Fear of Missing Out, Information Overload, Information Literacy, and Digital Wellbeing

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Agenda

- Introduction & theoretical background
- The research project: objectives and methodology
- Results:
  - information literacy vs. FOMO
  - digital wellbeing vs. FOMO
  - Information overload… vs. FOMO
- Conclusions

Introduction and theoretical background (1)

- The context of underdeveloped information and digital literacy and its consequences
  - problematic Internet use (PIU)
  - Fear of missing out (FOMO) as one of its manifestations
  - Information overload
- FOMO
  - a manifestation of lacking skills in information verification?
  - a limitation of full engagement in societal and civic life
- digital wellbeing as a status requiring our attention and care to decrease the scale of FOMO

Definitions

- FOMO: a pervasive apprehension that others might be having rewarding experiences from which one is absent (…) the desire to stay continually connected with what others are doing (Przybylski et al., 2003)
- Information literacy: the ability to think critically and make balanced judgments about any information we find and use. It empowers us as citizens to reach and express informed views and to engage fully with society" (CILIP, 2018)
- Digital wellbeing: a state where subjective wellbeing is maintained in an environment characterized by digital communication overabundance (Gui, Fasoli, & Carradore, 2017)
- Digital wellbeing skills: a set of skills needed to manage the side effects of digital communication overabundance (Gui, Fasoli, & Carradore, 2017)

Introduction and theoretical background (2)

- Digital wellbeing vs. information literacy
- Jisc Digital Capabilities Framework: a list of 6 competency areas of individual digital literacy:
  - Digital proficiency and productivity (functional skills)
  - Information, data and media literacies (critical use)
  - Digital creation, problem solving and innovation (creative production)
  - Digital communication, collaboration and participation (participation)
  - Digital learning and development (development)
  - Digital identity and wellbeing (self-actualising)
- digital wellbeing is either competency or an outcome of digital literacy and can be analyzed in technical, critical thinking, and social aspects

The research project part 1 (1)

- Objective 1: to explore the relation between FOMO, information literacy, and digital wellbeing.
- Does information literacy cover the standards and competences required for digital wellbeing?
- Research questions:
  - RQ1: How is information literacy associated with FOMO?
  - RQ2: How is FOMO associated with digital wellbeing?
- Subquestions:
  - Are the high-FOMO people information literate?
  - Is there any relation between being information literate and problematic Internet use?
  - If so, what kind of such a relation can be observed?

The research project – methodology

- FOMO in Poland 2018-2019 (https://fomo.wdib.uw.edu.pl/):
  - two waves of the CAWI survey of Polish Internet users aged 15+
  - a nationwide probability random-quota sample of the Internet users aged 15+ (N=1060 in 2018, N=1066 in 2019) selected from Ariadna research panel in Poland
  - The quotas on sex, age, and the size of the place of residence were based on how the population of Poland is represented among Internet users
- partial results of both waves in regard to information literacy and digital wellbeing
- Questionnaires for both editions included the FOMO scale by A. K. Przybylski et al., other sets in separate waves:
  - different aspects of online activities, like information literacy, online self-presentation in 2018 wave
  - digital wellbeing, phubbing, nomophobia in 2019 wave
  - the analysis includes only the answers related to FOMO, information literacy, and digital wellbeing

General results

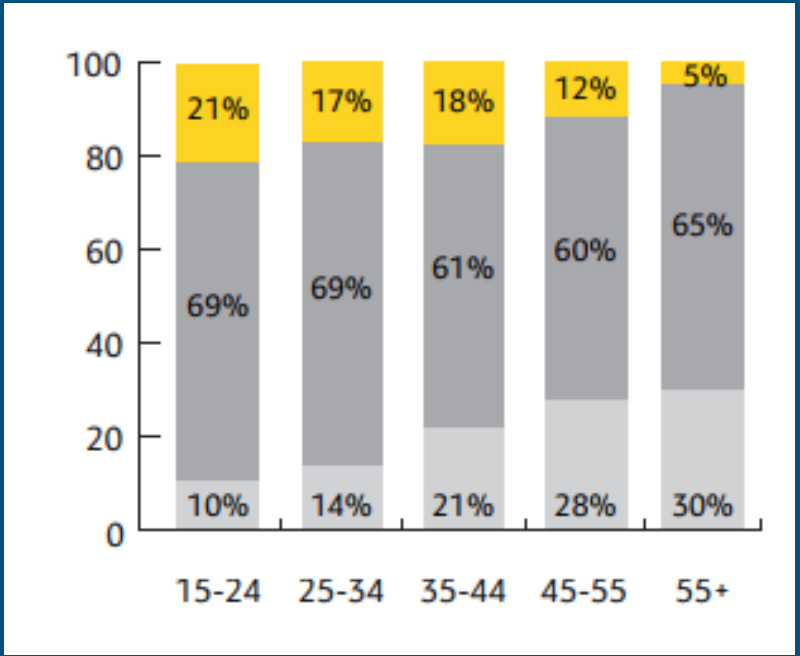
- About 26,9 mln of the Polish Internet users in 2018 (approx. 96% of Polish population)
- 2018 wave:
  - approximately 16% (~ 4,3 mln people) of the Polish Internet users 15+ appeared to be high-FOMO people (so-called „fomers”)
  - 65% of mid-FOMO people (~ 17,5 mln)
  - 19% of low-FOMO people (~ 5,1 mln, mostly the oldest generations)

- 2019 wave:
  - high-FOMO - 14% of respondents
  - mid-FOMO - 67%
  - low-FOMO - 19%

