

# Are ChatGPT, ChatGPT4, Bard and Bing Chat (GPT4 LLM) Viable Options for LGBTQIA+ Research?

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# A few things about Generative AI

- **We all know that Generative AI has become a very popular approach in the press as well as the financial world. Corporations are laying off thousands of employees because of the anticipated effectiveness of this new technology and high tech firms are becoming more highly valued.**
- **There are problems, however...Women are more likely to be laid off, customers are given short shrift by AI technologies, and marginalized minority inquiries are sometimes inaccurate.**
- **We need to know that each one of these systems is constructed upon a data base where after each word, an algorithm searches for the next most logical word. Some times the data base is biased and sometimes the results of the searches are odd.**
- **The author proposes to analyze queries about LGBTQIA+ issues in ChatGPT, ChatGPT4, Bard and Bing Chat (GPT4 LLM) which are AI-based systems that are highly touted in the press.**
- **Toward this end, the author has submitted 10 basic LGBTQIA+ inquiries to ChatGPT, ChatGPT4, Bard and Bing Chat (GPT4 LLM) to see how meaningful the responses are.**

# What are the questions that we asked each of these systems? Question 1...

- **1. Question: "What is the effect of the AIDS, COVID-19, and MPox pandemics on the gay community?"** This question was posed because it is the topic of a book (just approved by Routledge) that I am editing with co-editors Chris Surfus and Dallas Drake. .
- **Answers: Regarding CHatGPT,** The answers were quite limited in terms of stating impacts for AIDS and COVID and the answer regarding Monkeypox (now renamed MPox) was quite simply wrong: It said that Mpox is typically spread amongst monkeys in Africa. The first ChatGPT4 query response was better in terms of its description of both AIDS and COVID-19, but the final conclusion was that "There is no evidence to suggest that Monkeypox has disproportionately affected the gay community or had any significant impact on LGBTQ+ individuals" despite the fact that 30,000 gay men were infected and 11 died. Bard was reasonably good in dealing with AIDS and COVID-19 (but no numbers as to how many people were impacted), while the Bing response was problematic: MPox is "having a disproportionate impact on gay men. This is likely due to the fact that monkeypox is spread through close contact, such as sexual contact, and that gay men are more likely to engage in this type of activity." This last phrase is stereotypical. Bing Chat (GPT4 LLM) picked out random articles from the press (*Speaking of Medicine and Health, USA Today and The New York Times*), which did not provide an overview that was systematic and useful. But, as always, it ended with the phrase "I hope this helps!"

# Question 2

**2. Question: “How many anti-transgender bills are currently under consideration in 36 states in the United States?”**

**Answer: The Chat GPT response was “As of my knowledge cutoff of September 2021, there were over 100 anti-transgender bills that were introduced in state legislatures across the United States. These bills were introduced in at least 36 states.” Factually the answer was wrong: According to the Human Rights Campaign, there were 250 anti-transgender bills introduced in 36 states in 2021. The ChatGPT4 response was even less helpful because it said that “my knowledge is up to date only until September 2021 and I cannot provide real-time information...” However, it did suggest some useful resources from which to obtain the information. The author then prompted the system to ask how many anti-transgender bills were under consideration through September 2021, and the response was that “...As of September 2021, there were over 100 anti-transgender bills introduced in state legislatures across the United States.” This answer is incorrect, as indicated in the previous ChatGPT response. The Bard response was also that there were 100 anti-transgender bills in 2023: The fact is that on February 15 2023 the Human Rights Campaign (the most reliable source) counted 340 anti-transgender bills and many more later. Bing Chat (GPT4 LLM) indicated that there were “more than 350 anti-trans bills introduced as of March 2023.”**

# Question 3

**3. Question: “What is Critical Race Theory and why is it important?”**

**Answer: In this case, the ChatGPT response was quite general and covered many of the basics. The ChatGPT4 inquiry went into a bit more detail: “Critical Race Theory (CRT) is an intellectual framework and analytical tool that originated in the field of legal studies in the 1970s and 1980s. Developed by scholars like Derrick Bell, Kimberlé Crenshaw, and Richard Delgado...” but it included all of the same basic points as the ChatGPT response. The Bard response was quite good. Bing Chat (GPT4 LLM) was also quite good. But in all four cases, there was no indication of the backlash against the concept in many Republican states.**

