated in the study.

The research was based on the analysis of two contracts:

1. A bank account and debit card agreement with one of the commercial banks.
2. A cash loan agreement with one of the loan companies specialising in short-term loans.

Each of these contracts was simplified in terms of language to two levels of simplification based on the Gunning Fog Index (Gunning, 1952, pp. 36-37).

$\text{Foginess index} = 0.4 \times (\text{average number of words per sentence} + \text{percentage of difficult words})$

The Foginess Index (FOG) is one tool for analysing the readability of a text, particularly useful for assessing its complexity and accessibility for the average reader. It is a popular measure in a variety of fields such as education, marketing, journalism, and technical editing, where it is important to tailor content to the comprehension level of the audience.

The material of these contracts prepared for the study in the first simplification had a text vagueness index of 10 and was comprehensible to a person after at least 10-11 years of education. The simplified version of the second simplification had a vagueness index of 8 and

---

<sup>1</sup> See: <https://www.pzgopole.pl/index.php/jezyk-migowy/pjm>

was comprehensible to a person after 8 years of education. The contracts in the simplified first and second degree versions were prepared by a plain language expert with many years of experience.

The intention of the project was not to simplify the contract to a FOG = 3 or 4 which would have been understandable to a person after 4 years of education, as such a simplification option would have definitely negatively affected the study and would not have shown the weaknesses and incomprehensible provisions in the current bank contracts. Therefore, it was decided to simplify the contracts to a FOG index of 10 and 8.

The contracts in the original version had a FOG index of 14.

Respondents were randomly given one of the versions of the contracts among the six variants:

1. Account Agreement in the original version (FOG 14).
2. Simplified account agreement up to FOG.
3. Account agreement in a simplified version up to FOG.
4. Loan agreement in original version FOG 14.
5. Loan agreement simplified version up to FOG 10.
6. Loan agreement simplified to FOG 8.

Respondents familiarised themselves with the content of the agreements and then answered test questions verifying the level of comprehensibility of the provisions contained in these documents.

The selection of the research sample by customer segment and the type of agreements they evaluated is presented in Table 1.

**Table 1.**

*Respondents by category and versions of the agreements they received for analysis*

	<b>FOG account agreement 14</b>	<b>FOG account agreement 10</b>	<b>FOG account agreement 8</b>	<b>FOG loan agreement 14</b>	<b>FOG 10 loan agreement</b>	<b>Loan agreement FOG 8</b>
<b>Average customers N = 300</b>	50	50	50	50	50	50
<b>People with disabilities N = 150</b>	25	25	25	25	25	25
<b>Elderly 65+ N = 150</b>	25	25	25	25	25	25

Source: own elaboration.

After learning about the content of the contract, they answered the survey questions. The structured interview questionnaire was standardised so that ultimately comparisons could be made between the results of the surveys conducted in each subgroup. It consisted of 8 metric questions and 13 questions for the bank account agreement and 14 questions for the cash loan agreement. The survey questions were supplemented by several open-ended questions of

a qualitative nature allowing primarily to obtain information from the respondents on their actual knowledge/familiarity with banking or financial products.

The survey sample was balanced in terms of a number of criteria like:

1. Gender:
  - women 50 % (301 persons),
  - men 47 % (281 persons),
  - refusal to answer 2% (13 indications),
  - other gender 1% (5 indications).
2. Age proportional distribution, each age group is represented in fairly large numbers and there are no significant disparities:
  - 18-24 years old 14%,
  - 25-34 years 17%,
  - 35-44 years 20%,
  - 45-65 years 23%,
  - Over 65 years 26%.
3. Place of residence - there is no significant disproportion to the actual situation in our country. Two groups of respondents prevail - residents of rural areas 33% of declarations and residents of large cities 24% of indications.

However, when considering the criterion of residence, it should be considered that it is not a significant circumstance differentiating the surveyed population in terms of understanding the content of financial contracts.
4. Education - in terms of education, people with secondary education dominate the surveyed population with 38%, followed by higher education with 20% and vocational education with 18%.
5. Respondents mostly already use banking services 85% of the declarations. They did not use bank services 13% and refused to answer 3%.
6. Loan companies were used by 16%, not used by 78% and refused to answer by 6% of respondents.