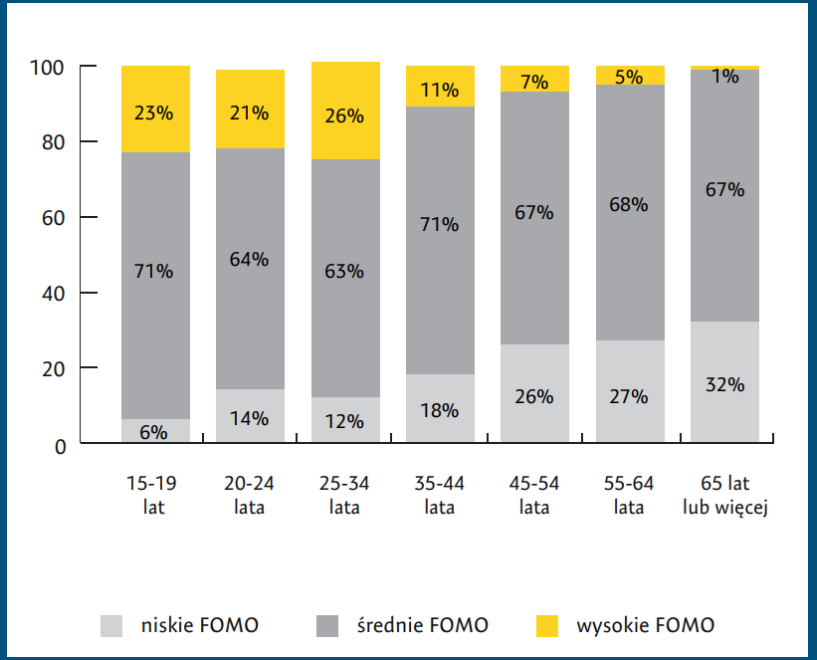
- The age is a discriminating variable (younger respondents - aged 15-34 - reached higher FOMO indicator)
- Some differences regarding the place of living (19% of high-FOMO people lived in large cities)

