



Human Subjects Office of Research UNIVERSITY OF GEORGIA

Reviewing Audit Study and Al Research

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Audit Study

- A specific type of field experiment in the social sciences attempt to mimic the experiments of the natural sciences by implementing a randomized research design in a field setting
- Allows researchers to make strong causal claims and explore questions that are often difficult or impossible to answer with observational data
- Has exploded in popularity in recent years, particularly to examine different types of discrimination, due to the rise of online applications for housing and employment and easy access to decision makers across many contexts via email



Two Main Variations of Audits

In-Person

Research subjects pose as legitimate applicants for employment or for housing as testers or auditors

Correspondence

Overtook in-person audit by means of online, telephone, or by mail audits using hypothetical individuals or recorded messages (e.g., audits by telephone)

Growing Trend of AI Research

- Artificial Intelligence (AI) collection of technologies that allows computer to sense, learn, reason and act
- They are programs that run on computer, and they work by putting a vast collection of data through algorithms (i.e., set of instructions) to create models that can automate task that typically require human intelligence and time

personal assistant (e.g., Siri/Alexa)





self-driving car



assembly line conveyor belt





Growing Trend of AI Research (cont.)

- The term AI has been around since 1950s but became more popular in 2020s when machine learning was successfully applied to many problems in academia and industry
- Other terms related to AI:

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   Responsible AI
   Flugins

   Mailucinations
   Hailucinations

   Multimodal Models
   Multimodal Models

   Generative AI
   Prompts

   Large Language Model (LLM)
   Eugensulation
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UGA Entry into Al

- 1984: Artificial Intelligence Research Group was formed by UGA researchers
- 1995: Artificial Intelligence Center was officially established
- 2006: AI Center became part of the Franklin College of Arts and Sciences
- 2008: Al Center became Institute of Artificial Intelligence
- We are seeing more and more research about AI in recent years. Although some of these are not considered human subjects research as defined by the regulations, there are still a lot of factors to consider
- Records-based research must balance the possible <u>benefits of answering</u> <u>important research questions</u> with the possible <u>risk of using information about</u> <u>individuals</u>, especially if information is used without their consent



Considerations for IRB Review of AI Research

- 1. <u>How the data collected will be used?</u>
 - a) If for non-research purposes Not Human Subjects Research (NHSR)
 - b) If for secondary data analysis Exempt 4
- 2. <u>Private Identifiable Information (PII)</u> Private vs. Public (HIPAA, FERPA, Federal Privacy Act)
- 3. <u>Potential Risks</u> Group Harm (e.g., <u>FB Contagion Study</u>)
- 4. <u>Potential bias/flaw in the use of AI</u> i.e., facial recognition algorithms could be heavily based on white males, but the researchers "using the algorithm" might not be aware of this
- 5. <u>Waiver/Alteration of Consent</u> when approvable?



Waiver/Alteration of Consent Requirements

- 1. The research involves <u>no more than minimal risk</u> to the subjects
- 2. The research <u>could not practicably be carried out</u> without the requested waiver or alteration
- 3. If the research involves using identifiable private information or identifiable biospecimens, the research <u>could not practicably be</u> <u>carried out without using such information or biospecimens</u> in an identifiable format
- 4. The waiver or alteration <u>will not adversely affect the rights and</u> <u>welfare</u> of the subjects
- 5. Whenever appropriate, the subjects or legally authorized representatives will be provided with additional pertinent information after participation



Sample of Audit Study using AI

- **Funding:** National Science Foundation (NSF)
- **Purpose:** Cybersecurity that involves the development of an AI-powered phone chatbot that can automatically make or receive calls and interact with malicious actors that perpetrate scams over the phone
- **Participants:** Phone Scammers
- **Deception:** Yes, participants will not be made aware that they are interacting with a phone chatbot and that they are research subjects
- **Data Collection:** Phone chatbot will call and receive call from a scammer and record their conversation
 - Al chatbot will be explicitly trained to not attempt to learn any personal information about the scammers (e.g., real name, location, etc.), but only learn how they operate
 - Call recordings (i.e., scammer's voice) will be transcribed and the audio will be destroyed
- Informed Consent: No, there is a request to waive the consent

Things to Ponder:

- 1. Is this a no more than minimal risk study? Is the consent waiver request approvable?
- 2. What is Georgia law on the one-party consent for recording calls?
- 3. Telephone Consumer Protection Act of 1991

Amends the Communications Act of 1934 to prohibit any person within the U.S. from:

- (1) using an automatic telephone dialing system (ATDS) or an artificial or prerecorded voice (APV) to make a call to any emergency telephone line of a hospital, medical physician or service office, healthcare facility, fire protection center, law enforcement for which the called party is charged for the call
- (2) initiating any call to a residential telephone line using an APV to deliver a message without the consent of the called party, with specified exceptions
- (3) using any FAX machine, computer, or other device to send an unsolicited advertisement to a FAX machine
- (4) using an ATDS in such a way that two or more telephone lines of a multi-line business are engaged simultaneously
 Human Su



Helpful Links

- <u>45 CFR 46.116(f): Requirements for Consent Waiver and Alteration</u>
- <u>HRPP Policies and Procedures: 098 Internet Research</u>
- <u>Considerations for IRB Review of Research Involving Artificial</u> <u>Intelligence</u>
- <u>10 AI Terms That Everyone Should Know</u>
- <u>Audit Study</u>
- <u>Telephone Consumer Protection Act of 1991</u>







Thank you!

