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The determinants of mass attitudes about AI surveillance

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Introduction

Advances in artificial intelligence (AI) enabled surveillance have raised multiple concerns, including data privacy, bias and discrimination, and potential violations of civil liberties, among others. At the same time, more governments are using AI tools to improve policing, national security, and crisis response. How does the mass public think about and respond to both the promise, and potential peril, of AI surveillance? We study mass attitudes as they are often an important predictor of policy. We utilize an experiment embedded in a survey to explore how priming respondents about issues surrounding AI surveillance affects attitudes about regulating this powerful technology.

Research Goal

We seek to understand the drivers of mass attitudes about AI surveillance. Specifically, we examine how priming about common concerns about AI surveillance affect willingness to support regulation

Methods

We embed an experiment in a survey in which we randomly assigned respondents to one of 7 treatment groups, each of which read a short paragraph referring to common concerns about the use of AI in surveillance, and 1 control group that did receive a paragraph to read. We then asked respondents about their willingness to support new regulation on the technology and to engage in political action urging greater regulation of AI in surveillance.

Video surveillance is commonly utilized by government and private sector entities to view, record, or store images. Artificial Intelligence (AI) is now being implemented in video surveillance systems. AI surveillance is able to analyze images and/or audio and identify objects, vehicles, humans, and other features. AI surveillance cameras also implement rules-based algorithms that can convert the passive observation of video surveillance into an action-focused camera that can learn based on observations, and adjust procedure accordingly. For example, an AI surveillance camera designed to prevent trespassing can distinguish humans unauthorized to enter an area and alert its owners. AI surveillance cameras are now widely implemented by private businesses, governments, and law enforcement entities across the world.

In a moment, we will present you with some additional information about AI surveillance, then ask you several questions about the use of this technology.

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Project Overview

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On a scale of 1-10, how concerned are you with the use of AI-enabled surveillance technology?

0 — 10

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Experimental "treatments"

Human rights obligations: Many types of AI surveillance may be inconsistent with countries' obligations under international law. For instance, Article 12 of the 1948 United Nations Universal Declaration of Human Rights, a non-binding international treaty, states, "No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence." This language also appears in Article 17 of the International Covenant on Civil and Political Rights (ICCPR), a binding international treaty which the U.S. has ratified. Experts note that surveillance equipped with AI capabilities, such as facial and pattern recognition, could be considered "arbitrary interference with privacy," which would mean its use is a violation of international human rights law.

Mission creep: Authorities often justify the use of surveillance technologies in exceptional, and narrow, circumstances. For instance, AI-enabled cameras and related algorithms may help authorities during emergencies or times of crisis. Or, the technology may be used on an ongoing basis, but with very specific restrictions on the purposes for its use. On the other hand, some worry such uses will lead to widespread, rather than targeted use of the technology. One expert recently noted "Exceptional justifications for the use of surveillance technologies often turn into mundane regular use," which could lead to intrusions of privacy.

Security : Liberal democracies are major users of AI surveillance. 51 percent of advanced democracies deploy AI surveillance systems. In contrast, 37 percent of closed autocratic states, 41 percent of electoral autocratic/competitive autocratic states, and 41 percent of electoral democracies/illiberal democracies deploy AI surveillance technology. Liberal democratic governments are aggressively using AI tools to police borders, apprehend potential criminals, monitor citizens for bad behavior, and pull out suspected terrorists from crowds. Such uses can potentially make towns and cities safer. One expert noted "AI surveillance has the potential to dramatically increase the safety of our cities and borders."

China China is a major driver of AI surveillance worldwide. Technology linked to Chinese companies—particularly Huawei, Hikvision, Dahua, and ZTE—supply AI surveillance technology in sixty-three countries, including the United States. There is some concern that Chinese companies like Huawei may use the export of surveillance technology to obtain intelligence or otherwise interfere in the politics of other countries. Experts warn that "producers of AI surveillance technologies have close ties with the Chinese government," adding that such ties mean that surveillance technology from Chinese producers might be used to further the goals of the Chinese government.

Use against civil society groups, dissidents, and journalists: AI surveillance has come under fire recently for allowing law enforcement to monitor and identify protestors and harass independent journalists, raising questions about whether it threatens fundamental freedoms. For instance, experts warn that such surveillance may "unjustifiably or arbitrarily" restrict citizens' rights to freedom of opinion and expression, adding that legitimate surveillance requires states to "demonstrate the risk that specific expression poses to a definite interest in national security or public order."

Unreliability and discrimination: Although facial recognition is widely used in AI Surveillance, its reliability has often been questioned. When unexpected variables are thrown in—poor weather or fuzzy database images—then failure rates start to shoot up. Facial recognition technology also has been unable to fully eliminate consistent gender and racial biases, which lead to elevated false positives for minorities and women. This concern even prompted one leading supplier of police body cameras in the United States to cease offering facial recognition on its devices. Experts agree: "Face recognition technology is not currently reliable enough to ethically justify its use."

Stifling innovation: AI surveillance has the potential to deliver many positive benefits to society. It may be used across a range of industries and for several different purposes. The impact of these potential benefits depends on investment in the industry and incentives for further development of the technology. Yet some experts note that "unduly burdensome regulation might stifle innovation and development." Regulation could also deter new developers from entry into the industry. Overzealous limits on the technology might prevent realization of as yet undiscovered benefits.

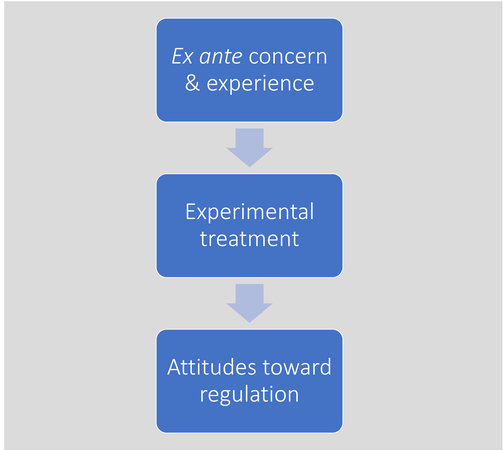
Do you support the creation of a federal independent oversight agency to monitor local law enforcement's and local governments' use of AI surveillance?

- Strongly Support
- Support
- Neither Support or Oppose
- Oppose
- Strongly Oppose
- Don't know

To the best of your knowledge, does existing law provide adequate privacy protections with respect to AI surveillance technologies?

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree
- Don't Know

Expected Outputs



After piloting the survey on a sample of UT undergrads in large, online classes, we plan to field surveys to nationally representative samples in the U.S. and the U.K. We expect prior attitudes to interact with specific treatments to shape support for government policy.

Acknowledgments

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References

For more on mass attitudes about AI, see:

Horowitz and Kahn (2021). "What influences attitudes about artificial intelligence adoption: Evidence from U.S. local officials." PLoS ONE 16(10).
Kreps et al. (2023). "Exploring the artificial intelligence "Trust paradox": Evidence from a survey experiment in the United States." PLoS ONE 18(7).
Zhang et al. (2020). "Americans' perceptions of privacy and surveillance in the COVID-19 pandemic". PLoS ONE 15(12).