FOMO vs Polish Internet users by age

2018

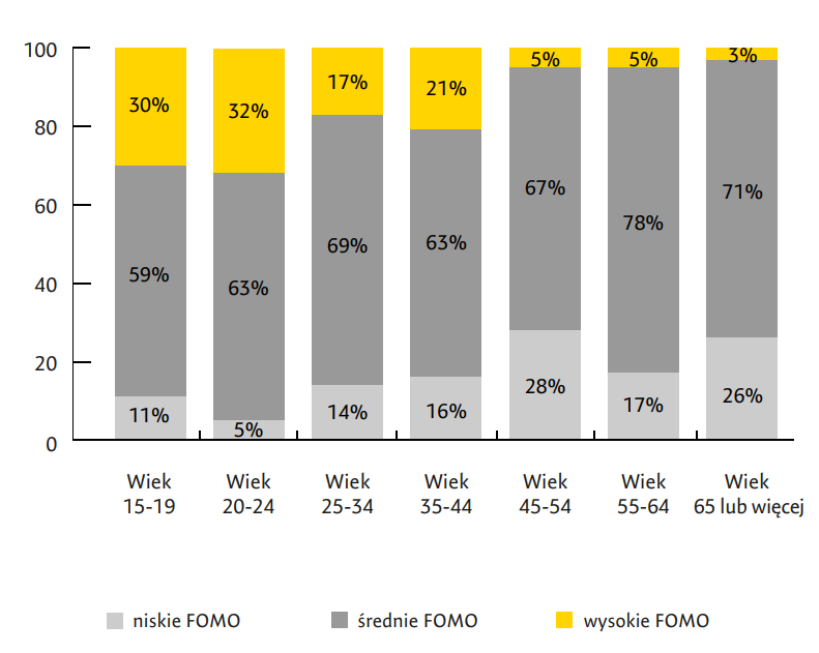


2019

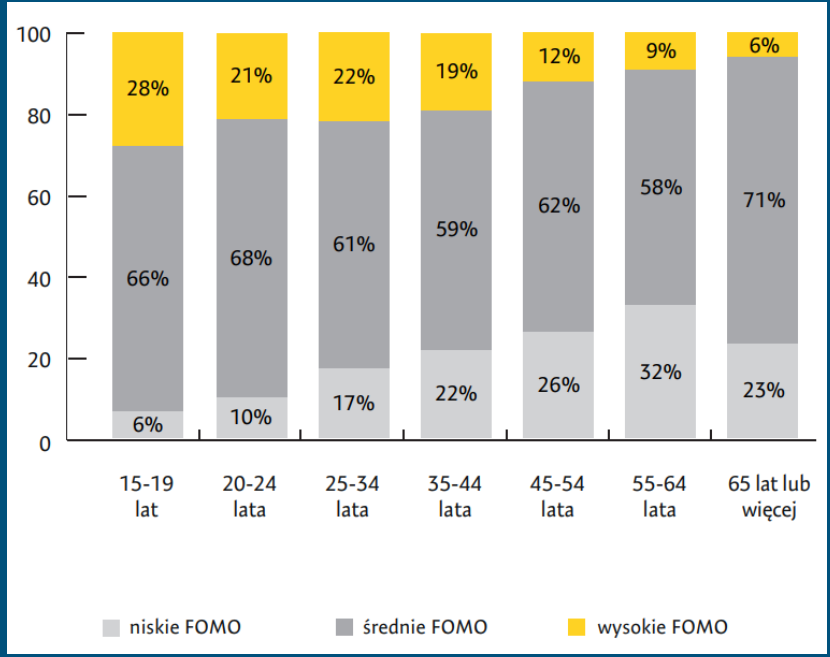


FOMO vs Polish Internet users by age

2021



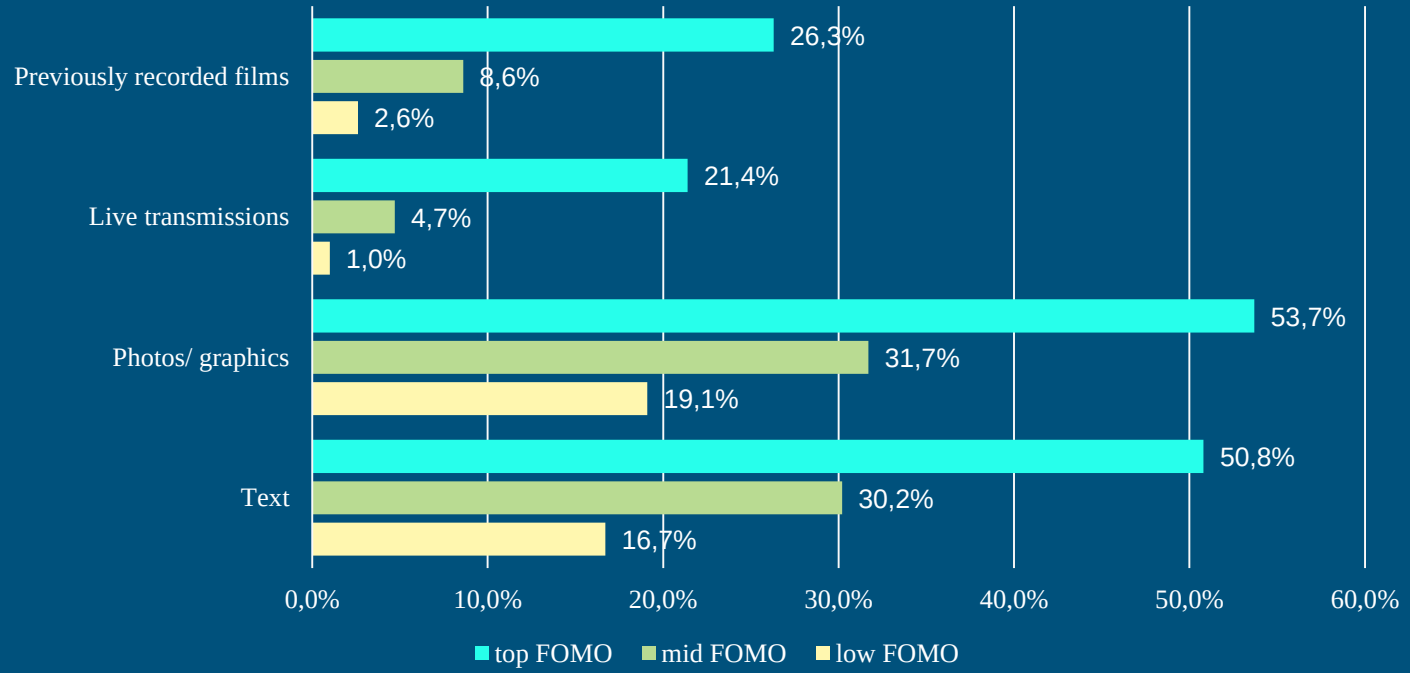
2022



Results: information literacy vs. FOMO

What forms of content do you publish on your social media profile(s)?

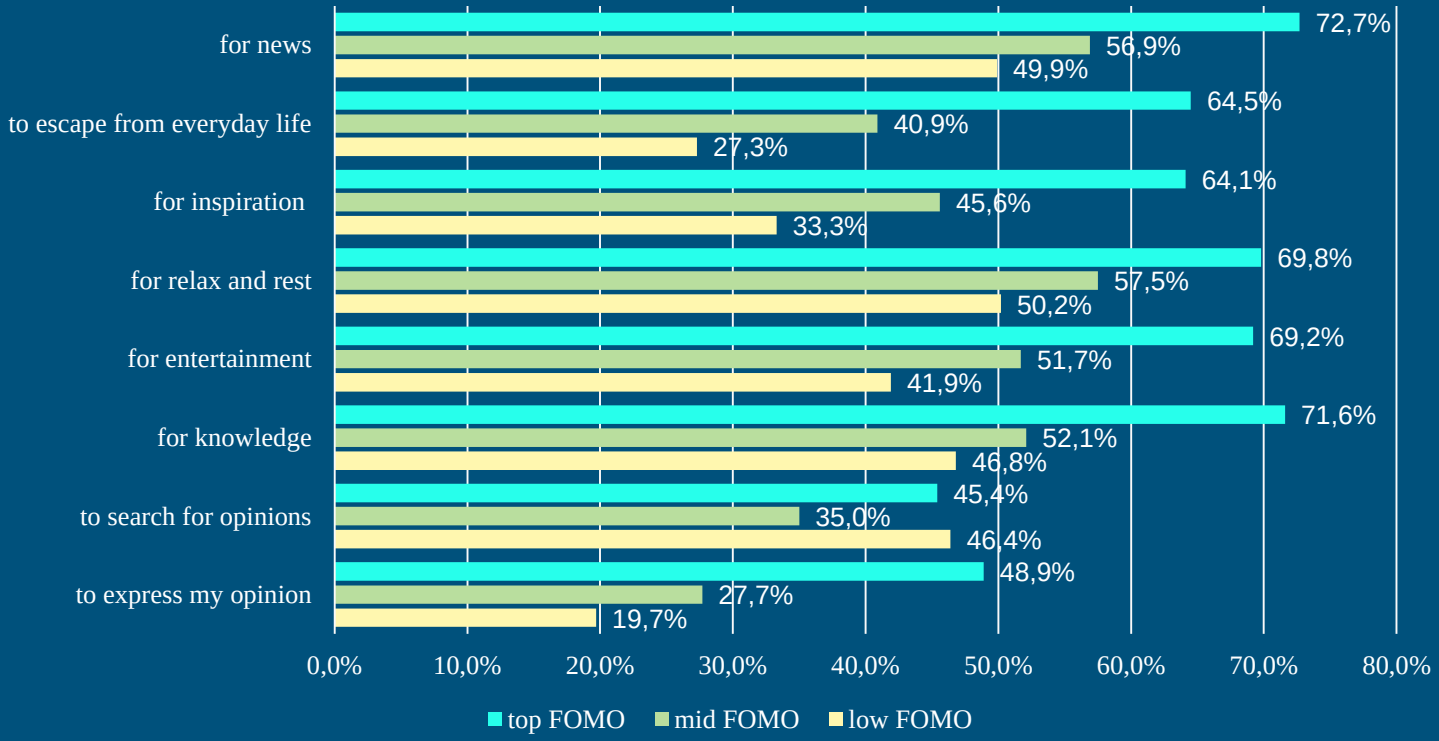
(N=1060, wave 2018, accumulated "often" and "always" responses)



Results: information literacy vs. FOMO

How often do you use social media for the following goals?

