



How Do Academic Librarians Respond to the Environmental Impacts of Generative AI?

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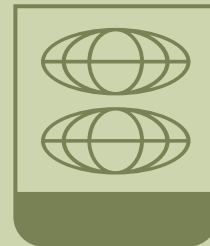
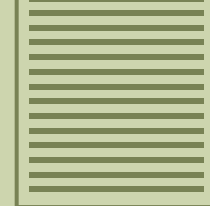
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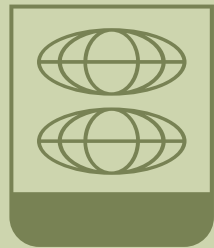
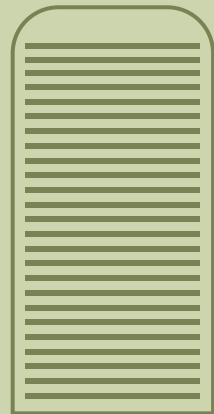
Results



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Background





The Study

- Research Team: Olivia Chin & Mandi Goodsett
- Research Questions:
 - How does sustainability tie in to librarianship?
 - Do librarians feel pressured to use AI?
 - How do librarians use AI?
 - What do librarians currently know about the environmental impacts of generative AI?
 - What are librarians' roles when it comes to the environment and AI literacy?



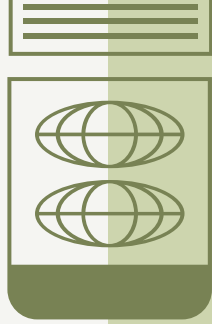
Mixed Methods Design

Survey

- Sent to a variety of listservs and groups
- Respondents were academic librarians in North America
- Collected mostly quantitative data
- 373 responses

Focus Groups

- 4 focus groups
- 18 individuals total
- 7 questions
- Collected qualitative data



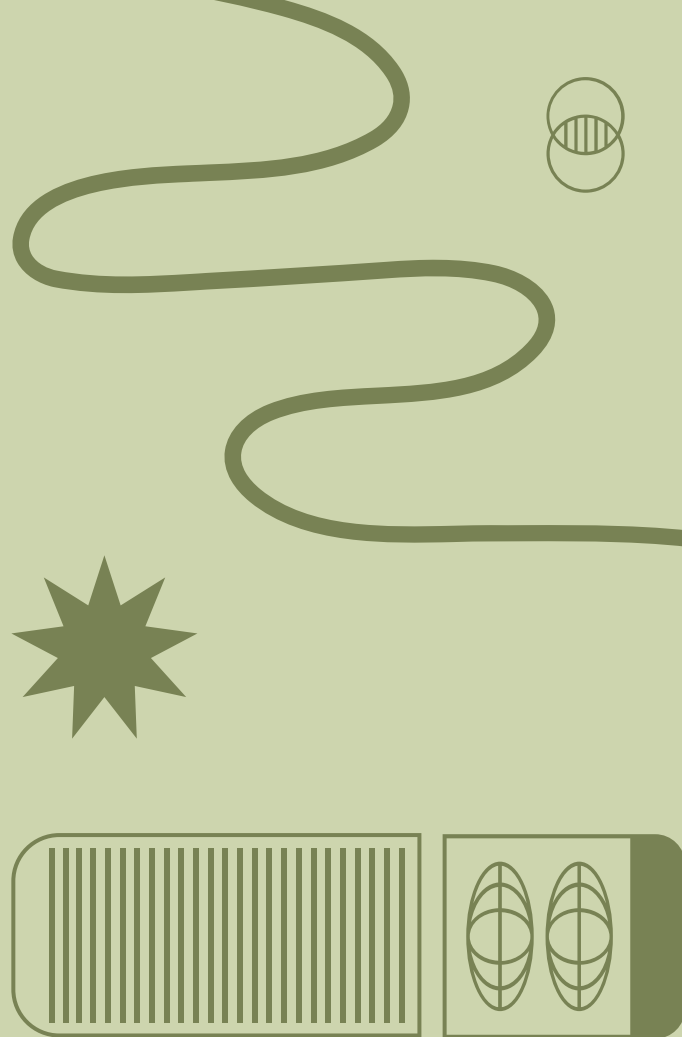
Sample Survey Questions

Perspectives and Attitudes Section 1

	Select the answer that best describes how you relate to each statement.				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am concerned about climate change.	☐	☐	☐	☐	☐
I am doubtful that climate change is occurring.	☐	☐	☐	☐	☐
I am worried about the environmental impact of generative AI.	☐	☐	☐	☐	☐
I am optimistic about the potential of generative AI to help address climate change.	☐	☐	☐	☐	☐
Environmental sustainability is relevant to the work of libraries.	☐	☐	☐	☐	☐

Sample Focus Group Questions ✨

- To the best of your knowledge, what is the environmental impact of new AI technologies?
- What changes have you made in your behavior because of the environmental impact of AI?
- What do you see as the most important step libraries can take to balance AI technology with environmental responsibility?