### **3. Survey results**

Analysing further questions from the survey - a test of respondents' understanding of the content of financial contracts, it was noted that there were no statistically significant differences in responses to most test questions. This was true for both the different groups of respondents ('average' customers, older people, people with disabilities) and the level of simplified language used in the content of these agreements.

Test questions for the bank account agreement included:

- An assessment of the legibility of the font and layout of the contract.
- The contracting party and the currency of the account.
- The possibility of using electronic banking channels.
- The way in which personal data is processed.
- Possibility of obtaining bank statements.
- Documents provided by the bank as part of the conclusion of the contract.
- Terms and conditions of the account, such as security packages or possible claims by the bank.

In the case of a loan agreement, the test questions covered the terms on which the agreement is concluded:

- The period for which the contract is concluded.
- the amount to be repaid.
- the deadline for withdrawal from the contract.
- conditions for obtaining another loan.
- processing of complaints.
- possibility to repay the loan early.

The distributions of responses to the above questions did not differ significantly between versions of these agreements (FOG 14, FOG 10, FOG 8) . This was true for each group of respondents ('average' customers, senior citizens, people with disabilities).

No significant variability was identified between the questionnaires for the FOG 14, FOG 10, FOG 8 versions of the contracts in terms of respondent characteristics (gender, education, place of residence, age between 18-65 years).

An interesting phenomenon was observed in the answers to some questions in the form of significantly better results (more correct answers) given by the group of senior citizens surveyed. The group of seniors 65+ outperformed the other two surveyed groups of respondents in some aspects in the following questions:

- with which bank is the contract concluded?
- in which currency will the account be held?
- do you know the duration of the bank's account agreement with you?
- concerning the bank's claims and enforcement.

In these questions, the responses of older people had significantly more correct indications than the other two populations surveyed. Identifying the reasons for this is not possible using quantitative research. Only in the course of in-depth qualitative research would it be possible to establish the influencing factors.

It can only be speculated that the older people surveyed had:

- more time to devote to the interviewers,
- more life experience, from which they were better able to associate information,

- greater involvement in the research process, due to an appreciation of their importance as well as their role in the process - see the Hawthorne Effect (Moczyłowska, Pawelec, 2023).

The same was true for respondents who were presented with a loan agreement. Here, too, seniors had significantly more correct indications than the other two surveyed populations in their responses to the questions:

- a) identifying the parties with whom the contract is signed: the company Soonly Finance sp. z o. o. is...
- b) verifying knowledge of the amount respondents would have to give back to the lender: The amount you will have to give to the lender – is...
- c) calculation task to be solved based on the data entered in the contract: If the lender lent you £4800 and the annual interest rate is 18.5%, what amount of interest will you pay for one month?
- d) The possibility of repaying the loan early: Can you repay the loan early?
- e) knowledge of the abbreviation ADO (Administrator of Personal Data): What does the abbreviation ADO stand for?

In the case of people with disabilities, a lower number of correct answers is observed compared to other groups of respondents ('average' customers, seniors 65+). This is true for all versions of the contracts (FOG 14, FOG 10 and FOG 8). This observation is not surprising and should have been expected given that the majority of ON respondents are deaf and mentally disabled. Importantly, however, no significant differences in the distributions of correct test responses between the versions of the contracts (FOG 14, FOG 10 and FOG 8) were identified in the ON population studied. Which indicates a small role for simplifying language as a means of increasing understanding of the content of financial contracts in this group of people surveyed.

## **4. Example distributions of respondents' answers to the test questions**

Due to the volume of the article, distributions of responses to only two selected survey questions will be presented. One question was selected from each of the financial contracts surveyed, which most clearly illustrated the research insights discussed above.

### **4.1. Bank account agreement**

The distribution of respondents' answers to the question on the duration of the bank account agreement is shown in Table 2. The correct answer was indefinite duration.

**Table 2.**

*Distribution of responses regarding the duration of the bank account agreement across respondent groups*

Groups of respondents	Responses	FOG 14	FOG 10	FOG 8
<b>Average customers</b> Group size 50 per contract version	For an unlimited period	66%	60%	42%
	However, I do not remember	28%	20%	36%
<b>People with disabilities</b> Group size 25 persons for each contract version	For an indefinite period	40%	52%	40%
	However, I do not remember	10%	32%	44%
<b>Older people 65+</b> Group size 25 persons for each contract version	Indefinite	96%	100%	96%
	However, I do not remember	0%	0%	4%

Source: own elaboration.