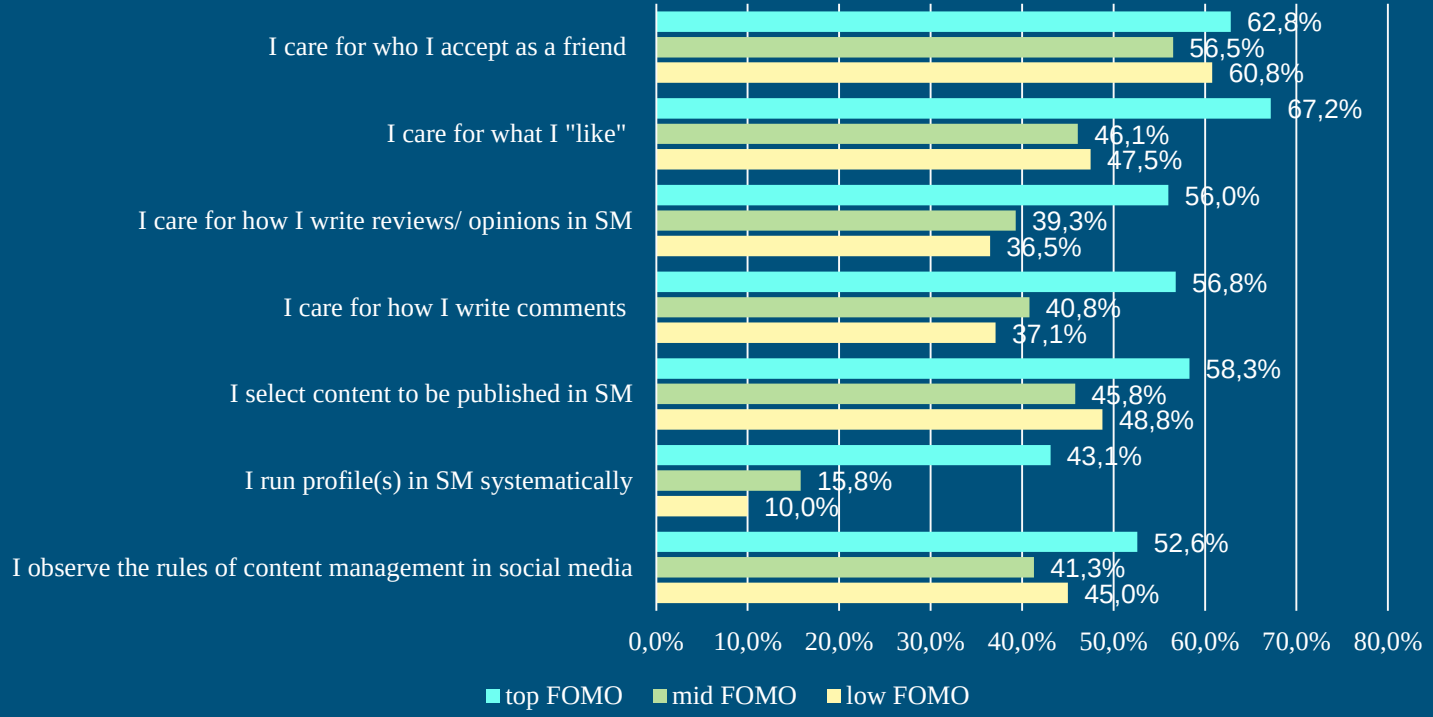
(N=1060, wave 2018, accumulated "often" and "always" responses)



Results: information literacy vs. FOMO

How often do you run the following activities on social media?

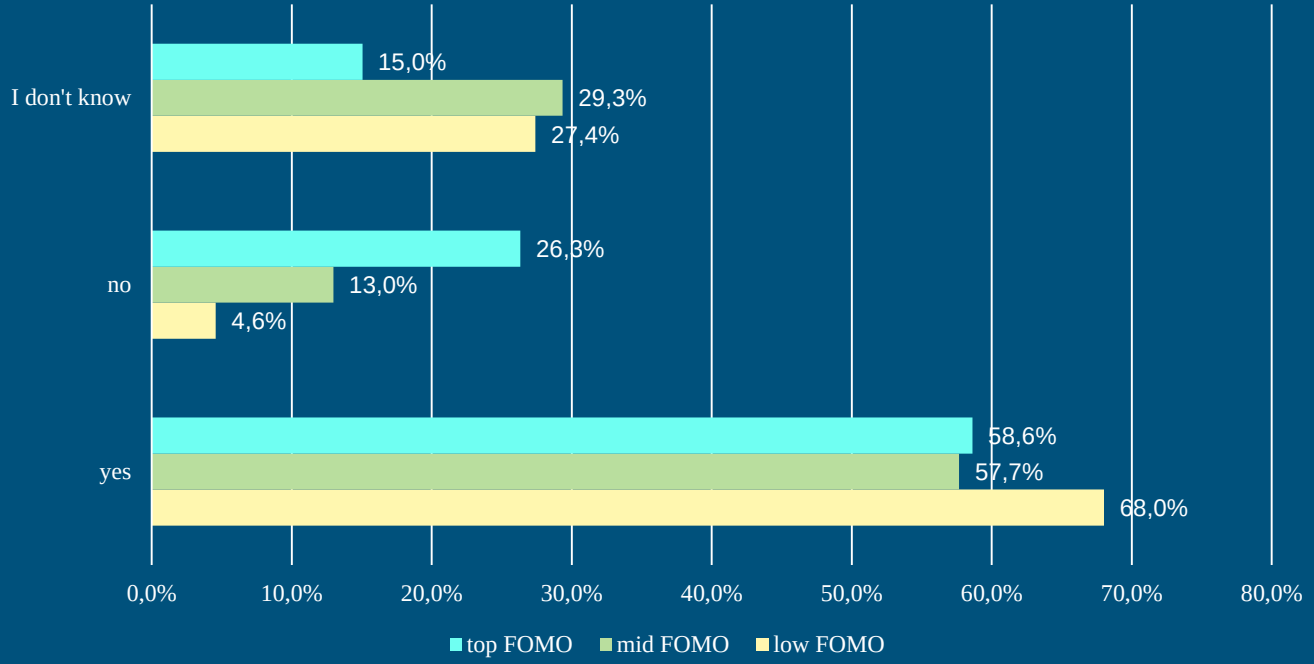
(N=1060, wave 2018, accumulated "often" and "always" responses)



Results: digital wellbeing vs. FOMO

Do you try to keep healthy habits during ICT & Internet usage?

