# Public perceptions of ChatGPT-generated text: Acceptable for news articles but detrimental for school essays

Abstract

With the recent introduction of the ChatGPT language model for text generation, the future of human writing is undefined. To better understand what the general public thinks about AI agents substituting human writing, we conducted a representative survey of the US population (N = 1,005) in January 2023 that looked into the public's perceptions of automation of various types of writing. Our results reveal that the public is most accepting of AI writing newspaper articles and business reports, and least accepting of automated school essays. Moreover, the findings suggest that more vulnerable populations such as ethnic minorities, people of low income and education are most comfortable with automated writing, especially AI-generated news articles. We elaborate on possible causes of our findings and suggest directions for future research.

About the author

**Ekaterina Novozhilova** is a doctoral student in the Division of Emerging Media Studies at Boston University's College of Communication. She received her Master's in New Media Studies at Shanghai Jiaotong University. Prior to her graduate studies she worked as a content specialist in a Chinese IT company, training algorithms to tailor news feeds for readers.

**Introduction**

The release of the ChatGPT model by OpenAI in November 2022 has shaken a wide range of industries from education to healthcare (Lund & Wang, 2023; Liebrenz, 2023). ChatGPT is a large language model trained on open-source internet data that is capable of answering questions and producing human-like texts based on prompts. The present scholarly literature is mainly concentrated on the potential risks of this technology (García-Peñalvo, 2023; Thorp, 2023). Researchers agree that ChatGPT is disruptive, especially to education and academia, but there is no turning back from it being a part of our lives. The few empirical studies showed that early adopters were overly excited about the possibilities of ChatGPT, especially in entertainment and creativity (Haque et al., 2022; Taecharungroj, 2023). Böhm (2023) showed that people were open to following ChatGPT recommendations even when they had negative views about AI authorship.

This study is a contribution to the scarce empirical literature on people's perceptions of ChatGPT. We investigate how comfortable people are with the potential uses of ChatGPT for writing school essays, research papers, newspaper articles, and personal emails. Our findings highlight the differences in perceptions of various text automation as well as the differences in perceptions across demographic groups.
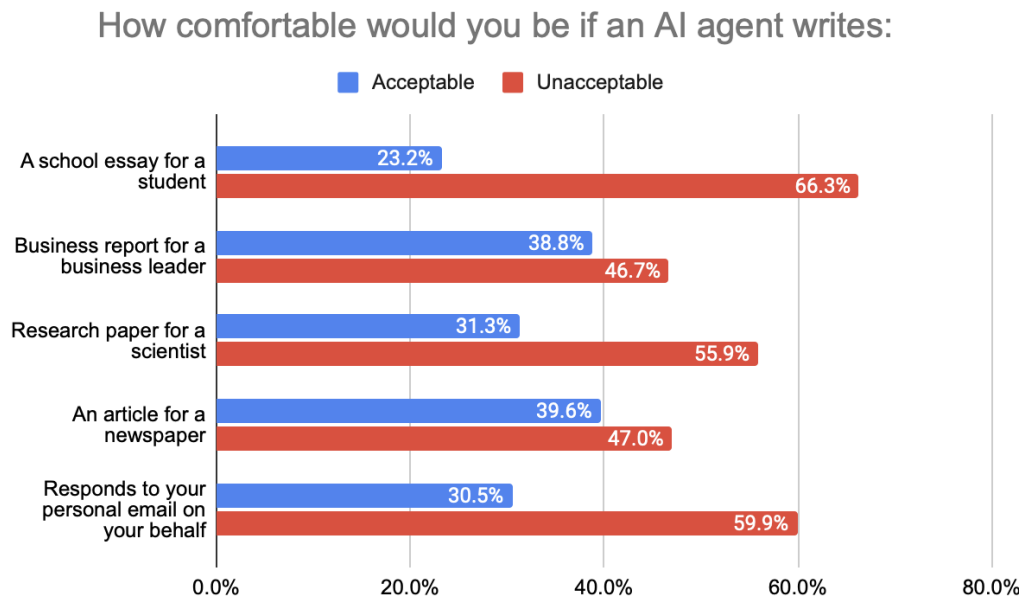
**Differences in genres perceptions**

We conducted an omnibus survey through an Ipsos eNation platform in January 2023. Our U.S. sample (N = 1,005) used nationally representative quotas on gender (55.6% female), age (M = 48.92, SD = 17.08), race (68.2% White or Caucasian), income (70% earned $74,999 or less), education (85.8% had some college degree or less), and employment status (37.4% were employed full-time).