Among the elderly, virtually full awareness of an indefinite contract was observed.

In the case of average customers, most of them indicate an indefinite term. Although here a rather interesting phenomenon can be observed that as the language is simplified in the different versions of the contracts, the number of correct answers decreases from 66% (FOG 14) to 42% (FOG 8). At the same time, the number of indications of "However, I do not remember" increases from 28% to 36%.

Among people with disabilities, the average number of correct answers is below half of the respondents. There is also a significant increase in the number of 'However, I do not remember' responses as the language in the contracts is simplified from 10% (FOG 14) to 44% (FOG 8). This fact is difficult to interpret on a quantitative basis. Explaining this phenomenon would require deeper research in a qualitative way.

#### 4.2. Loan agreement

As an illustration of the general conclusions presented above, the distribution of respondents' answers to the question about the possibility of repaying the loan early will be discussed here. This question did not cause respondents any great problems, with most of them marking the correct answer 'yes, always'.

The distribution of the answers to this question across the different groups of respondents is presented in Table 3.

**Table 3.**

*Respondents' answers to the question on the possibility to repay the loan early*

Groups of respondents	Responses	Loan agreement FOG 14	FOG loan agreement 10	Loan agreement FOG 8
<b>Average customers</b> Number of groups of 50 for each version of the contract	Yes always	74%	68%	76%
<b>Persons with disabilities</b> Number of groups of 25 persons per contract version	Yes always	36%	40%	32%
<b>Older persons 65+</b> Group size 25 persons per contract version	Yes always	92%	80%	84%

Source: own study.



Average customers answered 68-76% correctly

People with disabilities found it more difficult to answer correctly, declared by 32-40% of respondents in this group.

Older people 65+ had the highest percentage of correct answers 80-92%.

**These observations support the conclusions that older people read the contract more carefully** and that people with disabilities (especially intellectual disabilities, and these were the highest in this group) have more difficulty in understanding the provisions of the loan contract.

Analysing the distribution of responses between the language versions of the contracts in the different groups of respondents, no regularity or correlation between the degree of simplified language and the number of correct responses of the respondents can be seen.

## 5. Qualitative research - focus group

The research was enriched by a qualitative element in the form of a focus group interview, which took place at the headquarters of the Opole branch of the Polish Association of the Deaf on 25.09.2024. 11 deaf people aged 20 - 60 took part in the focus group interview. In addition, a research team supported by two sign language interpreters participated.

The issues discussed were mainly:

1. The specifics of PJM (Polish Sign Language) its possibilities and limitations and its influence on the perception of reality by deaf people.

In the dams of this issue, problems such as:

- a) The difference between the syntax, grammar and logic of PJM statements and the spoken and written Polish language results in the fact that for deaf people Polish is a foreign language, often incomprehensible.
- b) Language has a significant impact on the way the world is perceived. Due to the limitations of sign language, it is very difficult for deaf people to use abstract concepts or to make hypothetical considerations about the future.
- c) Sign language signs are much more ambiguous - a lot of content is explained based on context.
- d) Lack of codification of PJM - there is no universally recognised written sign language, resulting in a lack of a linguistic standard, which again results in significant differences in PJM across regions or even social groups among Deaf people.
- e) Difficulties in translating Polish into PJM and vice versa. Translation into PJM is not a simple 1:1 translation like translation between national languages, but a different way of representing ideas or conceptual constructions. This means that in the translation process, the role of the translator and his or her interpretation

of these concepts is invaluable in order for the recipients to understand the message well.

