AI will never replace us, or will it? Views of Finnish health librarians and information professionals on artificial intelligence in library and information services

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Abstract

The paper explores the impact of artificial intelligence (AI) on Finnish health librarians and information professionals (HLIP), focusing on their attitudes and the evolving role of library services. A survey conducted in 2024 and repeated in 2025 revealed that most HLIP view AI positively, though concerns about job replacement exist. AI is used for various tasks, including translations, planning searches, and creating teaching materials. The study highlights the need for continuous skill development and adaptation to technological advancements. Despite rapid technological changes, Finnish HLIP remain confident in the relevance of their profession.

Key words: *artificial intelligence; librarians; surveys and questionnaires; work/trends.*

Background

Like other Nordic countries, Finland is among the best performing societies regarding digital development (1), and has a reputation as one of the top countries in the world in the field of library services (2). The role of the libraries of higher education institutions (HEI) and HLIP has transformed thoroughly during the last decades. Information skills guidance and teaching became one of the main tasks decades ago, and now also research support is a significant and time-consuming task. The newest tasks in the libraries of HEI are the use of AI, especially generative AI based on large language models (LLM).

AI refers to technology that aims to enable computers to simulate human intelligence. It has a long history, and covers many tools. It is not a single concept, but an umbrella term for various tech-nologies. The impact of AI on the work of HLIP is a topic of growing interest and discussion. HLIP have varying attitudes to AI. AI is expected to influence various aspects of HLIP's work, including information retrieval and resource discovery, publishing, learning, teaching, acquisitions, and users' expectations. Challenges include ethical concerns, data quality, and the intelligibility of decision-making. The scope of AI is broad as it can be a technology for the automation of routine office processes like robotic process automation, or equally, something more at the end of strong AI, such as unsupervised machine learning or deep learning. Accepting AI as part of technological development in libraries and information services is inevitable. In the future, AI may also be an integral part of the work of HLIP in ways that cannot yet be predicted. Identifying the use and impact of AI technologies is important in order to avoid the risks associated with the technologies and to identify the opportunities they offer (3-6).

Objectives

New forms of professional practice often arise from new technologies, and the new practices require librarians to acquire new competencies (4). In spring 2024, with two questions in my mind: how will new technology help HLIP and is AI the answer or will it create new challenges, I conducted a survey on the trends of library and information service work – especially from the perspective of AI – for the members of Bibliothecarii Medicinae Fenniae (BMF), a professional association for HLIP in Finland.

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Methods

The anonymous survey was open from 2nd April to 2nd May 2024. The link to the survey was distributed on the email list of the association that has about 50 members who are in the workforce; on the list there are also retired members. There were 38 responses to the 17 survey questions, nine of which were obligatory. As eight questions were optional, and into some questions more than one option could be chosen, percentages do not necessarily add up to 100%. Two questions were open-ended, and the rest were multiple choice questions.

As the pace of AI development is staggeringly fast, the survey was repeated less than a year later, from 6th February to 2nd March 2025 with only the questions related to AI.

Results

In 2024, there were 38 respondents, out of which 30 (79%) were information specialists or subject librarians[1], four (10.5%) directors or chiefs, and four (10.5%) out of work (students, doctoral students, unemployed, retired).

In 2025 there were 33 respondents. A third of the respondents worked in universities, a fifth in UAS, 10% in research institutions, 10% in hospitals, and 10% in other organizations. The respondents had long experience both in the library and information field in general and in the health library field. 66% had more than 20 years of experience in general, and 58% more than 10 years of experience in health libraries. 10% were relatively new to the health field, with less than four years of experience, but all had at least four years of experience in general.

Many respondents shared their working hours between the health-related tasks and more general or other tasks. 45% stated that their tasks were primarily related to health, and 18% that their tasks were primarily general or other, and 37% that their tasks were both. They were also asked to predict if this will change in the future and it seems they saw a slight decline in specialization and some increase in the number of multi-skilled employees or generalists, as 43% believed that in the future their tasks will be both and 27% that their tasks will be more related to health, and 30% believed that in the future their tasks will be more general. Respondents were asked if they believe that HLIP will still be needed in the near future (until 2030) and in the more distant future (after 2030). Thirty-four (89%) replied "yes" and four (11%) "maybe" to former, and twenty-five (66%) "yes" and thirteen (34%) "maybe" to latter, while no one chose "no" to the either question. Respondents seemed quite sure about the near future, but more sceptical about the more distant future.