Participants were asked how comfortable they would be if an AI agent generates different types of writing. The results showed that the majority of respondents do not welcome AI-generated texts in all genres presented (Figure 1).

**Figure 1**

*AI-generated writing acceptance across different genres*



How comfortable would you be if an AI agent writes:

Acceptable · Unacceptable

- A school essay for a student: 23.2% Acceptable / 66.3% Unacceptable
- Business report for a business leader: 38.8% Acceptable / 46.7% Unacceptable
- Research paper for a scientist: 31.3% Acceptable / 55.9% Unacceptable
- An article for a newspaper: 39.6% Acceptable / 47.0% Unacceptable
- Responds to your personal email on your behalf: 30.5% Acceptable / 59.9% Unacceptable

The results suggest that people are most comfortable with AI automating newspaper articles (40%) and business reports (39%), while the least comfortable with school essay automation (23%). While the high comfort with the automation of business reports was expected, the high acceptance of AI writing news articles was more unusual. Automated journalism is not a new concept dating back to the mid-2000s (Caswell & Dörr, 2017), however, researchers argued that the journalism profession has been perceived as a "human" job (Waddell, 2017). Our findings suggest that in the current age of news fabrication and misinformation, people's attitudes might be navigated by associated machine heuristics (Sundar, 2008), or perception of AI text generation as more rational and objective than human writing.

The least accepted text automated by AI was student essays. This comes with no surprise as the mainstream news coverage is currently mainly focused on ChatGPT's perils to academic integrity (e.g., Kalhan Rosenblatt, 2022). However, a quick Google search reveals a great number of articles and video tutorials on how to write an essay using ChatGPT, revealing the high demand for learning this new skill.

The second least acceptable category of automated text was personal emails. This is an interesting finding as there are already several ChatGPT extensions for helping users in writing emails, such as Ghostwrite or ChatGPT Writer. In general, ChatGPT extensions now permeate multiple personal communication apps, such as Telegram and WhatsApp (Ferrer, 2022).

**Demographics: Age**

Looking at demographic differences, our findings suggest that age, ethnicity, and gender are statistically significant predictors of AI writing acceptance across different genres. Starting with age, the results show that the younger generation is more accepting of automated writing across all writing genres (Figure 2).
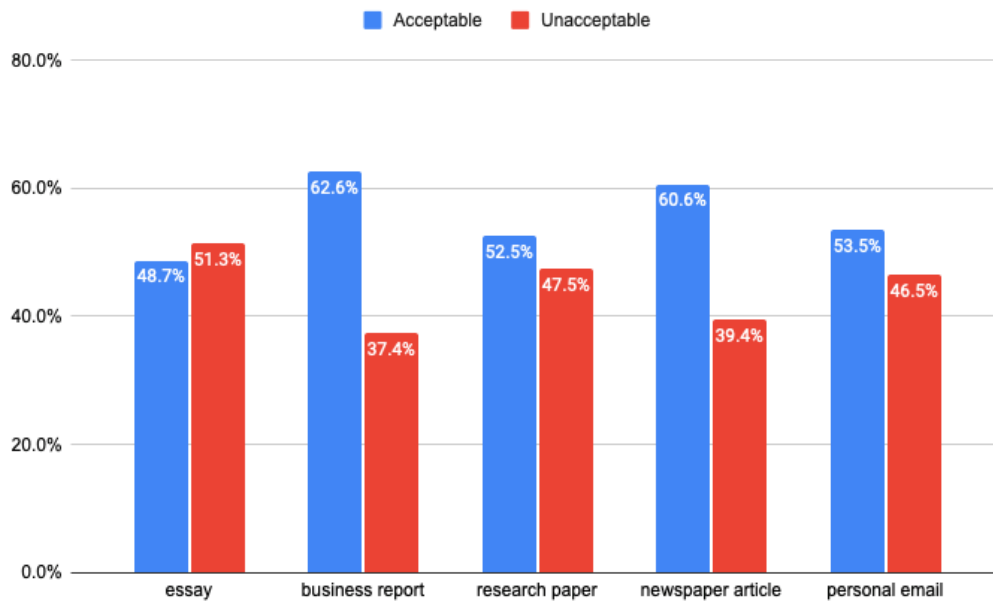
**Figure 2**