- f) As a consequence of the above observations, it is worth noting that deaf people are heavily dependent on interpreters/assistants whom they know, with whom they have established a thread of trust, who sign in a way that they understand as much as possible.
2. Deaf support technologies , where special attention was paid to:
- a) Deafness diagnosis, implantation of hearing aid processors and rehabilitation of Deaf people. This results in a decreasing number of people who only use sign language. However, as things stand today, there are, and will continue to be for the next few decades, needs to support Deaf people who are not implanted, are not rehabilitated, have great difficulty with mastering/understanding the Polish language.
  - b) Online PJM interpreters as a commonly used technique to support (include) Deaf people are not viewed enthusiastically by the Deaf community. First and foremost, there are reservations about the comprehensibility of such an interpreter's sign language for Deaf customers of banks, clinics, offices etc. The online interpreter is two-dimensional - making it more difficult for Deaf people to understand than a live interpreter service. In addition, there are regionalisms in PJM which also makes mutual understanding difficult, as online interpreters usually operate from the institution's head office, most often from Warsaw. But above all, focus participants indicated that they do not trust online interpreters because they see them incidentally, usually for the first time in their lives. And it is the factor of trust in the interpreter/assistant that is crucial in the deaf community. Added to this are the problems of providing stable and fast internet connections and good screen resolutions. In addition, an online interpreter does not help to fill in documents and Deaf people prefer to rely on the help of a real assistant/family/trusted people.
  - c) The role of artificial intelligence AI and automation in the form of e.g. holograms, avatars or humanoid robots assisting Deaf people is a song of the future. The technology is developing, but as of today, such solutions are in the conceptual or, at most, prototype stage. This does not mean that the topic is unperspective. However, the horizon for the real use of such technologies seems quite distant.

The qualitative research carried out has contributed to a broadening of perceptions regarding the design of financial service accessibility. Instead of focusing on simplifying the language in the content of contracts, a number of steps should be taken towards improving the accessibility of financial services (These will be presented in section 7). Similar conclusions were reached by Brazilian researchers A. Sales, Y.P. Costa Aguiar, U. Maritan and T. de Araujo in their focus group research (Sales et al., 2020).

## 6. Conclusions of the quantitative research conducted

The main conclusion of the research is that respondents, but also customers (because the vast majority of these respondents have bank accounts and a large proportion of them have taken out cash loans), do not read contracts carefully. Sometimes they look at them very briefly, sometimes they even sign them without being familiar with their content.

On the basis of the quantitative research carried out, a general conclusion can be drawn that the degree of simplification of language in financial contracts is not the most important factor influencing respondents' level of understanding of the content of these contracts. The research did not identify any significant differences between respondents' understanding of contracts with financial institutions regardless of the level of simplification of the language contained in their content. This observation extends to all respondent groups surveyed.

In light of the results of the quantitative research, it should be considered that all three of the research hypotheses posed have been falsified.

The reasons for this can be sought in the following circumstances

1. Respondents' cursory familiarity with the content of the contracts presented to them.

This behaviour may be influenced by the following factors:

- a) Difficulty in focusing attention on dozens of pages of text (even after simplifying the language).
- b) The belief that there is a certain level of security provided by the Financial Supervision Commission, which looks after the interests of the clients of financial institutions for them on behalf of the clients, which makes the clients to some extent able to trust the institutions that the contracts are not dangerous for them.
- c) The general lack of time of respondents, who are voluntarily engaged by the interviewer.

2. The inability to negotiate these contracts which results in the customer either agreeing to the terms of the contract or not receiving the financial product. The process is therefore analogous to shopping in a shop - either I buy the product offered off the shelf or I don't. At most, it is possible to compare competitor products, but in the case of contracts at other/competing financial institutions, this requires spending a lot of time and acquiring some knowledge of financial instruments. Since a bank account, as well as a small cash loan, are not expensive, passionate or luxury goods (like cars, travel or yachts) then customers are not willing to devote significant attention to considering multiple options (competitive offers). They choose a product that they know about, is recommended by friends or enforced by the bank (e.g. property insurance for which a mortgage has been obtained, etc.) or advertised in the media (e.g. an extra freebie to get started), or the banking outlet is located close by.

3. For people with disabilities (especially intellectual disabilities and deaf and hard of hearing disabilities), there is a problem with being able to understand contractual provisions in Polish due to their various perception limitations. Particularly for deaf and hard-of-hearing persons using sign language on a daily basis, text written in Polish makes it very difficult to understand the content.

The conclusions of these conducted studies are not alone. There are results in the literature indicating that plain language in financial contracts is not a determinant of higher levels of understanding of these contracts. This is indicated in several research articles from recent years:

1. A. Rossetti, P. Cadwell and S. O'Brien, on the basis of a focus study on the level of understanding of financial contracts conducted on older people, indicate that there is no benefit from the use of plain language in these contracts (Rossetti et al., 2020).
2. A. Felici, C. Griebel on the basis of a study of Swiss insurance company leaflets indicate that simplifying the language does not always guarantee good communication with the audience (Felici, Griebel, 2019, pp. 167-191).
3. A critical approach to the use of plain language as a method to increase the accessibility, comprehensibility and usability of bank mortgage documents is presented by N.N. Jones and M.F. Williams (2017, pp. 412-429).
4. The shortcomings associated with the ambiguity of plain language in legal documents are pointed out by J. Barnes (2010).
5. L.E. Allen and C.R. Engholm point out that plain language alone in legal documents is not sufficient they emphasise the role of document structure (Allen, Engholm, 1979).