As AI is one of the technological trends that will change our work, the survey included seven questions about AI. First, I asked about the respondents' attitude to AI. In 2024, most of the respondents (26; 68%) had an interested, mainly positive attitude to AI. Ten (26%) had a neutral attitude, while one (3%) took an enthusiastic, eager, very positive attitude, and another one (3%) an interested, mainly negative attitude. No one stated a negative or a fearful, doubtful, or annoyed attitude. In 2025, most of the respondents (20; 61%) still had an interested, mainly positive attitude to AI though the percentage was somewhat smaller than a year before. Four (12%) had a neutral attitude, while two (6%) now took an enthusiastic, eager, very positive attitude, and six (18%) now had an interested, but mainly negative attitude. No one stated a very negative attitude but one now had fearful, doubtful, or annoyed one (*Figure 1*).

In 2024, thirty-two (84%) respondents used AI in their work: four (10%) all the time and twenty-eight (74%) sometimes. In 2025, the number of users was similar (97%): now eight (24%) all the time and twenty-four (73%) sometimes. In 2024, two (5%) said that never use AI in their work, and in 2025 there was one (3%) who did not use. In 2024, four (11%) did not know if they use AI in their work but in 2025 no one was unaware of that.

In 2024 and 2025, the respondents' usage of AI tools differed (*Figure 2*). They used AI for multiple tasks but in 2024 three options – service evaluation; management, HR, recruitment; job applications – out of fifteen were not chosen. In 2025, also three options – acquisitions, subscriptions; management, HR, recruitment; job applications – out of fifteen were not chosen. Both years, the most common (66%, 88%) choice was translations and proofreading. Second (53%, 58%) came

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[1] Finnish titles *informaatikko* and tietoasiantuntija that translate to information specialist are commonly used instead of different librarian (*kirjastonhoitaja*) titles.
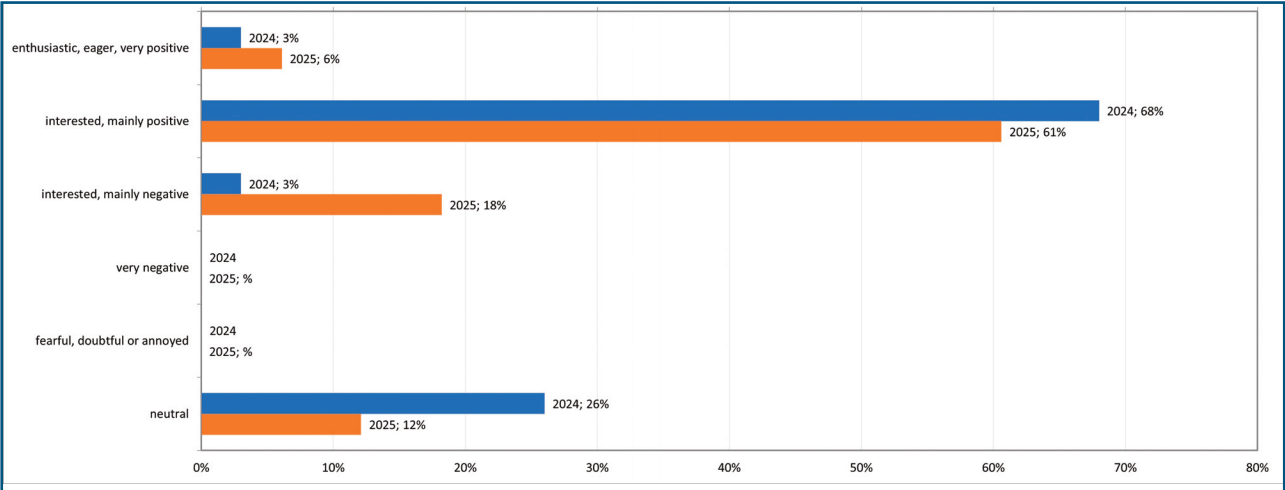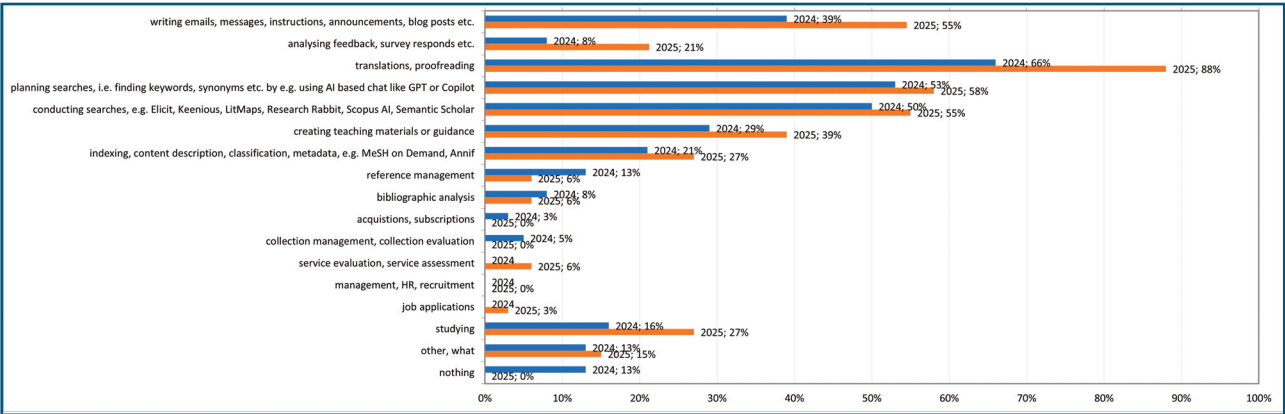
Fig. 1. *"Question: My attitude to AI is...".*

