

Non-genuine Participation in Online Research

Guidance on Handling Potential Non-Genuine Participants in Online Research

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These guidelines have been created by a university of Nottingham working group. More details of the development can be found in Annex one.

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Summary

Researchers often use online methods to conduct their research studies, across a wide range of settings and academic disciplines, including psychology and clinical research. There is growing evidence that online studies can attract participants who are not genuine, creating a substantial risk to the integrity of the research and potential harm around the use of this research outside of academia. The often-unexpected effort needed to respond to instances of non-genuine participation can also cause harm to the wellbeing of researchers. A working group at the University of Nottingham has put together this guidance to raise awareness of the problem non-genuine participation in online research studies, and to propose various strategies researchers (and others) can take to tackle the challenges that it causes.

Upon experiencing non-genuine participants, complex decisions have to be made, for example, decisions about how to respond to suspected instances of non-genuine participation will need to be taken without sufficient evidence to generate a definitive conclusion. These decisions may be taken differently depending upon the research domain involved, and the intended use for the knowledge produced by the research. Despite its threat to research integrity and their own wellbeing, researchers have a responsibility to engage ethically with people suspected of engaging in non-genuine participation. Preparing an effective response to the threat of non-genuine participation requires planning and decision-making work to begin as early as possible, and to continue throughout the life of the research study.

This evolving issue requires consideration and thought for use with different research projects and populations, which we have worked hard to capture in this document. The aim of this document is to support researchers in ensuring their data reflects experiences of genuine participants and is not impacted but non-genuine responses.

Key messages:

1. **Identify Potential Threats:** Consider risks like data breaches, budget overruns, scope creep, and stakeholder conflicts early on.
2. **Conduct Risk Assessments:** Regularly consult with experts, review similar projects, and stay informed through team and stakeholder check-ins.
3. **Prepare Before Data Collection:** Develop a clear project plan, secure necessary permissions and ethical approvals, and pilot test your methods.
4. **Monitor During and After Data Collection:** Continuously check data quality, maintain documentation, and validate and clean your data post-collection.
5. **Ensure Inclusivity:** Use inclusive sampling methods, make recruitment materials accessible, review participant demographics, and seek participant feedback.

Objectives of the Guidelines

- to raise awareness of the problem with online non-genuine activities within research projects
- to safeguard researchers and participants in online studies
- to support researchers in planning/considering resources required for grants for this issue
- to inform ethics committee review processes
- to support researchers in their conduct to ensure professionalism in response to this issue

The guidelines **do not** aim:

- to be overly prescriptive

- to explain the motivations behind non-genuine participation

This guidance is aimed for research activities but there are other activities outside of research e.g., Patient and Public Involvement (PPI), consultancy, where these guidelines might provide useful knowledge. Consideration may need to be given for how these guidelines are applied in those, and other scenarios.

Background

While online studies have been conducted for many years, internet-based research has become increasingly popular since the 2020 global COVID-19 pandemic, due to its ability to continue projects when in-person testing was not possible and offers many benefits, such as recruiting large or specific samples, minimising costs, and allowing for anonymity.

However, a growing body of academic literature and narratives from scholars globally as well from the University of Nottingham (see reference list in Annex 4) are raising concerns that online studies face significant issues with non-genuine participation in research studies, leading to data quality issues.

There are many reasons why people might not act genuinely when taking part in studies, and this issue can have huge implications for the quality of the conclusions we can draw from our research. For example, in health research, if policy and practice are based on findings that do not accurately represent the experiences of participants living with a condition, then there could be significant negative impacts such as the future deployment of interventions into health services that are ineffective, or even unsafe.