*AI-generated writing acceptance across age groups*
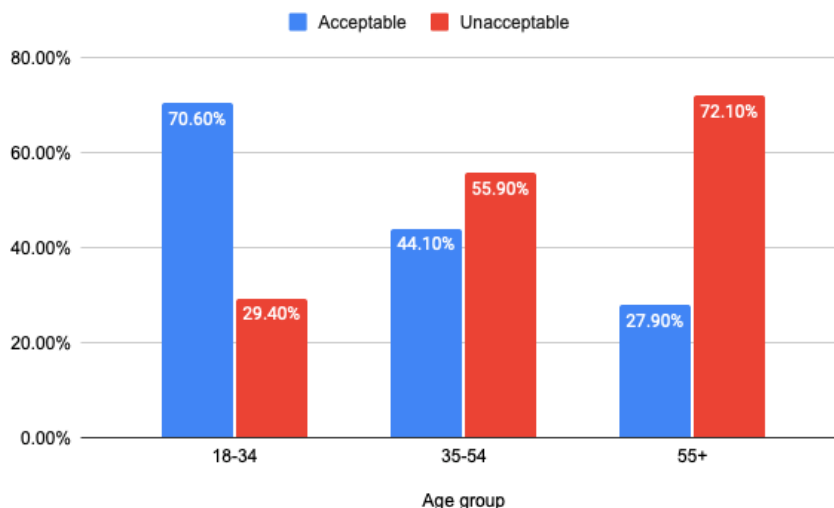
Interestingly, younger people are more accepting of all kinds of writing except student essays (Figure 3).

**Figure 3**

*18-34 years old participants acceptability of AI-generated writing*



Our sample included 18 respondents who identified themselves as students, and the majority of them (53%) stated that automated writing of essays is unacceptable. As our sample included people over 18 years old, our results are not representative of the specific demographic group, such as high school students, who potentially would be more in favor of using ChatGPT for essay writing.

**Demographics: Gender**

As for gender differences, our findings show that women are less accepting of automated writing than men (Figure 4).

**Figure 4**

*AI-generated writing acceptance across genders*
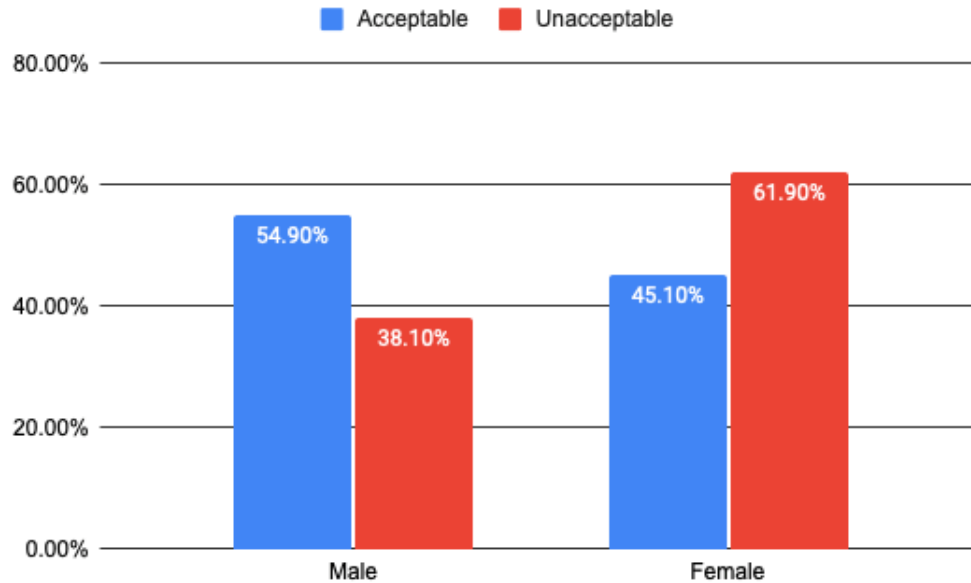


