

Guidance on Research that Involves Deception

Background/Introduction

Research that involves the use of deception might be necessary when it is important that participant behavior is not altered by their participation in the research. Even when it is necessary to use deception in research, there are ethical concerns, namely with regard to the principle of “Respect for Persons” (Belmont Report) because when participants are deceived they are not fully informed of the purpose and procedures that are involved.

The purpose of this guidance document is to provide researchers with information on how to ethically incorporate deception into their research plans. Deception should only be used when its use is the only way to answer the research question. Research plans that involve the use of deception must be adequately justified and, in most cases, will require that research participants be informed about the deception at the conclusion of their participation. This guidance document will cover the types of deception and the additional requirements for the use of deception. Researchers who plan to incorporate deception into their research should be familiar with the requirements in this guidance. For questions regarding this guidance, contact the Human Research Protection Program (HRPP) at irb@vt.edu.

Definitions/Terms

Deception - Deception is a practice in which researchers give false information to intentionally mislead participants or withhold information about a specific aspect of the research. Deception is used to promote behaviors in participants in times where it is less likely to obtain accurate information if they are informed about the true intent of the research. There are four main categories of deception listed below. This guidance will focus on deception and incomplete disclosure separately, and provide guidance on how they are different and how they can be incorporated in research.

1. **Outright deception** is when research participants are aware that they are participating in a research study, but not that they are being deceived.
2. **Covert deception** is when individuals are unaware that they are participating in a research study.
3. **Authorized deception** is when research participants have agreed to be deceived or to information being withheld.
4. **Incomplete disclosure** is when research participants are unaware that information is being withheld. It is a form of deception but the requirements may differ depending on the nature of the research.

When is it acceptable to use deception in research?

It is appropriate to use deception to attempt to facilitate scientific validity when there is *no other way* to test one's hypothesis with full disclosure. Deception is used to measure something that could not otherwise be measured without some degree of manipulation. Deception can help researchers collect unbiased information or data about attitudes or behaviors in situations where truthful disclosure has a high probability of producing biased responses by participants. These methods should only be used when no other reasonably effective alternative research methods are available to achieve the goals of the research.

As determined by the HRPP or the Institutional Review Board (IRB), only minimal risk studies may include the use of deception. It should be noted that the risk level applies to the entire study and not specific research procedures. If the deception is considered minimal risk, but the study is, greater than minimal risk, the deception will not be allowed.

Requirements for use of Deception

When a researcher has determined that, there are no other alternatives available and deceiving research participants is necessary to carry out the research plan, a few additional requirements must be met.

Research that involves deception requires providing the participant with false information or withholding some of the details about the research, so informed consent is not always possible. Informed consent is required for nonexempt research; therefore, a waiver or alteration of informed consent must be approved for nonexempt research involving deception. In order for the IRB to approve a waiver or alteration, the following requirements must be addressed in the research protocol.

1. The research must involve no more than minimal risk to research participants. The researcher should explain why the study is minimal risk, but the final determination is made by the HRPP or the IRB.
2. The research would be impracticable without the waiver or alteration. Meaning that without the waiver or alteration in order to include deception, the research could not be conducted. Whether a waiver or alteration of informed consent is needed is based on the information the researcher provides the participant prior to participation. Since the research involves deception, participants cannot be provided with all the information they would typically receive, but it might be possible to provide them with some information. If the basic (and any additional applicable) elements of informed consent cannot be provided, the researcher should request to waive all the requirements of informed consent. If some information can be provided prior to participation, an alteration should be requested. For example, if the researcher will debrief the participants after the

deception, an alteration should be requested. In either case, the researcher must provide justification.

3. The research will not adversely affect the rights and welfare of research participants. The research should not have a negative impact on participant lives.
4. When appropriate, the participants should be provided with pertinent information after their participation. This can be provided during a debriefing process. During the debriefing, the participants should be given the opportunity to withdraw their consent. More information about when debriefing is appropriate and required is discussed below in the debriefing section.

For exempt research that involves a benign behavioral intervention (Exempt Category 3), the use of deception is permissible if:

1. The intervention is brief in duration, harmless, painless, not physically invasive, not likely to have a significant adverse lasting impact on participants and the researcher has no reason to believe the participants will find the interventions offensive or embarrassing; AND
2. The participant prospectively agrees to their participation while being informed they would not know the full purpose of the study. For example, the information sheet could indicate: “Some research requires that the full purpose of the study not be explained before you participate. We will give you a full explanation after you complete the research.” At the conclusion of their participation, the participant must be made aware of the deception (i.e., debriefed) so they can agree that their data can be used or withdraw their consent.