Non-genuine participation falls into five different categories:

- **Inauthentic Participants:** individuals who wrongly claim to fulfil specific recruitment criteria
 - *for example:* a person saying that they have experience of being a young person with depression when they are not
- **Repeat Responders:** individuals who take part in the same study multiple times
 - *for example:* many responses at the same time, often using different email addresses
- **Eligibility Misrepresentation:** individuals who exaggerate or mislead their experiences to meet recruitment criteria
 - *for example:* in a breastfeeding study, a person saying they have a young child when their children are adults
- **Participant Disengagement:** individuals who give false or random responses
 - *for example:* answering questions so quickly they have not had time to read it
- **Bots:** automated software program designed to perform tasks or interact with systems without human intervention
 - *for example:* Automated systems completing surveys or research tasks, simulating human participation

These issues affect many different types of online research, with both qualitative and quantitative data collection. There are a range of causes and motivations that may contribute to these practices. These can include claiming payments for research participation, or influencing research findings (for example, through organised efforts by activist groups). Sometimes, nongenuine participation occurs by accident, for example, if someone has misunderstood a research procedure.

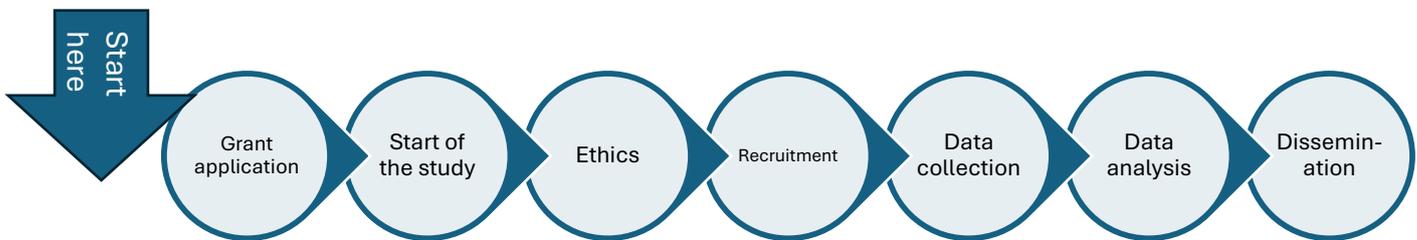
Issues around nongenuine participation are leading to inaccurate data collection and therefore potentially flawed conclusions. This can affect the generalisability of results, undermine the

credibility of the research, and waste resources. Additionally, it can lead to poor decision-making if the research is used to inform policies, product development, or other important actions.

Despite the development of technologically advanced secure platforms, these problems persist, impacting data integrity through effecting the validity of the data collected. After encountering various issues in their online research, a team of researchers from the University of Nottingham have reported their experiences (French et al, 2024; French et al, 2024) and worked together to bring guidelines on conducting online studies.

Research Timeline

Strategies and thoughts about the impact of non-genuine participation need to be made as early as possible in the research cycle, starting at a minimum at the ethics application stage but often as early as grant application stage, for research that is funded by external grants. Early consideration allows sufficient resources to be collected to contain non-genuine participation. Thinking about the strategies that will need to be implemented at each stage of the timeline below is very important.



Potential solutions

We highlight below considerations to be taken at different stages of the research. It is important to think about the different context, environment and steps that can be taken to minimise the impact these issues have on data integrity. While many strategies can be implemented (see resources annex 4 for other guidelines and framework), these guidelines are not prescriptive as each study is unique and will have unique sets of implementable strategies. Additionally, it is important to recognise this is an evolving area where strategies may become obsolete; therefore, the proposed solutions are to help researchers understand what to consider and how to professionally approach responses to this ongoing issue.

Before the research starts/planning/grant applications

- **Develop a protocol:** Think of the steps you will take in the event of multiple responders or non-genuine participants taking part and incorporate this in the project Data Management Plan.
- **Communicate:** Include your intentions to check for non-genuine participation in participant facing documents. Explain that due to increasing numbers of non-genuine participants we introduced such measures.
- **Engagement with PPI:** Working with lived experience groups can help to find acceptable strategies for how to handle multiple responders or non-genuine participants with different population groups.
- **Minimise Patterned Answers:** In surveys, think about how patterned answers can be minimised

- **Screening:** Think about ways to “meet” the participants online or in-person beforehand and check their identity of eligibility.

