Information overload as a burden and a challenge. What can we learn for information literacy?

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Research aim

To indicate the challenges and recommendations for information literacy, based on the results of 2 national surveys on information overload

To provide insight into different experiences, attitudes, emotions, and/or education needs based on the specific of demographic characteristics
# Background

## IO DEFINITIONS

1. A situation which arises when an individual's efficiency and effectiveness in using information (whether for their work, studies, citizenship, or life generally) is hampered by the amount of relevant, and potentially useful, information available to them (Bawden & Robinson, 2009; 2020)

2. A distress associated with the perception that there is too much information (Williamson, Eaker, & Lounsbury, 2012)

## CONTEXT

- COVID-19 pandemic (COVIO scales)
- Political and social situation
The tool: Information Overload Scale
(Williamson, Eaker, & Lounsbury, 2012)

1. I have to manage so much information in my daily life that it takes me a long time to complete even simple tasks.
2. I regularly feel overwhelmed by too much information these days.
3. It is sometimes hard for me to concentrate because of all the information I have to assimilate.
4. There is so much information available on topics of interest to me that I have trouble choosing what is important and what’s not.
5. I have to process so much information that it frequently takes me too long to get things done in a timely manner.
6. I feel overwhelmed learning a new subject or topic because there is so much information.
7. I am confronted by an avalanche of email, phone and text messages each day.
8. When I search for information on a topic of interest to me, I usually get too much rather than too little information.
9. I have so much information to manage on a daily basis that it is hard for me to prioritize tasks.
10. I am stressed out by the sheer volume of information I have to manage on a daily basis.
11. It seems like the volume of information available is increasing exponentially in a relatively short period of time.
12. I feel like I can’t keep up with all the new developments in my area of expertise.
13. I sometimes feel numb and incapable of action because of all the information I have to process on a daily basis.
14. I feel like my attention span is becoming shorter and shorter because of information overload.
15. I regularly feel pressed for time because of all the information I have to deal with.
Methodology

1. **Procedure**: two waves of representative surveys (CAWI technique), in cooperation with the Ariadna Panel in 2021 and 2022 subsequently

2. **Sample**: Polish Internet users aged 15 and older
   (2021: n=1067, 2022: n=1083)
   Respondents’ quotas representative for gender, age, education level, size of locality of residence

3. Questionnaire included several scales for different PIU studies

4. The responses were recoded from 5 into 3 levels (summed negative 1-2 and positive 4-5 answers)

5. Only positive responses presented here (4 - I agree and 5 - I strongly agree)
Results
Information overload of Polish Internet users 15+

Repeated pattern of information overload among the total sample in both waves.

Decrease of information overload between the first and second waves.

Top 3 results (items 4, 8, 11) all refer to an overwhelming quantity of information and difficulties with selection.
Information overload by gender in 2022

Women suffer from IO more than men (see: items 3, 4, 8, 11, 12)

Men most often declared IO in the context of items 4, 8, 11, 15.
The youngest suffer the most (15-19 years), while the least are the oldest (55+).

For both these groups, the indications differ significantly among items.

The youngest: managing information takes too much time (1, 5); this makes them feel overwhelmed (2, 6, 12, 13) and stressed (10, 15), and causes problems with concentration (3, 14) and selection (4, 9). However, they less often experience excessive communication (item 7).
Information overload by age group in 2022 (2)

Group 55+ achieved the lowest results for items 1-6, 9-10, and 13-15.

They are less burdened with managing daily tasks (items 9-10, 13).

Selection from among too much information (item 8) is problematic, and rapid growth of information (item 11).

The latter is problematic for all age groups.
Discussion & conclusions
This project confirms and enhances knowledge on increased information overload specifically in the pandemic time (2021) and beyond (2022).

The general IOS study confirmed results from COVIO scales, that people suffered from IO in general.

A specific pattern of reactions to particular items can be observed between the waves. Data for 2022 reveals that women are more likely to feel overwhelmed by information, also with regard to selection of sources and concentration. The men report similar problems, but to a lesser degree and additionally a time pressure.

That leads to a hypothesis for future research of a specific model of information overload, in particular, if the pattern repeats in the following survey waves.
Discussion (2)

Information redundancy is the most difficult to deal with (highest indications), while it influences less everyday living (lower indications).

IO influences negatively prioritization of tasks and lack of concentration

The results for all age groups 20+ mostly decreased, excluding the youth (15-19), who declared significant increases (even by 32% - item 6).

The youth and the oldest respondents differ from the other age groups (20-54), although in almost opposite ways.

The significant correlation of IO and gender (women) and age found by Williamson, Eaker, and Lounsbury is confirmed on a representative national sample.
Conclusions

Information overload is a major social problem, increasing in times of such major problems as the pandemic.

IO negatively influences users' capacities in information verification, selection, or concentration.

The scope and scale of IO differ depending on age and gender.

The dynamics of the social environment affect information literacy, making it necessary to be flexible in the design of the content and forms.
Recommendations for IL training

Digital hygiene (as a part of information literacy discussion)

Precise identification of information needs and formulation of information searching instructions

Advanced searching skills and tools

Verification of information reliability and quality

Filtering and selection of sources and information

**Prosumers' responsibility for information redundancy**
- the issue of awareness and responsibility for the co-creation of information overload.
- A prosumer should ask him/herself if it is really necessary for him/her to make specific content public? What purpose does it serve? Who needs it? This issue links directly to ecology of information behavior

**Further adaptation of trainings to specific needs of different social groups**

**Young people and women seem to have specific needs, which can possibly depend on age or social roles**
Thank you!

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