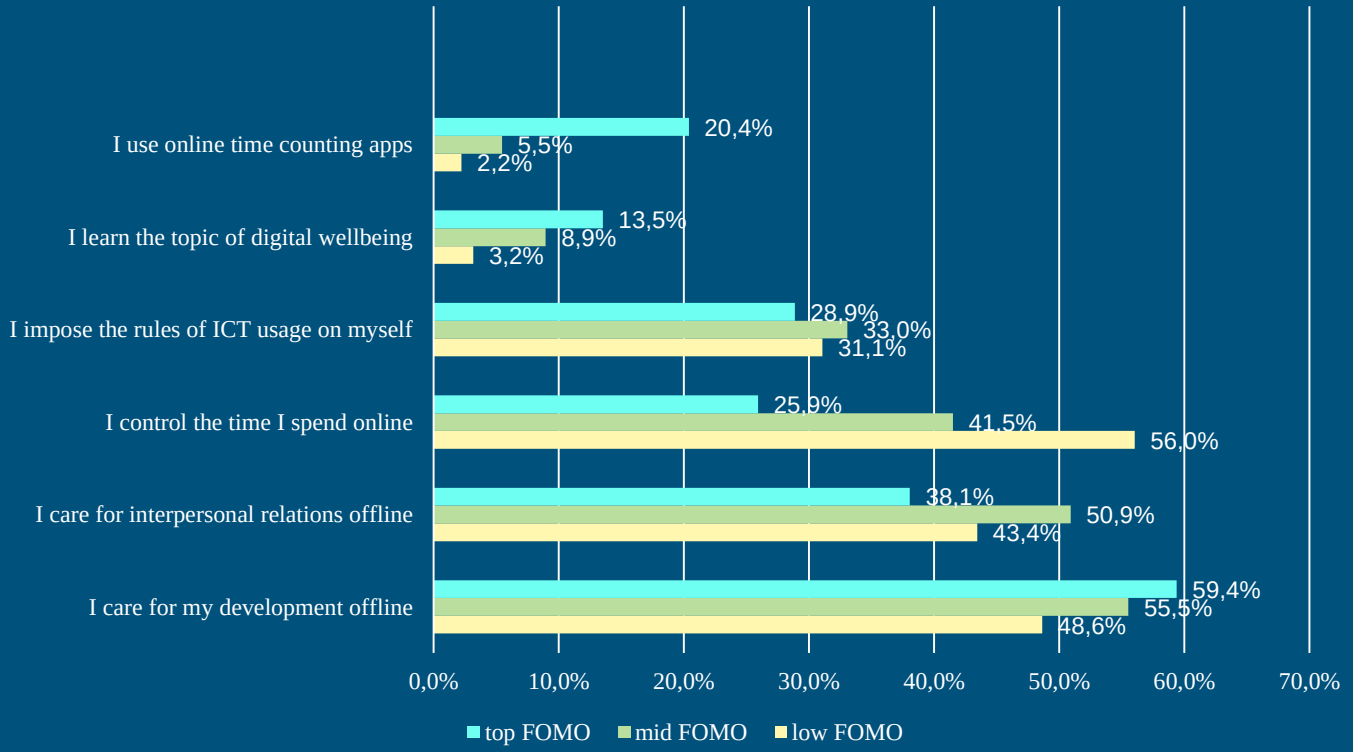
(N=1066, wave 2019, accumulated "often" and "always" responses)



Results: digital wellbeing vs. FOMO

What do you do to keep healthy habits during ICT & Internet usage?

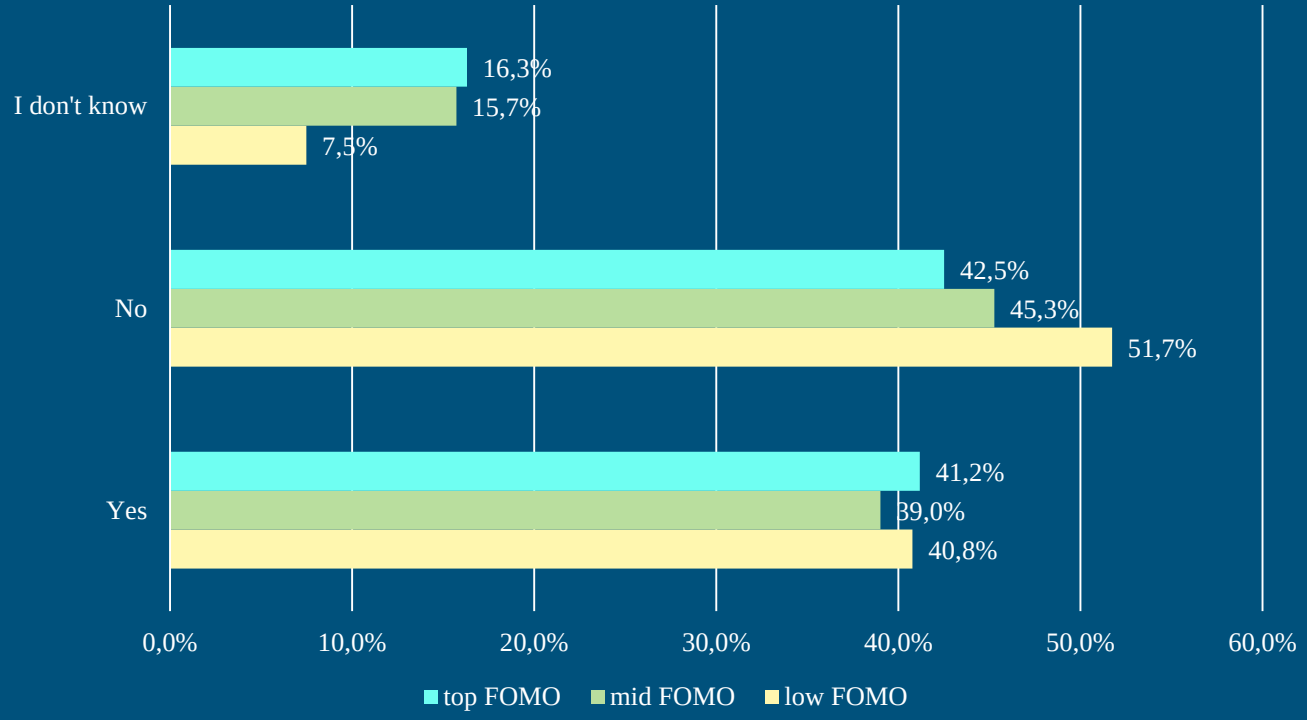
(N=1066, wave 2019, accumulated "often" and "always" responses)