This finding is consistent with previous public opinion surveys about AI acceptance (Smith & Anderson, 2017, Zhang & Dafoe, 2019; Cave, Coughlan & Dihal, 2019; Mays et al., 2021). However, there is a shortage of literature explaining the cause of women's reluctance toward new technologies. The research shows that having less experience with technology leads to more anxiety over and more negative attitudes toward it (Broos, 2005). Thus one possible explanation can be that women's lack of representation in the tech sector (Mckinsey report, 2022) leads them to be less involved in designing and developing technologies, that in turn causes their lower acceptance of AI.

**Demographics: Ethnicity**

The data on ethnic differences show that White respondents are the least comfortable with AI-generated writing. Hispanic participants are the most comfortable followed by Black and Asian participants (Figure 5).
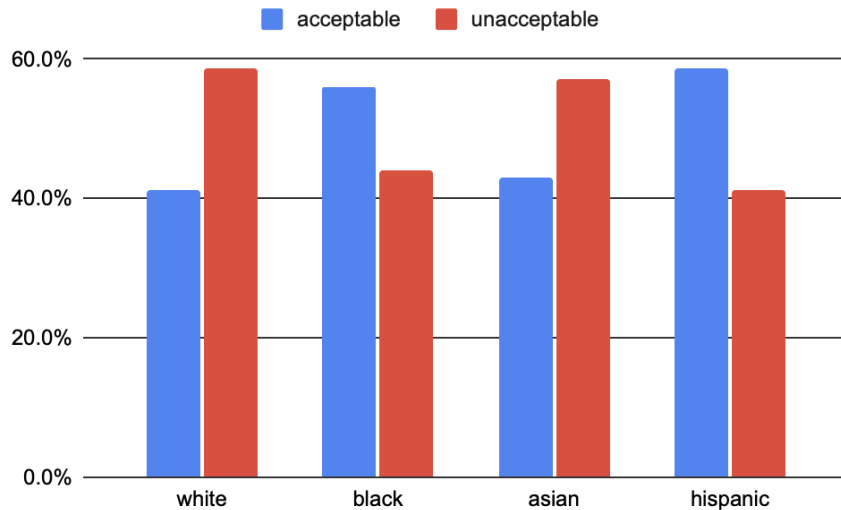
**Figure 5**