# Question 4

**4. Question: “What does the term LGBTQIA+ mean?”**

**Answer: For ChatGPT, there was a response which was especially weak regarding the terms “transgender” and “Intersex.” The ChatGPT4 inquiry provided somewhat more helpful detail about each of the categories. Bard provided details about each of the categories (and added a few, including pansexual, demisexual, and genderfluid), but left out a very important one which is “allies.” Bing Chat (GPT4 LLM) also was helpful, but it did not include “allies” and added one category that this author had not seen before which was “aromantic.”**

# Question 5

**5. Question: “What does the word ‘Woke’ mean?”**

**Answer: The ChatGPT response is weak because it does not include the Republican attacks on the term “woke.” The ChatGPT4 query was somewhat improved: “The term ‘woke’ originated in African American Vernacular English (AAVE) and initially referred to being aware of social and political issues, particularly related to racism and inequality. Over time, the term has expanded to encompass awareness and understanding of a broader range of social injustices, including issues related to sexism, LGBTQ+ rights, and other forms of discrimination and systemic oppression.” The Bard explanation was quite good as well, but it (as well as Bing Chat (GPT4 LLM)) does not address the extraordinary backlash to the concept (despite the fact that it is presumably up to date as of 2023).**

# Question 6

**6. Question: “What percentage of the American population is LGBTQ+?”**

**Answer: The initial comment by ChatGPT is particularly misleading: “The exact percentage of the American population that identifies as LGBTQ+ is difficult to determine due to factors such as varying definitions of sexual orientation and gender identity and a lack of comprehensive data collection.” Keeping this qualifying statement by ChatGPT in mind (“May occasionally generate incorrect information; May occasionally produce harmful instructions or biased content; Limited knowledge of world and events after 2012.”), a user could easily be misled because it is now not at all difficult to determine this percentage. The ChatGPT4 response was somewhat more helpful (even given the 2021 limitation) because it used a valid source: “A 2020 report by the Williams Institute at the UCLA School of Law estimated that approximately 4.5% of the adult population in the United States identified as LGBTQ+. However, this percentage may change as societal attitudes continue to evolve, and more people feel comfortable disclosing their sexual orientation or gender identity.” Regarding Bard, it used the 2022 Gallup poll estimate of 7.1%, but the most useful source was not provided in either the response of ChatGPT, ChatGPT4, Bard or Bing Chat GPT4 LLM: According to the U.S. Census Household Pulse survey (2022) the percentage is actually 9.37%.**

# Question 7

**7. Question: “What does the term ESG mean, and what is its significance?”**

**Answer: The ChatGPT response discusses the positive aspects of ESG (environmental, social, governance) but is time limited because as this author has noted “... The term ESG has been challenged by a number of conservative American states, which do not wish to endanger the production of natural resources which they possess.” The ChatGPT4 response is similarly time limited to data collected no later than 2021, and does not cover the backlash. The Bard response was quite good, but again did not discuss the current backlash to the concept. The same was true of Bing Chat (GPT4 LLM). According to the Bond Buyer of March 16 2023 the anti-ESG movement is extensive: “So far 12 states have enacted ESG statutes with 67 pending statues in 28 states, according to the Morgan Lewis law firm. Florida's anti-ESG bill goes farthest...”**

# Question 8

**8. Question: “What is intersectionality, and why is it important?”**

**Answer: The CHatGPT response provided was generally acceptable but the name of Kimberlé Crenshaw who wrote the seminal paper in 1989 was not included in the response. The ChatGPT4 response improves a bit upon the ChatGPT inquiry by noting that “Intersectionality is a theoretical framework and analytical tool that was first introduced by legal scholar and civil rights advocate Kimberlé Crenshaw in 1989.” So CHatGPT4 got the author and date correct. Bard did a generally good job with the issue of intersectionality. Bing Chat (GPT4 LLM) did a generally good job with the concept but again did not note that Kimberlé Crenshaw wrote the seminal paper in 1989.**

# Question 9

**9. Question: “Who is Dr. Lorenda Naylor and what is the importance of her publications?”  
(Leading American public administration scholar, an expert on LGBTQ+ issues)**