Results: digital wellbeing vs. FOMO

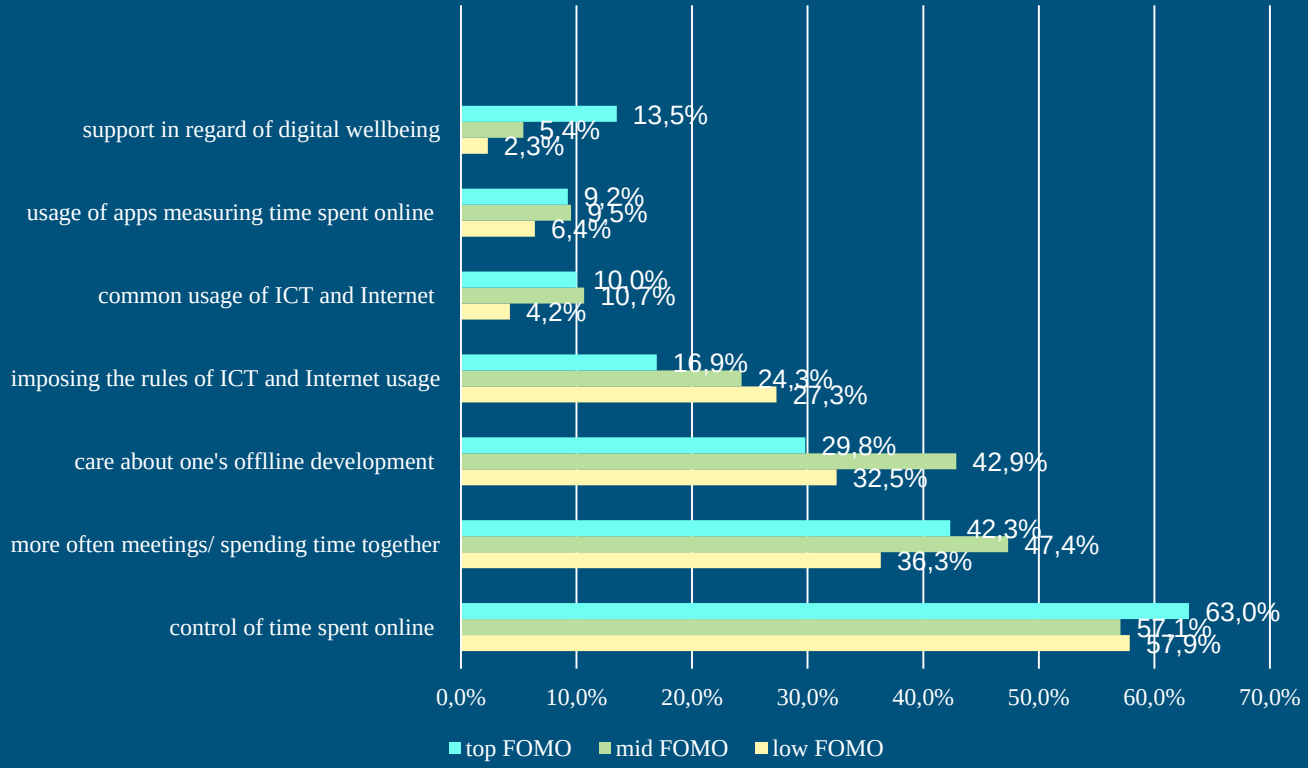
Have you ever pointed out anybody due to his/her unhealthy habits in ICT usage?

(N=1066, wave 2019, accumulated "often" and "always" responses)



Results: digital wellbeing vs. FOMO

What did you offer to a person, whom you pointed out due to his/her unhealthy habits concerning ICT usage? (N=1066, wave 2019, accumulated "often" and "always" responses)



Conclusions for part 1

- According to the respondents' declarations, the high-FOMO people are information, ICT, and media literate people.
  - They possess knowledge, skills, and experience in publishing texts and photos/graphics, less in films and live transmissions.
  - They care for their online behavior (on social media in particular), while commenting, liking, reviewing, or publishing more than those from mid and low-FOMO groups.
- They (only) declare their efforts in undertaking activities for their digital wellbeing, in particular controlling the time spent online.
- Knowledge and skills in information processing and dissemination may not be enough to protect against FOMO and problematic Internet use.
- Digital wellbeing calls for specific attitudes.
  - Attitudes are the third aspect of competences in the qualifications framework perspective.
  - Inclusion of the digital wellbeing perspective in information literacy education component of competences, i.e. attitudes towards the Internet as an environment of everyday information activity.

Conclusions part 1 (2)

- Digital wellbeing as the awareness of the specificity of the virtual sphere and digital culture
- Rather positive reinforcement techniques than controlling behavior to develop new habits, to promote self-regulation and social learning
- Information literacy and knowledge of threats do not guarantee protection against problematic Internet use, nor its negative consequences, like FOMO.
- Development of attitudes as potential protection against risky behavior needs to be recognized for those living networked lives in the post-truth era.