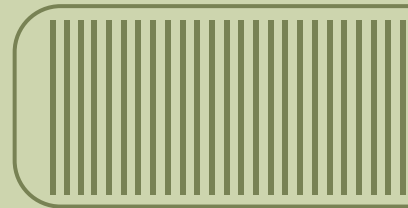


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02

Results



Survey Results

Demographics

Most respondents identified as female (71%), within the 35 - 44 age range (33%), and were faculty librarians (43%).

Usage

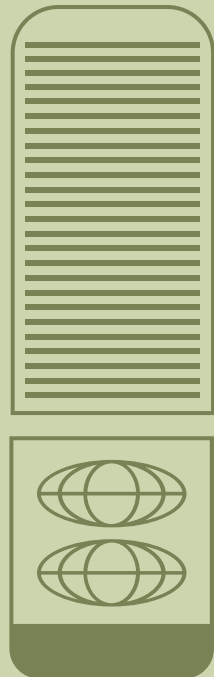
49.9% of respondents use AI in their work, while 50.1% do not.

Statements

Participants generally agreed with the statement *"I consider the environmental impacts when I use generative AI"* and others that involved concerns about AI.

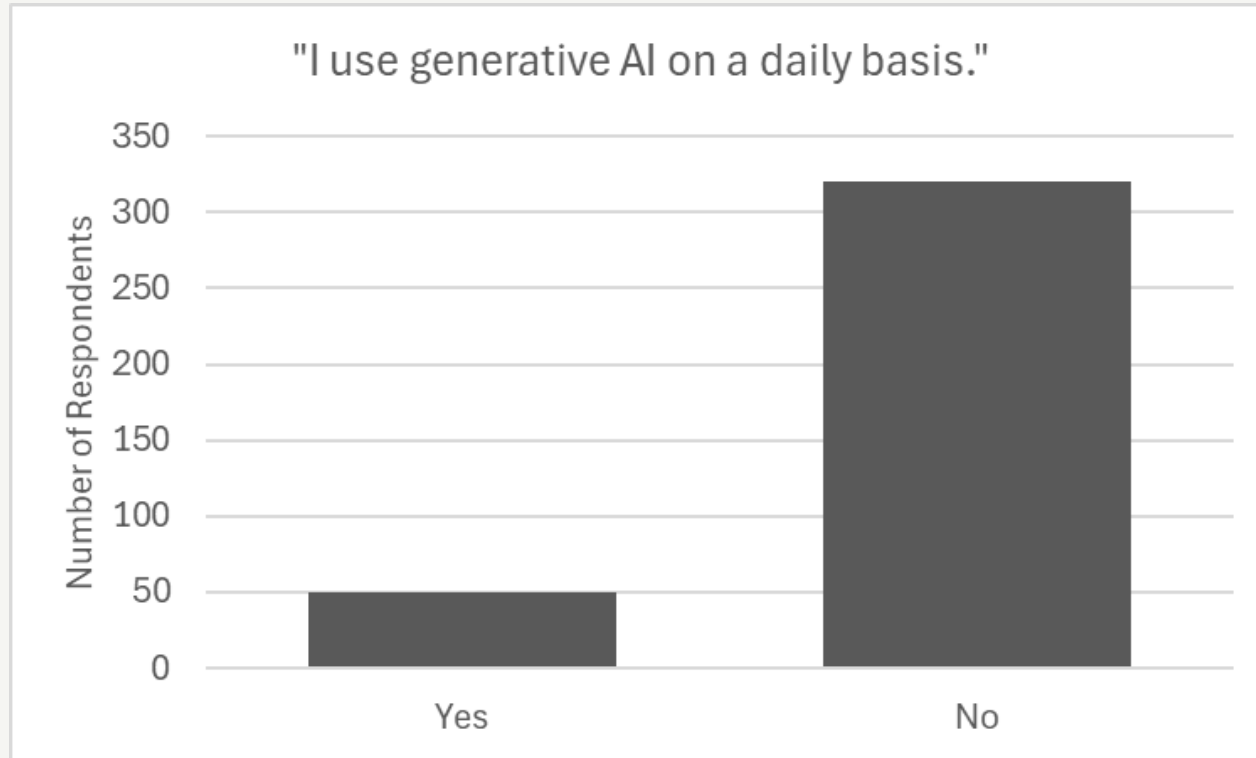
Concerns

While participants expressed concerns about climate change, this concern does not necessarily prevent them from using AI tools.