Fig. 2. *"Question: I have used AI tool for...".*

planning searches. The third position (50%, 55%) went to conducting searches, but in 2025 the position was shared with the same percentage with writing emails, messages, instructions, announcements, blog posts etc., while in 2024 this had the fourth place with 39%. Creating teaching materials (29%, 39%), and indexing, content description, classification, metadata (21%, 27%) were also relatively popular. In Finland, a tool for automatic content description called Annif was developed in the National Library (7). In medicine, many use MeSH on Demand.

AI tools were used by the respondents also for analysing feedback, survey responds etc. (8%, 21%) where numbers significantly increased; reference management (13%, 6%) where numbers interestingly decreased, bibliographic analysis (8%, 6%), acquisitions and subscriptions (3%, 0%), collection management

and evaluation (5%, 0%), and studying (16%, 27%). Five other purposes were listed in 2024: "testing to getting to know them", "Web of Science's View related articles", "matching a manuscript to potential journal", "image creation", "presentations". In 2025, the additional purposes were: "getting to know things that I'm not familiar with", "creating images", "making analysis and presentations", "finding information", "meeting reports", "brainstorming summaries". In 2024, five respondents (13%) had not used AI for anything but in 2025 no one said they used AI for nothing (Figure 2). When asked, regarding the tasks of HLIP, whether AI is currently helpful or not, the respondents could choose more than one option. In 2024 eight respondents (21%) and in 2025 ten respondents (30%) choose the option "helping us and making our work easier" while 13 (34%) and 12 (36%) thought that the option