Information overload as a burden and a challenge: Tips for information literacy?

Research objectives 2

- To indicate the challenges and recommendations for information literacy, based on the results of (next) 2 waves of the national survey 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)

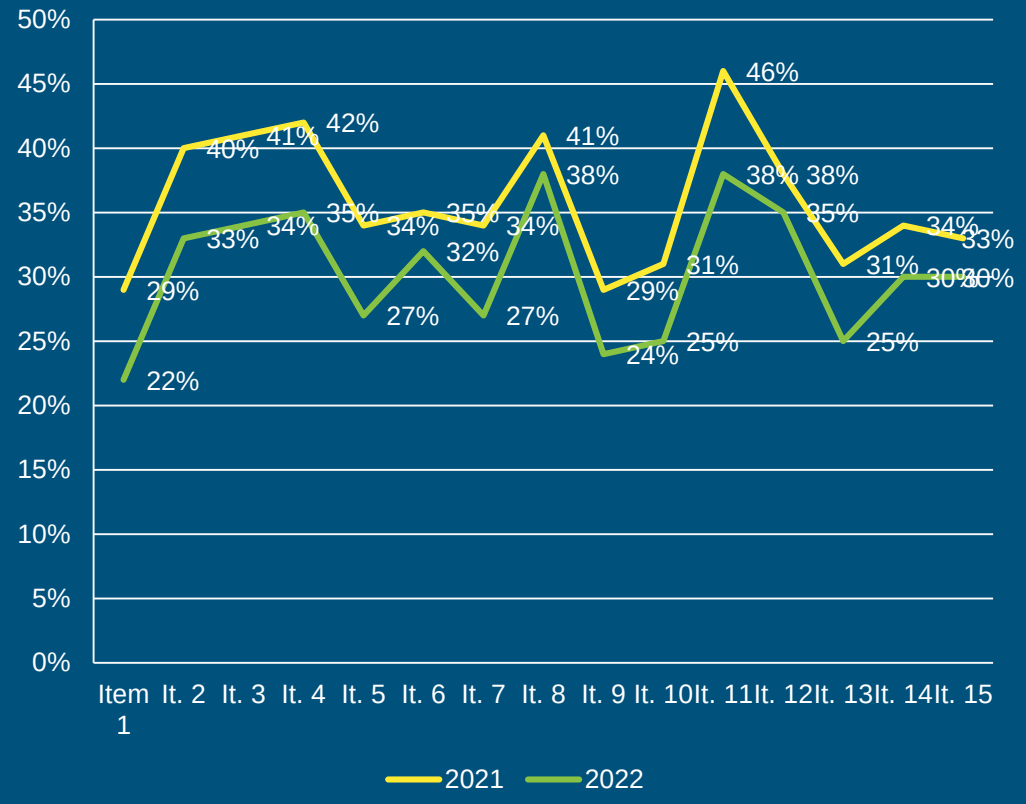
Results

Information overload of Polish Internet users 15+

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

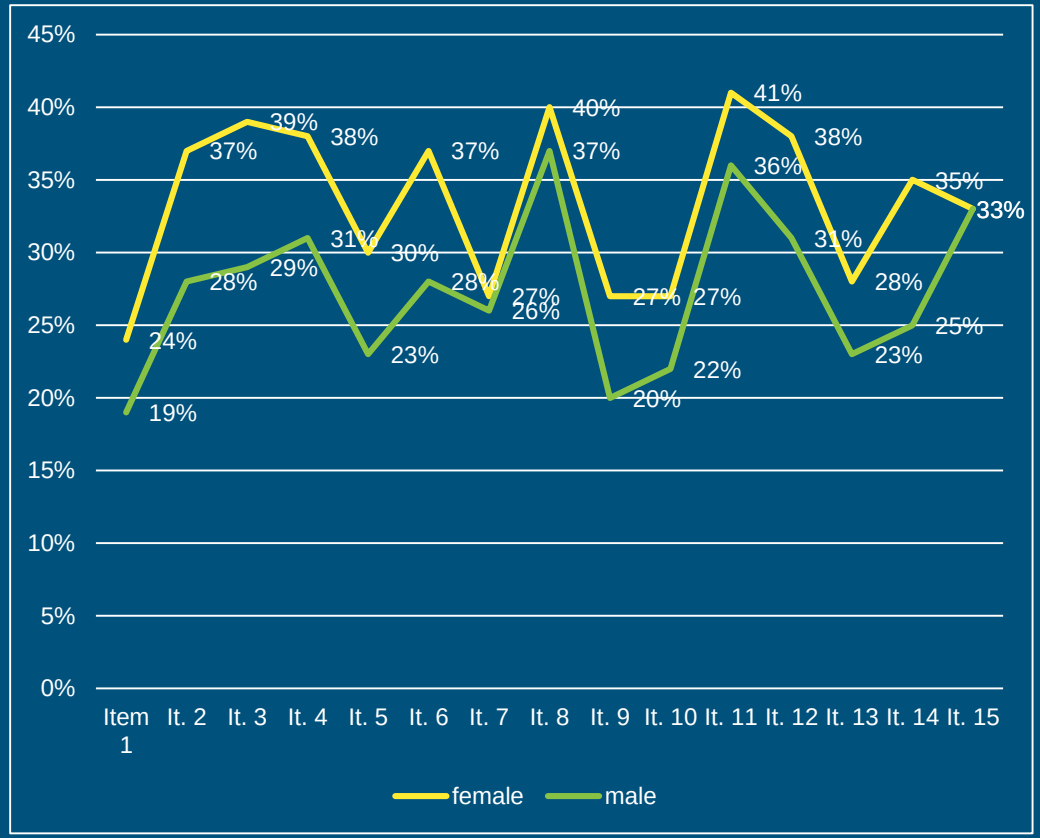
Decrease of information overload between the first and second waves.