Since this article primarily presents the results of the research conducted by the authors, the literature cited only reinforces the conclusions drawn from this research. The articles cited above are not a systematic review of the literature. They are examples of studies that showed no or limited relationship between language simplification and respondents' level of understanding of the text of contracts and similar documents.

It is worth noting that the research described in this article was based on verification of the level of understanding of contracts through test questions answered by respondents immediately after reading the content of contracts. Thus, the level of understanding of contracts was verified and objectified. Most studies on the use of plain language in official or financial documentation are based on respondents' declarations about whether the text they read seems more comprehensible/readable/clear to them. Thus, they are based on the subjective feelings of respondents (e.g., Ronka-Chmielowiec, 2018). Conclusions from survey respondents' feelings usually support the implicit thesis that the easier / simpler the text, the better the understanding. However, according to the authors, such conclusions are based on the erroneous basic assumption that respondents read the content of contracts or documents thoroughly and with understanding. They only form their opinions about the legitimacy of simplifying the language in these texts.

## 7. Proposals for improving the accessibility of financial services

Based on the results of the quantitative research enriched by a focus group interview. Several suggestions can be made

1. The aim should be to simplify contracts as much as possible, not only in terms of the language used but also in terms of the layout and content contained therein, as well as the use of technology to support the reader's focus on the key points of the contract (especially those mandatorily required by the legislator). In this context, it is advisable to offer a contract whose provisions fit on one A4 page with a tabular layout in bold.
2. It is possible to conclude the contract in an electronic version, which further enriches the range of presentation possibilities for the content of the contract.

In the electronic version, the client may be able to choose:

- font size,
- the language version of the contract,
- sign language translation in various language versions - PJM (Polish Sign Language), SJM (Sign Language System), BSL (British Sign Language), ASL (American Sign Language), DGS (German Sign Language) LSF (French Sign Language), Russian Sign Language, etc.),
- versions for the visually impaired with a magnifying part of the image,
- visually impaired and blind versions with audio descriptors.

In addition, scrolling control can be introduced here for the text the customer is looking at. You can slow down the scrolling so that the reader cannot move the contract all the way to the end in a single movement of the mouse or touchpad. You can also use a forced response in the form of actions (e.g. clicking on checkboxes) confirming that the customer has familiarised themselves with the important parts of the contract.

In an advanced electronic version, a method of tracking the reader's gaze can be included to verify that the contract provisions have been viewed long enough by the user.

Electronic versions of contracts with interactive elements with additional explanations and links to additional information, definitions, etc., can be included.

In addition, in order to make it easier to familiarise oneself with the content of the agreement and to encourage a careful study of it, one could enforce the development of tutorials available on YouTube showing step-by-step how to log into and further use the e-banking channels. Such steps are already being taken, but are not mandatory for financial institutions. Such tutorials could also be armed with language options (including sign language), video zooming, video audiodescription, etc.

Analogous measures could be taken for cash loan agreements:

1. Enhancing the role of education in the financial area. Here, one could point to extending secondary school education to include financial literacy. Specific programmes on this subject should be developed for special schools educating young people with special needs. Encourage both young people and people of all ages to take a greater interest in the area of financial services through:
  - a) information campaigns,
  - b) raising awareness of financial engineering issues - the very name financial engineering is more attractive than personal finance,
  - c) knowledge competitions on financial instruments,
  - d) Developing a textbook for students or secondary school pupils on finance/economics/management written in plain language.
2. A system-process approach instead of point support. Above all, it is worth considering extending support to the whole process of using an account or repaying a loan, and not just the point at which the contract is signed. This is particularly important for people with special needs.