During the research/data collection

- **Diverse Recruitment Approaches:** Use various recruitment channels and evaluate the ethical and reputational aspects of each.
- **Avoid Certain Terms in Advertisements:** Refrain from using words like “incentives” or “vouchers” in public advertisements to deter scammers. These details can be included in the participant information sheet instead.
- **Monitor Data for Anomalies:** Regularly check incoming data for unusual patterns, such as rapid responses, duplicate entries, or demographics outside the study criteria.
- **Screening questions:** May be completed prior to consent or before access to the data collection activity.
- **Participant Verification steps:** Consider using email or mobile phone/text such that participants must be verified prior to completing research outcome measures. e.g. send a link to verify record or access the survey.
- **Gradual Recruitment Rollout:** Implement recruitment in incremental stages to allow time for identifying and addressing any issues that may come up.
- **Regular Team Debriefs:** Conduct frequent debriefing sessions with experienced members of your research team to discuss any concerns and enable team members to highlight unusual activity.
- **Incentive-Based Eligibility:** Ensure participants understand that incentives are conditional upon meeting certain criteria or completing all study steps.
- **Prevent Multiple Submissions:** Use IP address tracking or unique login credentials to check for participants from enrolling multiple times. Clearly communicate this policy.
- **Detect Bot-Like Activity:** Collect timestamps and response durations to identify unnatural patterns indicative of automated responses.
- **Delay Payments:** Postpone any payments until after data collection is completed to prevent non-genuine responders from repeatedly participating.
- **Additional Verification:** Consider additional verification steps, such as online video calls or age or profession verification at different contact points, before distributing incentives. Make this possibility clear during recruitment. If suspecting non-genuine activity, it is advisable to ask participants for clarifications
- **Decision making about suspension:** Studies should have a clearly documented process for making decisions about suspending participants, including specific requirements on documenting suspensions for the purpose of audit.

After the data collection

- **Review Data:** Check all data before you include it in the analysis
- **Notify research ethics committees:** Ethics committees should be told about suspected fraudulent activities to support keeping track of such problems.
- **Keep a record:** Don’t delete data so you can keep a record of all suspicious data to support recording and reporting of issues you’ve experienced.
- **Be transparent:** To support tracking of these issues, openly report problems you’ve faced in your reports/papers and methods you may have used to overcome them.

Caution

It is important to keep in mind that online studies are part of a consistently evolving environment. Strategies that work at one time might not work later in time. It is also important to recognise that

each study will have different strategies that would be acceptable depending on the methodology, population and context. Strategies need to evolve with upcoming technologies and methods, and therefore these guidelines will need to evolve too.

In many cases, it will not be possible to definitively prove that an instance of participation is non-genuine. A combination of factors might be used to identify a suspicion that a participant is non-genuine, but researchers may still need to take a decision on the status of a research participant without definitive knowledge. Similarly, a combination of strategies rather than an individual strategy will be required to prevent or respond to non-genuine participants. To combat this complex issue, clear decision-making procedures are needed for transparency of decision-making.

Annex three offers two case studies of 1) survey and 2) interview/focus groups, giving an example of what non-genuine responses may look like and what potential solutions there may be applied to these scenarios. These are not given in the main body of this work as the evolving nature of this area means the proposed solutions may not always be appropriate.

Key questions

What do I need to be looking out for and thinking about?

When starting a project ask yourself these 5 questions:

1. What are the potential threats?
2. How would I find out?
3. What can I do before starting data collection?
4. What can I do during or after data collection?
5. What can I do to confirm/ensure I am not excluding genuine participants?

Examples of common situations to look out for and considerations to take

What should I look out for?	What can I do?
An unlikely or unprecedented number of responses are received	<p>Consider how you will capture the number of responses within a particular time point</p> <p>Consider whether you will be able to pause recruitment so you can identify where non-genuine responses may be coming from</p> <p>Think about methods to check any inconsistencies between aspects of data collection.</p>
Responses completed very quickly in a short amount of time	<p>Consider how you may be able to capture the total completion times for data collection.</p> <p>Think about whether you may want to have a minimum time requirement for completion of data collection.</p> <p>Work with lived experience groups to identify the anticipated time required to complete data collection.</p>
Participants give uniform survey responses, non-sensical answers or	<p>Consider whether the type of questions you are asking (e.g. closed and open) enables checking the validity of answers.</p> <p>Think about how can answers in pattern responses be minimised.</p>