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.

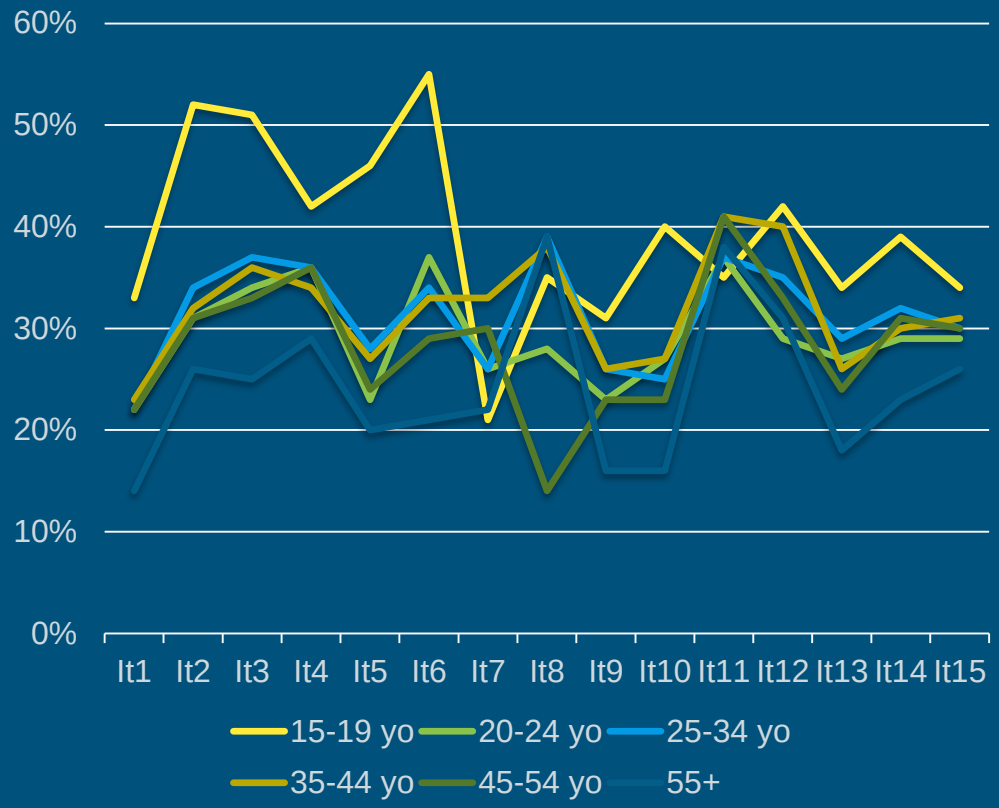


Information overload by age group in 2022 (1)

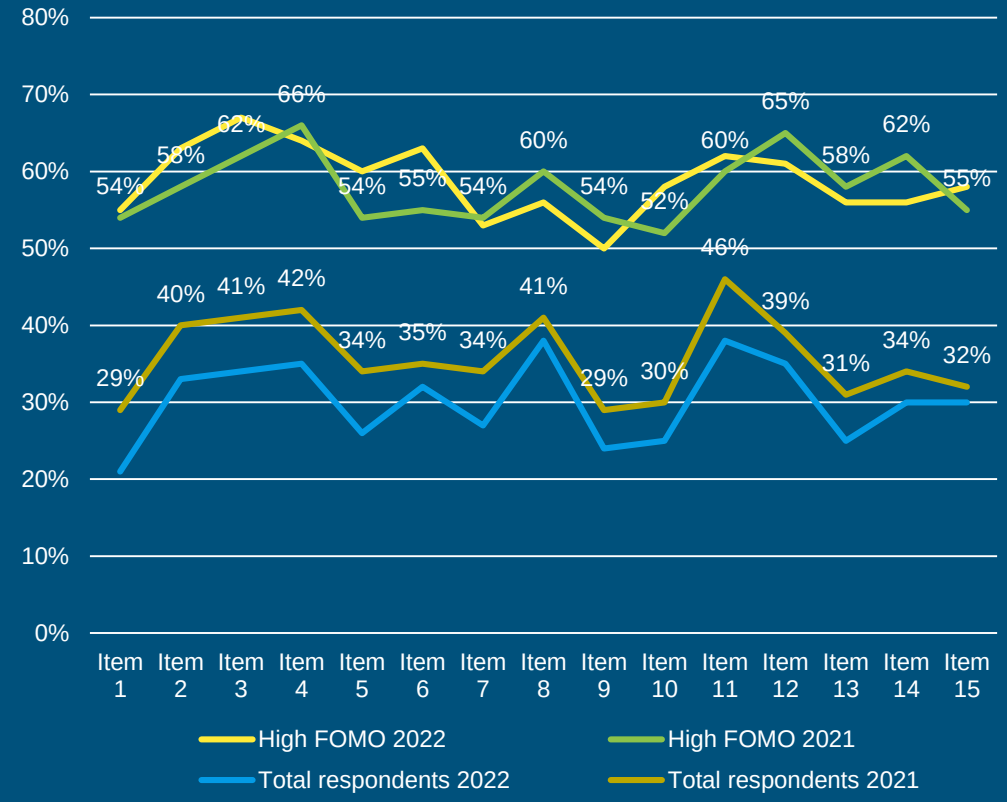
The youngest suffer the most (15-19 years), while the least are the oldest (55+).
For both these groups, the indications differ significantly among items.
The youngest: managing information takes too much time (1, 5); this makes them feel overwhelmed (2, 6, 12, 13) and stressed (10, 15), and causes problems 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.



FOMO vs. Information Overload



Discussion & conclusions

Discussion (1)

- 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**

Final conclusions

- High FOMO is related with:
  - information literacy
  - DECLARED digital wellbeing (vs. reality)
  - Information overload
- Information overload may influence negatively information literacy in terms of selection and evaluation skills
- The lower information literacy, the higher risk of FOMO and information overload
- What is the remedium?
  - Information literacy training, focused on attitudes and selfcare?

Thank you!

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