**Answer: The ChatGPT response was “I'm sorry, but I do not have any information on a person named ‘Dr. Lorenda Naylor’ in my database.” The author then prompted ChatGPT by saying:” Dr. Lorenda Naylor is a Professor at the University of Baltimore who has published on LGBTQ+ issues.” The response was “Thank you for providing me with more information.” This author then received an answer that provided some more information about her: “Dr. Lorenda Naylor is a Professor at the University of Baltimore in the School of Criminal Justice....” The ChatGPT4 inquiry was somewhat more useful because it went into detail by discussing the fact that “Her work specifically addresses issues related to diversity and inclusion, such as LGBTQ+ rights, gender, race and socioeconomic status.” It also cites three of her publications from 2017 to 2020: However, my communication with Professor Naylor (and the Walden University library) indicates that the citations (with co-authors) are completely incorrect both for ChatGPT4 and Bard. The Walden University analysis of these citations was that these citations might best be characterized as “hallucinations”; i.e., inventions of the AI system. The Bing Chat (GPT4 LLM) response was general in nature with no citations, but a reference to 30 publications and 65 presentations: It ended with “Unfortunately, I could not find any information on the importance of her publications. I hope this helps.” There was no mechanism to allow for a further prompt.**

# Question 10

10. Question: “Who is Dr. Wallace Swan and what the importance of what he has written?”

Answer: The ChatGPT response was similar to that of Dr. Lorenda Naylor, so it was necessary to prompt ChatGPT, which the author did. The response was factually incorrect: “He is the author of the book ‘Gay, Lesbian and Transgender Issues in Public Administration’ which was published in 2006. This author checked his CV and he published nothing in 2006, and has published no books under that name. The rather devious ChatGPT4 response, by contrast, seemed to recognize that the ChatGPT was not factually correct and said: “Dr. Wallace Swan, as an academic focused on LGBTQIA+ research, would contribute to the understanding and knowledge of issues related to LGBTQIA+ individuals and communities. The importance of his work would depend on the specific topics he addresses and the impact his research has on both academia and society. Scholars and researchers like Dr. Swan play a crucial role in highlighting the experiences, struggles, and successes of LGBTQIA+ individuals. Their work can contribute to policy changes, increased awareness and acceptance, and the development of more inclusive and supportive environments for LGBTQIA+ people...” Bard is even worse, with a number of incorrect book titles, non-existent titles, and inaccurate dates. Bing Chat (GPT4 LLM) got the university position of the person correct, but listed outdated course assignments, and ended with “Unfortunately, I could not find any information on the importance of what he has written. I hope this helps.” It then was followed by a completely random list of publications, including his newest book on COVID-19 (2023), an article on “Separation of Aides and Services” (1971) and “Administrative Analysis in Public Welfare”(1971) and an article from a Minneapolis newsmagazine concerning what the LGBT community needed to focus upon after marriage equality was achieved (June 12, 2014). I might note parenthetically that I have edited 6 books, including the very first text on LGBT issues in the field of public administration in 1995...

# CONCLUSION

- **As one can see, the results of the ten inquiries for ChatGPT, ChatGPT4, Bard and Bing Chat (GPT4 LLM) are at best mixed and sometimes simply factually incorrect when one is doing research about LGBTQIA+ issues.**
- **Occasionally ChatGPT4 improves upon the response in ChatGPT (or cleverly works around its obvious errors).**
- **Bard improves upon both of the previously cited systems, but**
- **Bing Chat (GPT4 LLM), presumably the most useful of the systems, is not very helpful.**
- **Each of these systems are premised upon their own database and the use of algorithms to search out the “answers” to the questions.**
- **This author concludes that one would need to be really quite circumspect about using the information generated by ChatGPT, ChatGPT4, Bard and Bing Chat (GPT4 LLM) for any serious research on LGBTQIA+ issues.**

# New Book

- I am working on a new book entitled “LGBTQIA+ Communities, Pandemics and Policy Responses” which has just been approved a week or so ago for a Routledge contract. The book is designed to identify the disparate effects of the three pandemics (AIDS, COVID-19, Mpox) on our LGBTQIA+ communities from an international perspective.
- I am especially interested in obtaining chapter proposals about International aspects of these pandemics upon the LGBTQIA+ community. If you would like to make a chapter proposal, please send me an email at [swanx009@umn.edu](mailto:swanx009@umn.edu) I need (1) a one paragraph biographical statement with your major work, and (2) a title for your proposed chapter, and a one paragraph description of what you will write about. It can be about (1) one of the chapters in the document that Richard Gregory Johnson III is handing out, or (2) another chapter that you think would fit nicely into the list of chapters that Richard is handing out to you.