the answers follow similar patterns or formats.	Think of ways you might be able to prevent participants from enrolling multiple times in your data collection.
Individuals exaggerate or mislead their experiences to meet recruitment criteria	<p>Consider additional verification steps so you can ensure your participants meet recruitment criteria before collecting data and/or distributing incentives.</p> <p>Work with lived experience groups to understand typical experiences for this group and understand whether responses appear non-genuine.</p> <p>Work with a lived experience group to determine appropriate verification procedures for the population you are working with.</p> <p>Consider various recruitment channels and evaluate the ethical and reputational aspects of them.</p> <p>Consider involving members of your team who have experience and understand the population to be able to guide advice, discuss and progress any concerns.</p>

Consideration for Research Ethics Committees

Ethics Committees have a responsibility to support both researchers and research participants. They must consider the ethical implications of disruptions caused by non-genuine participants and balance these with the impact of additional countermeasures on genuine participants.

Ethics Committees should consider the implementation of tailored countermeasures for specific target participant groups whilst ensuring the integrity of the research as an ethical implication.

This includes considering approval for:

- The collection of personal details, such as date of birth or emails for the purpose of verifications
- Instances where non-reimbursement might be acceptable (for example, providing proof that one person responded multiple times)
- Ensuring the integrity of the research data through implementing extra steps to participation, protecting public funds and where appropriate suggest alternative acceptable approaches.

Ensuring Data Integrity

Ethics committees will want to ensure that any verification process will not exploit participants. Any methods used to verify participant identities should respect participants' privacy.

Validating Data Without Distorting the Experience: Researchers need to justify how their approach is necessary and proportionate for ensuring high-quality data without distorting the research process.

For example, if the process involves additional validation, they should ensure:

- **Proportionality:** Ensure methods are proportional to the involvement and incentive proposed by the study. Ensure methods are proportional to the sensitivity of the data being collected.
- **Bias Consideration:** Consider potential biases introduced by validation methods. Develop solutions to mitigate these biases.

- **Building Trust:** Build trust in the process for participants who are genuine.
- **Participant Experience:** Ensure the experience of genuine participants is not negatively impacted.

Transparent Documentation

The researcher must provide a clear, detailed explanation of how they plan to authenticate participants. The ethics committee will assess whether the study design includes transparency in data handling and participant recruitment.

Transparency in reporting in publications:

- **Pre-defined criteria:** If exclusion criteria are pre-determined, researchers should clearly state these criteria in their study protocol and report on the number of participants excluded based on these criteria.
- **Post-hoc exclusions:** If exclusions occur after recruitment, the reasons for these exclusions should be clearly and comprehensively reported, including the number of participants excluded for each reason.
- **Justification for exclusions:** Researchers should provide a justifiable explanation for each exclusion, whether it relates to safety concerns, participant characteristics, data quality issues, or other relevant factor

Example text to be added to Participant Information Sheets:

Due to a significant rise in non-genuine participants taking part in research, we have implemented a few steps to ensure the integrity of the data collected. Inconsistent enquiries will be checked by the research team before participation and/or reimbursement. Participants believed to have completed multiple responses will not be reimbursed.

Definitions

Repeat Responder: The act of an individual or an automated algorithm registering multiple times for a study, each time using a different persona, such as different email addresses, to participate more than once.

Eligibility misrepresentation: When an individual deliberately provides false information about their personal characteristics, such as clinical or demographic details, to qualify for a study they would otherwise be ineligible for

Inauthentic Participants: “those who falsify personal or contextual characteristics to meet study eligibility criteria and/or exaggerate their experiences in order to participate in ...[research] studies” (Hoskins et al., 2025).

Participant disengagement: When participants who do not fully engage with the study tasks, providing minimal effort or attention, which can compromise the quality and reliability of the data collected.

Bots: Automated systems for the completion of research tasks (Panicker et al., 2024)

Survey Fraud: The act of providing false or misleading responses in a survey, often to qualify for incentives or to skew the results.