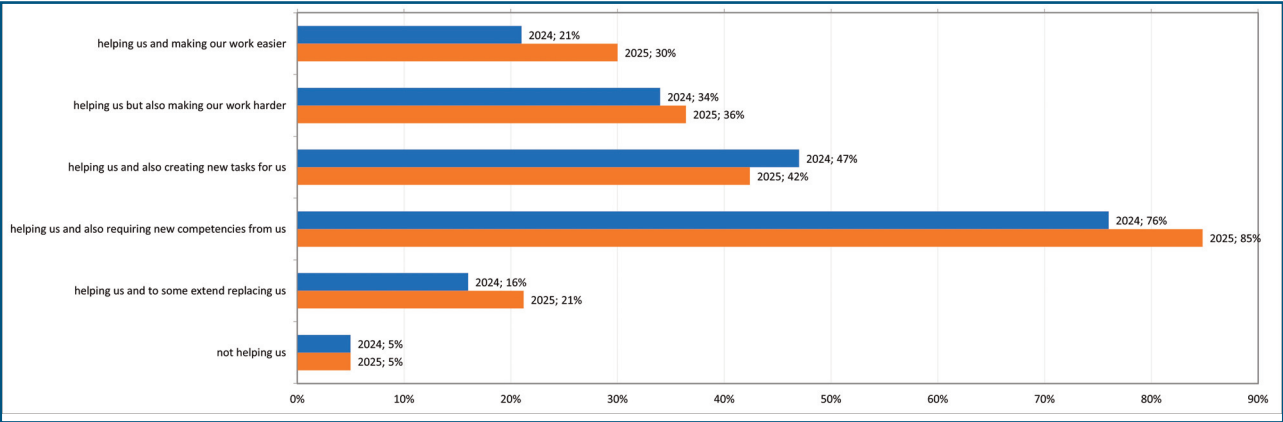
Fig. 3. *"Question: Regarding the tasks of health medical library and information professionals, artificial intelligence (AI) is currently…".*
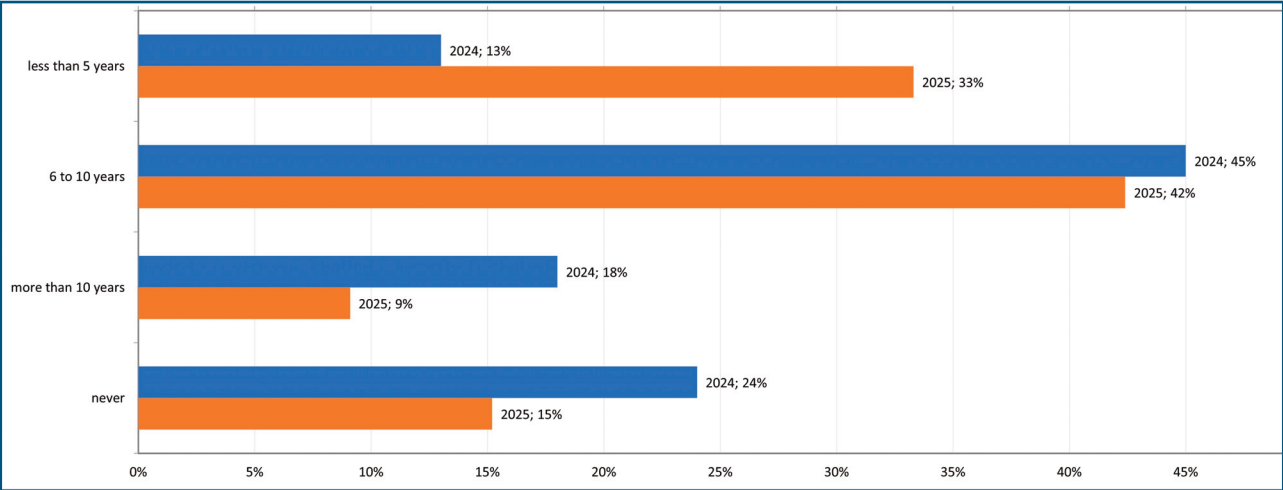

Fig. 4. *"Question: I think health medical library and information professionals will be PARTLY replaced by AI in…".*

"helping us but also making our work harder" describes the situation better, or as well, since both options could be chosen. In 2024, almost half of the respondents (18, 47%) thought that AI is "helping us and also creating new tasks for us" while in 2025 14 (42%) chose that option. Both years, the majority (29, 76%; 28, 85%) agreed that AI is "helping us and also requiring new competencies from us". The option "helping us and to some extend replacing us" was chosen by six respondents (16%) in 2024 and by seven respondents (21%) in 2025. Two (5%) chose the option "not helping us" in 2024 but no one in 2025 (*Figure 3*).

The following survey questions were related to possible concerns about whether AI will partly or completely re-

place HLIP in the future. In 2024, five respondents (13%) thought AI will partly replace HLIP in less than five years, while in 2025 11 (33%) thought so. In 2024, seventeen (45%) and in 2025 14 (42%) thought that will happen in 6 to 10 years. In 2024, seven (18%) and in 2025 3 (9%) thought that will happen in more than 10 years. In 2024, nine (24%) and 2025 five (15%) respondents believed that HLIP will never be even partly replaced by AI (*Figure 4*).