Support at the moment of decision-making in the form of signing a contract is only the initial moment, followed by real action in the form of the use of financial products or services, usually spread over a longer period of time of financial products or services, usually spread over many years. One of the key conclusions of the focus group research is the recommendation to set up assistant support centres run by institutions at central as well as at local government level. These centres could be used by people in need, such as Deaf people needing support from a PJM interpreter and at the same time an assistant in the form of personal contact rather than a two-dimensional online image. In the case of people with mental disabilities, assistant support in the decision-making process for financial agreements would also be highly desirable. The sustainability of such centres should be ensured by funding not from floating projects, but from a fixed fund provided by the state or local government budgets. The services provided by the assistants would personally assist people with special needs in dealing with a wide range of issues (health care, taxes, administrative matters, etc.) and this would include the use of financial services and products.

## 8. Conclusion

This paper presents the results of empirical research on a large sample of 600 respondents and, in addition, a focus group with 11 deaf people.

In the light of the research, the basic research hypotheses have been falsified, and through this, the answer to the main research question posed: to what extent will simplifying the language in contracts increase the level of understanding?

The main findings of the research point to the small role of simplified language as a factor in raising understanding of financial contracts. While intuitively it would seem that significant improvements in accessibility to financial services could be achieved quickly (by simplifying the language in financial contracts), the reality turned out to be more complicated.

In addition to fulfilling the purpose of the article, i.e. to discuss the research findings, this also achieved the objective set in the research project albeit in a non-obvious way. The degree of understanding of financial contracts among the respondents must be assessed as low, and this is true no matter what language they were written in. However, this made it possible to look for other ways to improve the accessibility of financial services, among which the following were suggested:

- a) simplifying contracts as much as possible in many aspects, not only in terms of the language used in them,
- b) taking advantage of the rich possibilities offered by electronic versions of the contract,
- c) taking a broader view of the problem, not only at the point of contract, but throughout the entire period/process of use of financial services by customers,
- d) increasing the level of financial education among the public.

## References

1. Allen, L.E., Engholm, C.R. (1979). The need for clear structure in plain language legal drafting. *U. Mich. JL Reform*, 13, 455.
2. Barnes, J. (2010). When 'plain language' legislation is ambiguous: sources of doubt and lessons for the plain language movement. *Melbourne University Law Review*, 34(3), 671-707
3. Felici, A., Griebel, C. (2019). The challenge of multilingual 'plain language' in translation-mediated Swiss administrative communication: A preliminary comparative analysis of insurance leaflets. *Translation Spaces*, 8(1), 167-191.
4. Gunning, R. (1952). *The Technique of Clear Writing*. McGraw-Hill. pp. 36-37.
5. Jones, N.N., Williams, M.F. (2017). The Social Justice Impact of Plain Language: A Critical Approach to Plain-Language Analysis. *IEEE Transactions on Professional Communication*, vol. 60, no. 4, pp. 412-429, doi: 10.1109/TPC.2017.2762964
6. Moczydłowska, J., Pawelec, G. (2023). *The Hawthorn experiment - a breakthrough in the role of social energy in an organization*, <https://wiz.pb.edu.pl/akademia-zarzadzania/wp-content/uploads/sites/3/2023/09/1.2.-J.M.-Moczydłowska-G.-Pawelec-Eksperyment-w->

Hawthorn-%E2%80%93-przelom-w-rozumieniu-roli-mechanizmow-spoecznych-w-organizacji.pdf, 20.11.2024.

7. Ronka-Chmielowiec, W. (2018). *Czytelność Ogólnych Warunków Ubezpieczenia – teoria i zastosowanie w praktyce ubezpieczeniowej [Readability of the General Insurance Terms and Conditions – theory and application in insurance practice]*, <https://www.wir.ue.wroc.pl/info/phd/WUT03e5b5f5160d4fa7b2b74650e5af36dc/>
8. Rossetti, A., Cadwell, P., O'Brien, S. (2020). *The Terms and Conditions Came Back to Bite In International Conference on Human-Computer Interaction*. Springer, 699-711; [https://link.springer.com/chapter/10.1007/978-3-030-60149-2\\_53](https://link.springer.com/chapter/10.1007/978-3-030-60149-2_53)
9. Sales, A., Costa Aguiar, Y.P., Maritan, U., de Araujo, T. (2020). Participatory Design Workshops for Adapting a Form for Deaf Respondents. In: M. Antona, C. Stephanidis (eds.), *Universal Access in Human-Computer Interaction. Applications and Practice. HCII 2020 Lecture Notes in Computer Science, vol. 12189*. Cham: Springer. [https://doi.org/10.1007/978-3-030-49108-6\\_9](https://doi.org/10.1007/978-3-030-49108-6_9)