Duplicate Responses: When a participant submits multiple responses to a survey or study, either intentionally or unintentionally, which can distort the data.

Participant Fatigue: When participants become tired or bored with the study tasks/activities, leading to decreased effort and lower quality responses over time.

Attrition: The loss of participants over the course of a study, which can affect the study's validity and the generalizability of the results.

- **Inauthentic Participants:** individuals who wrongly claim to fulfil specific recruitment criteria
 - *for example:* a person saying that they have experience of being a young person with depression when they are not
- **Repeat Responders:** individuals who take part in the same study multiple times
 - *for example:* many responses at the same time, often using different email addresses
- **Misrepresentation:** individuals who exaggerate or mislead their experiences to meet recruitment criteria
 - *for example:* in a breastfeeding study, a person saying they have a young child when their children are adults
- **Disengagement:** individuals who give false or random responses
 - *for example:* answering questions so quickly they have not had time to read it
- **Bots:** automated software program designed to perform tasks or interact with systems without human intervention
 - *for example:* Automated systems completing surveys or research tasks, simulating human participation

Annex 1 - Working group on non-genuine participation in online studies

Aims of the Working Group

The aims of the working group are to raise awareness of the increasing threat to research integrity caused by non-genuine participation in online research studies, and to provide guidance on how to counter this threat. The working group is a collaboration between University of Nottingham researchers, University of Nottingham research ethics committee panel members, and the UK Research Integrity Office (UKRIO). Our remit was to develop guidance that considers multiple perspectives, including those of people reviewing ethics proposals, leading online studies, and working on online studies.

Assumptions of the Working Group

In terms of online studies, the assumptions of the working group are...

- Non-genuine participation in online studies is an evolving issue, which we are still learning about, and which will require continuous monitoring and adaptation by people involved in research planning and delivery
It is important that researchers strive to maintain quality and credibility in their research, and hence people planning studies should actively plan to maintain the integrity of their online studies
There are multiple reasons why someone may or may not be authentic in participation and caution should be given to making assumptions about these reasons. Known reasons include multiple registration due to misunderstanding of study procedures, and to profit from payments for research participation.
- Individual factors alone do not necessarily mean a participant is not genuine, suspicion may be raised based on a combination of factors, and it may not always be possible to come to a definitive understanding on whether an instance of participation is genuine or not.
It is important to care for the wellbeing and rightful representation of participants, even in the case of research participants who have deliberately registered multiple times purely for the purpose of claiming participation payments.
- It is important to care for the wellbeing of researchers.
- All research is being carried out with guidance and permission from ethics bodies

Annex 2 - Lessons learnt and tips

Four most important things that we've learnt from work about non-genuine participants:

1. Automated technologies can be used to identify suspected multiple registrations or suspected eligibility misrepresentation. The use of automated technologies to identify suspect registrations may be particularly important for studies recruiting large numbers of participants. Examples of automated technologies include the use of algorithms that monitor for registrations from identical IP addresses, or for similar email addresses. Automated technologies may need to access data with the potential to be sensitive, and hence ethical approval is required for their use.
No automated technology can guarantee accuracy when identifying suspect registrations. For example, two registrations from the same IP address, on the same day, may just indicate genuine study registrations by different family members who have learnt about a study together. Principle investigators should understand the strengths and limitations of any automated technologies that they choose to use. Procedures for investigating suspect registrations should account for the limitations of what can automatically be determined about suspect registrations.
2. Procedures for investigating suspect registrations can involve contacting registered participants, for example to enquire about whether they have used more than one email address to register for a study. Responses to queries are unlikely where non-genuine registrations have occurred. This means that, in most cases, study decisions (such as suspending a registration) will have to be taken without participant response to queries.
3. In some research communities, a decision to suspend a registration may be particularly consequential to the perceived integrity of a study. For example, in a randomised clinical trial, a decision to suspend can unbalance the arms of a trial, or contradict with accepted norms such as analysis through an Intention-To-Treat principle. Investigators should consider how best to address community challenges to the integrity of their studies, for example by publishing their procedures for suspending registrations in advance.
4. Multiple registrations can happen for many reasons, including due to misunderstanding of study procedures by participants, by technology failure, to gain financial reward, or to gain access to an intervention (for example in an RCT randomising participants to a control or intervention arm). When investigating possible non-genuine registrations, investigators should adopt a neutral tone, for example avoiding an assumption that a participant has registered multiple times for purpose of financial benefit.