In 2024, six respondents (16%) and in 2025 seven (21%), thought AI will completely replace HLIP in more than 10 years. In 2024, none of respondents thought it will happen in 6 to 10 years, but in 2025 one (3%) had that view. In 2024, 32 respondents (84%) be-
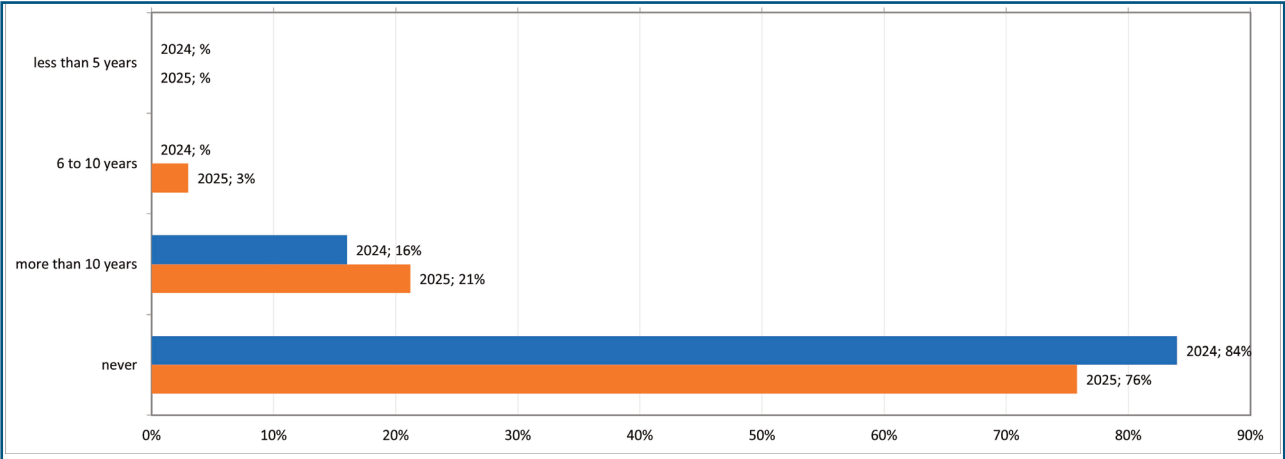
Fig. 5. *"Question: I think health medical library and information professionals will be COMPLETELY replaced by AI in...".*

lieved that HLIP will never be completely replaced by AI. In 2025, the number decreased to 25 (76%). Either year, no one chose the option of less than five years (*Figure 5*).

The last two questions were open-ended. The respondents were asked about their views about other trends than the development of AI, which will change the work, workplaces, working conditions or employment situation of HLIP.

About other trends than AI, it was firstly asked which trends they think, will affect the change in *addition* to the development AI. The respondents listed:

- diminishing budgets;
- fusions of HEIs;
- open science policies and open access;
- less collection management, and more teaching and research support, e.g. RDM;
- changing/diminishing library spaces;
- more remote work;
- smaller age-groups of students;
- new ways of learning;
- precarious work leading to less competence and shorter careers;
- shortage of competent staff;
- demand of generalist instead of subject librarians;
- division in people's understanding about scientific knowledge;
- increasing economic inequality;
- global crises (conflicts, environmental disasters, climate change).

Major global issues or matters related to the change in the job descriptions, not other technological trends, appeared from the open-ended questions.

Secondly, it was asked which trends they think will affect the change *instead*, or *more*, than AI. There were less answers to this question, indicating that most of the respondents believe AI is the trend that will change the work, workplaces, working conditions and employment situation of HLIP. The respondents mentioned:

- new systems;
- fuzzier information landscape;
- demand for deeper and expanded professional competence of librarians;
- decreasing funding of public sector;
- policymakers demanding or preferring quick answers instead of slower evidence based and trusted information;
- environmental health an emerging topic due to climate change, global warming, and nature loss;
- questions of war and peace.

Both new systems and information landscape are broad terms and could easily include the development of AI. Funding issues and environmental challenges were mentioned, as well.

Conclusion

The survey results indicate a strong belief among respondents that HLIP will continue to be needed in the near future, with 89% affirming their necessity until 2030. However, there is a noticeable decline in confidence regarding their long-term relevance, with only 66% believing they will be needed beyond 2030. This

suggests a growing uncertainty about the future impact of technological advancements, particularly AI, on the profession.

Respondents generally had a positive attitude towards AI, with the majority expressing interest and positivity in both 2024 and 2025. However, there is a slight shift towards more neutral and negative attitudes over time. The use of AI tools is widespread among respondents, with a significant increase in those using AI all the time from 2024 to 2025. Despite the benefits, respondents acknowledge that AI also introduces new challenges and requires additional competencies. Concerns about AI replacing HLIP are evident, with an increasing number of respondents believing that AI will partly replace them within the next decade. However, the majority still believe that complete replacement by AI is unlikely in the near future.

The speed of technology will continue to impact health libraries in the future (9), but seeing AI tools as support, and not a substitute for human expertise, is important (10). Jobs are unlikely to disappear, but they are likely to change (10). Attitudes seem to change more slowly than technologies. It can be concluded that Finnish HLIP are confident in the relevance and permanence of their profession despite the rapid development of technology.

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