# Queen's REB Guidelines on Bots, Suspicious Data, and Other Issues when Conducting Research Online through Surveys

Queen's UNIVERSITY RESEARCH

# Queen's REB Guidelines on Bots, Suspicious Data, and Other Issues when Conducting Research Online through Surveys

**Version 1.0**
**12-Sept-2024**

Queen's University is situated on **traditional Anishinaabe and Haudenosaunee Territory**.

# Contents

# Purpose

This guidance outlines the procedures for identifying, managing, and mitigating instances of fraudulent activity and/or data in online research, mainly when such data has been generated by automated systems ("bots"). This guidance also addresses the ethical considerations surrounding compensation claims made by fraudulent entities. When data provides no value, the cost to researchers is relatively high (i.e., budget concerns, data quality, and research outcomes). This guidance applies to all researchers, faculty, staff, and students at Queen's University involved in online research, including, but not limited to, surveys, experiments, and data collection methods conducted via the internet.

The integrity of research data is paramount, and fraudulent data must be excluded from any analysis or reporting. The following ethical standards have proven potentially problematic for some researchers engaged with online participants:

- Participants are entitled to the specified amount of compensation for participating in, not completing, study activities;
- Participants have the right to withdraw at any time and/or skip any questions without consequence (including their right to compensation);
- When using crowdsourcing platforms (e.g., MTurk, Prolific), researchers are not permitted to reject Human Intelligence Tasks (HITs)/participants as this would harm the participant.

The demand for compensation by "bots" or fraudulent actors raises complex ethical issues, particularly in distinguishing between human and non-human participants and the responsibility for compensation of these non-human or fraudulent participants.

# Identification of Fraudulent Data

Researchers should employ methods to detect fraudulent responses, such as:

- Cross-verifying timestamps and response patterns.
- Implementing additional security features on online platforms such as CAPTCHA or similar technologies to deter bot participation.
- Analyzing inconsistencies in data that suggest non-human input (e.g., speed of responses, nonsensical responses to queries, etc.).
- Implementing specific and robust screening questions and procedures to ensure all participants meet eligibility requirements before consenting to participate.
- Providing training for research staff on identifying and handling fraudulent data.

## Documentation and Reporting to the REB

If the researcher is choosing to deny compensation to suspect and/or fraudulent participants, the researcher is required to keep detailed documentation of these incidents.

### Denial of compensation is built into the protocol/application

When denying compensation on the premise of fraud is built into the protocol/application in the existing approved submission/amendment, reporting of the refusal to compensate the fraudulent participant is **not** required. The researcher is encouraged (but not required) to update the REB of suspected bot/fraudulent activity. This may be accomplished at the time of the annual renewal submission.

### Denial of compensation is not built into the protocol/application

When denying compensation on the premise of fraud is **not** built into the protocol/application in the existing approved submission/amendment, reporting of the refusal to compensate the fraudulent participant **is** required. The researcher is required to submit a protocol deviation event to the REB, which outlines remedial actions in order to ensure data integrity and/or re-evaluate compensation to participants.

Details required in the reporting:

- The nature and extent of the fraudulent data;
- The methods used for detection;
- The potential impact on the research findings;
- The bot's demand for compensation (if applicable).

## Responding to Compensation Demands

Researchers should include in the LOI/CF specific language that excludes bots from compensation eligibility and detailing the researchers' expectations regarding participation (e.g., participating only once and participating in 'good faith'). Suggested language: "We expect good faith participation. Fraud checking mechanisms may be utilized, and failure to pass such checks may result in denial of compensation. If you believe you have been wrongfully denied compensation, please contact XXX."

## References

Western University. (2022, January 20). Ethical Challenges in Online Research: Bots, suspicious data, and other issues. https://applywesternrem.uwo.ca/Personalisation/DownloadTemplate/90