Annex 3 - Examples

These examples have been created inspired by experiences from real-life research projects with a proposal of solutions and lessons that could be applied. Given the evolving area, these case studies offer some solutions that were appropriate at the time, but consideration needs to be given as to whether these solutions remain useful as technologies and contexts change.

Example A (Survey)

Aim

An online survey to capture the views of adults with a diagnosis of depression on web-based therapy

Methods

An online survey is deployed. Participants are invited via online advertisements and social media groups. The advertisements state the survey is quick, and two £50 vouchers are available via a prize drawer. Consent is taken via a QR code on the adverts, and immediately the participant (if appropriately completing consent) are directed to the survey. Survey data and demographic data are saved separately. The prize drawer is saved on another separate survey. Survey questions are majority closed questions or require few words.

Indication of problems

- The survey is launched, within 60 minutes, more than 50 responses are made
- Large numbers of responses are completed within 2 minutes
- Participants give uniform survey responses
- Participant emails follow a similar format e.g. name.name.###@gmail.com, (first and last names are interchangeable)

Potential solutions to consider in response to problems

Problem	What might have happened?	Potential Solutions
Large numbers of responses are recorded	If you receive an unlikely or unprecedented number of responses, you might have experienced a type of bot response or repeat responder	<p>Date and time stamps: Ensure settings capture the start and end dates and times for the survey. This will enable reviewing the data.</p> <p>Staggered recruitment: Take a staggered approach to recruitment when using social media, keeping a record of where you've advertised. Be ready to pause recruitment to allow identification of, and removal of advertisements from where suspicious responses might have stemmed from.</p> <p>Unique identifiers: Asking participants to have a unique identifier (not personal information) on consent/survey and prize drawer page. This allows you to check consistency of the unique identifier between all two/three online forms. Often, the repeat responders responses will be random and having the same unique</p>

		identifier might identify where ‘random’ responses are.
Responses completed very quickly	If you receive responses that are completed in a very short amount of time, you might have experienced a type of bot response	<p>Completion time settings: Capture the total completion times for the survey.</p> <p>Consider Time-Based Restrictions: A minimum time requirement for survey completion to discourage rushed, insincere participation.</p> <p>PPI input (timings): Work with a lived experience group to identify the anticipated length of time the survey may take. Use these to compare with responses.</p> <p>Minimize Patterned Answers: In surveys, think about how can answers in pattern be minimised (i.e. the questions posed may take random order, but ensure the logic is preserved if the order is automated)</p>
Participants give uniform survey responses	<p>Open Questions: If you have case-matched, non-sensical answers that are uniform across survey responders, you might have experienced a type of bot response or repeat responder.</p> <p>Closed Questions: If responses follow a similar pattern, such as continuous answers of 1 on a Likert-scale, you might have experienced a type of bot response or repeat responder.</p>	<p>Forced open questions: The addition of forced open questions enables checking the validity of answers. Avoid questions necessitating one/few-word responses, to enable checks.</p> <p>Prevent Multiple Submissions: Use IP address tracking or unique login credentials to prevent participants from enrolling multiple times. Clearly communicate this policy.</p>

Example B (Intervention with interviews and focus groups)

Aim

Online interviews to capture the experiences of adults with a diagnosis of depression on using a web-based therapy

Methods

Participants are identified via community and healthcare services and invited to take part in the interviews. Participant information and consent is emailed to interested participants, and a time is scheduled for them to complete the interview. Participants take part in a 20-minute interview via an online videoconferencing platform and are sent a voucher after the interview.