Survey Results

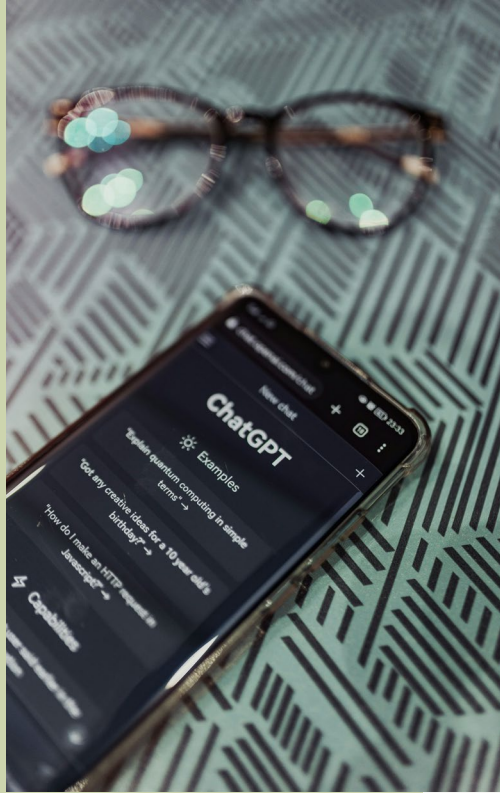




Focus Group Results

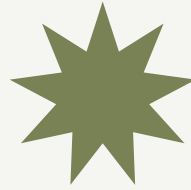
Theme Number	Theme	Example Quote
Theme 1	AI is Inevitable	"It feels like there's no choice but to go along with AI."
Theme 2	AI is a Catalyst	"I'm against climate change . . . but I wouldn't say that previous to really thinking about AI and generative AI it has informed my library work."
Theme 3	AI is Intrusive	"The amount that it's [AI] has been integrated into daily life is concerning."
Theme 4	AI Negatively Impacts the Environment	"The places where the server farms are generally housed are either becoming rapidly depleted or are in places where people who are unable to pay their way out of environmental harms are being harmed."
Theme 5	Institutional Approaches to AI Vary	"Sometimes I'm told to stay in my lane, and I really don't care"
Theme 6	Communication is Key	"Maybe part of our role as individuals is, like, organizing ourselves into wider collectives and networks"
Theme 7	Individual Approaches To Climate Change Vary	"As much as I think we should center sustainability more in our library, I know that the first function of a library isn't sustainability."
Theme 8	Critical AI Literacy is Essential	"I think as academic librarians, we do have that responsibility to talk about sustainability in that way in our teaching, in our interactions with faculty and with students. I think especially promoting it with regards to technology is definitely a big one here."



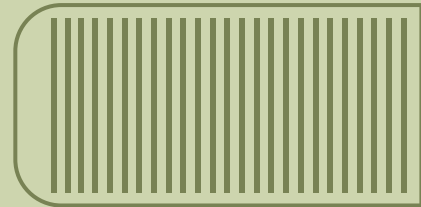


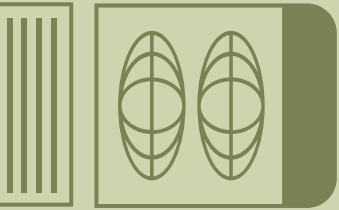
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Key Takeaways



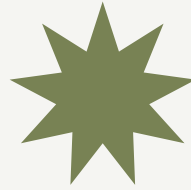
Academic librarians are
looking for ways to
balance their values and
concerns around AI with
the need to learn, teach,
and engage with AI.



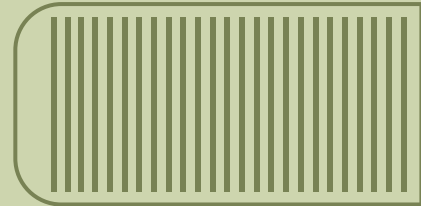


More transparency
and conversations
about AI's
environmental
impacts are needed
for academic
librarians to figure
out this balance.
Critical AI is key!





As experts in
information literacy,
academic librarians have
a unique opportunity to
speak up about AI and its
environmental impacts.





Thank you!

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