*AI-generated writing acceptance across ethnic groups*
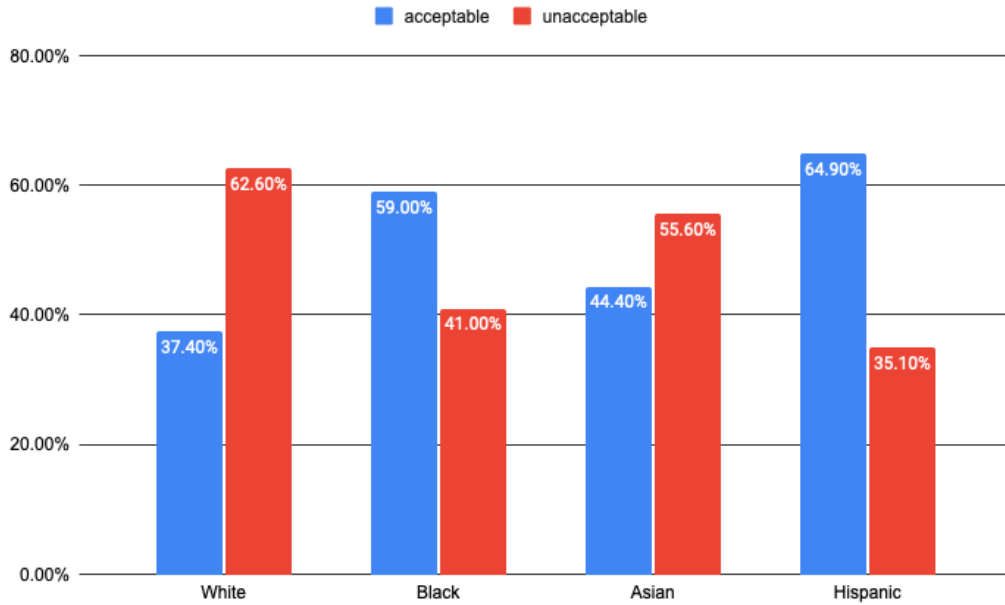


Automation of newspaper articles, in particular, is acceptable by the majority of Black and Hispanic respondents, compared to lower levels of support from White and Asian respondents (Figure 6).
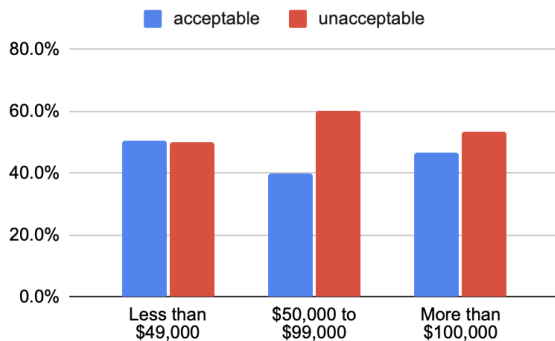
**Figure 6**

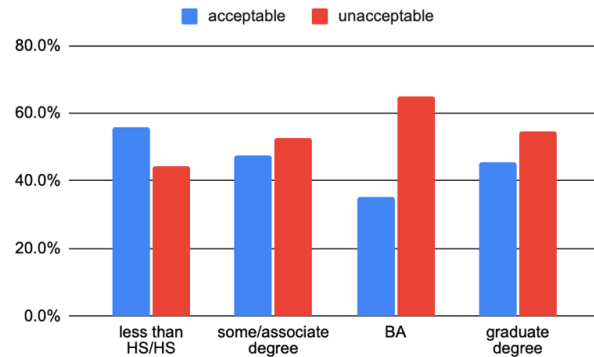*Acceptance of AI-generated news articles across ethnic groups*

The machine heuristics phenomenon mentioned above might also play a role in this case. Minorities may perceive algorithms as more objective and less biased in news production that was historically occupied by Whites. However, the growing body of evidence reveals a great amount of explicitly racial biases encoded in AI systems that do not support ethnical minorities (Benjamin, 2019).

It is important to highlight here that while education and income levels did not show a statistically significant impact on AI writing acceptance, descriptive findings suggest participants with less than $49,000 annual household income and only with a high-school diploma or less also showed more support for AI-generated newspaper articles than other groups (Figure 7,8).

**Figure 7**
*Acceptance of AI-generated news articles across income levels*



**Figure 8**
*Acceptance of AI-generated news articles across education levels*



**Conclusion**

The presented study is a general overview of public opinions on ChatGPT-generated texts. Our findings suggested that the public is more accepting of automated news articles and business reports while being less accepting of AI-generated essays, research papers, and personal emails. More importantly, our survey revealed that more vulnerable groups such as ethnical minorities, people of lower income and education, might perceive AI-generated writing as more objective and free from bias, especially in journalism writing. As the pool of ChatGPT users is

steeply growing, we will see more writing being automated. It is important for future research to investigate what causes public acceptance of the automated text of various genres, and why certain demographic groups are more open to the idea of AI replacement of human writing.

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