Indication of problems

- Participants are available for interview immediately
- During the interviews, participants are not willing to turn their camera on

- Participants share experiences that are not typical of the population you are investigating, e.g., quick access to diagnosis, positive feedback about
- Participants ask for the voucher as soon as the interview is completed

Solutions to consider in response to problems

Problem	What might have happened?	Solution
Eligibility Misrepresentation	Individuals exaggerate or mislead their experiences to meet recruitment criteria	<p>Additional Verification: Consider additional verification steps, such as requesting the names of doctors a diagnosis was obtained from or online video calls, before distributing incentives. Make this possibility clear during recruitment.</p> <p>Interviews/PPI group, think about ways to “meet” the participants online or in person beforehand and check their eligibility through a conversation</p>
Inauthentic Participants	Individuals who use non-genuine identities or specific recruitment criteria	<p>PPI input (eligibility): Work with a lived experience group to determine appropriate verification procedures for the population you are working with.</p> <p>PPI input (experience): Work with a lived experience group to understand typical experiences for this group. Use these to compare with responses.</p> <p>Recruitment Approaches: Use various recruitment channels and evaluate the ethical and reputational aspects of each</p> <p>Regular Team Debriefs: Conduct frequent debriefing sessions with your research team to discuss progress and any concerns. Ensure members of your team are experienced and understand the population to be able to guide advice.</p>

General solutions applicable to both examples

Advertisements:

- Removal of references to monetary incentives in promotional material
 - o The incentive of money (including monetary incentives like vouchers) for getting involved in research may be a motivator for non-genuine participation
 - Ensure such checking is included in the protocol (see Protocol)
- Less emphasis on ‘quick’ research involvement
 - o Removing the amount of time it might take to complete research might be less motivating for non-genuine participants

Monetary incentives:

- Consider whether the incentive you want to propose to participants is proportional to the involvement. Being overly generous might motivate non-genuine responders
- Are there alternative incentives to getting involved in research that you could use?
- If you want to use money as an incentive, consider if there are ways it can be verified ahead of giving this, e.g., is a legitimate bank account being used, do their address and name match
- Refer in your protocol to participants only being paid once for taking part, so that repeat responders cannot be given multiple incentives
- Delay Payments: Postpone any payments until after the survey is closed to prevent scammers from repeatedly participating

Protocol:

- Communicate in participant facing documents your intentions to check for non-genuine participation, ideally, explaining that due to increasing numbers of non-genuine participants we introduced such measures
- For measures where personal data is being used e.g. IP address tracking or unique login credentials, this must be included in participant information
- Include the steps to be taken in the event of multiple responders or non-genuine participants in your Data Management Plan

Reviewing your data:

- You must keep eyes on your data to be able to check if suspicious responses are occurring and then you can problem solve
- If you wait until the data collection period is completed/reached, you might find it impossible to check all the data you receive. You may also find all your data is unusable and therefore resource/time is wasted.

Additional Actions

- **Inform ethics committees:** To support awareness of this problem, we recommend that you inform your ethics committees if you encounter and suspect fraudulent activities
- **Inform funders:** As above, we also recommend you let your funders know
- **Transparency in reporting:** Ensure all aspects and participants
- **Keep a record:** Don't just delete suspicious data!

Annex 4 - Resources and Further Reading for Strategies

Below, we present resources that have evaluated the impact of non-genuine participants. The first reports case examples of this issue at the University of Nottingham. The papers presented report strategies, reliability of popular survey platforms (Mtruk, Prolific) and impact of non-genuine data on data integrity.

Paper written by members of this group

French, B., Babbage, C., Cassidy, S., & Rennick-Egglestone, S. Misrepresentation by online study participants-a threat to data integrity. *Lancet Psychiatry*.

[https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(24\)00359-6/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(24)00359-6/fulltext)

French B, Babbage C, Bird K, Marsh L, Pelton M, Patel S, Cassidy S, Rennick-Egglestone S. Data integrity issues with online studies, an institutional example of a widespread challenge. *JMIR Mental Health*, 11:e58432, 16th September 2024.

<https://mental.jmir.org/2024/1/e58432>

Further reading for strategies

Surveys

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