Debriefing

Research that involves the use of deception, in most cases, requires that participants be informed about how they were misled and why doing so was necessary to the study. Participants should also be given the opportunity to withdraw their consent. This is commonly referred to as debriefing. Debriefing must take place within a timely manner after the completion of a study. Details explaining how, when, and where debriefing is to take place should be described in the protocol and the debriefing document should be uploaded with the submission. A debriefing is not always required for research that involves incomplete disclosure.

There are arguments for and against debriefing. Most research involving deception includes a debriefing. Once the research is over, there is no reason for the deception to continue by misleading or withholding information from participants. The principle, respect for person, means that research participants should be given sufficient information to make an informed decision about their participation in the research. The debriefing process can help build trust and clear up any false information that has been provided. There are rare cases, where debriefing may not take place. The researcher should be able to provide justification in the protocol why it is not appropriate. Debriefing may not be practicable when research participants are unaware they are participating in a research study. Researchers are sometimes concerned that participants

that have been debriefed will inform potential participants about the deception. If debriefing has the potential to cause more harm to the participants than the deception itself, debriefing may not be appropriate. For example, if participants are recruited based on characteristics that are stigmatized in society the debriefing may be more harmful.

The purpose of debriefing is to remediate harm, reestablish trust, and provide educational benefits. If the debriefing process will not accomplish one or more of these, it may not be appropriate or necessary to debrief participants. This is sometimes the case with research that involves incomplete disclosure. Debriefing the participants may actually create confusion or distrust and not provide the participant with meaningful information.

When it is appropriate to debrief research participants, the process should be clearly described in the protocol and the debriefing document should be uploaded with the submission. The debriefing document should include the following details and information:

1. Similar to how consent forms are written, the debriefing document should include easy to understand terms that explain the deceptive aspects of the study. If the deception included misleading participants about the true study objective this should also be detailed in the debriefing document. Researchers must take reasonable steps to correct any misconceptions that participants may have due to the deception. In depth details of the study, such as hypothesis, intentions of each task, etc., are not necessary.
2. An explanation and justification of why the deception was necessary. Such reasons should be presented in transparent language and in an empathetic manner that is sensitive to subjects' possible discomfort or embarrassment at having been deceived.
3. Efforts should be made to alleviate any intense emotional responses felt by subjects. For example, explaining how their reaction is natural, expected given the study circumstances, and blame the behavior on the situation they experienced rather than any personal characteristics. Addressing all questions and concerns is a way to alleviate any negative emotions that surfaced by participating in the study. Information on where participants can seek additional help, such as counseling or at-risk hotlines, needs to be conveyed if the study involved any topics that may trigger distressing emotions even at a later date.
4. Provide an opportunity for the participant to withdraw their consent and data that was collected.

Examples of Deception

- A study in which a PI attempts to compare subjects' prejudices about people of different religions. If the PI were to disclose this purpose, the subjects' responses would probably be affected; therefore, the PI tells participants the purpose is to compare subjects' prejudices about people with different careers.

- In a study where anxiety is analyzed and measured, participants may be told to expect mild pain during the course of a study/experiment; however, no painful procedures are administered. The expectation of pain may enable participants to feel anxious or uneasy even though investigators will never exhibit such tests.
- Participants are asked to participate in a research study and are told that the purpose is to test their creative skills. They are asked to read a list of words or view a series of images and are asked to tell a story using those words or images. The true purpose of the research is to test if participants are more likely to remember certain words or images, but if that information is disclosed participants might focus on remembering the words or images making it difficult to answer the research question.

Examples of Incomplete Disclosure

- Participants are given general information about the study purpose but the information is not detailed enough to reveal the researcher's main or specific objective. For example, participants might be told the purpose of a study is to examine college student's morning routines, and they are asked to keep a journal of their morning routines. The main goal of the study is to determine the number of college students that incorporate regular exercise into their morning routines. If the participants are aware that exercise is a variable of interest, they might be more likely to report this even when it is not part of their morning routine.
- A researcher wants to see if background noise affects a person's performance while taking a test. The participants are told that the purpose of the research is to evaluate their test taking abilities. They are asked to complete two tests, which are similar in terms of difficulty, but during one of the tests, the researcher periodically introduces background noise. If participants are aware of the true purpose of the research, they might become more focused when they hear the background noise.
- A study is conducted to further understand how representations of same sex couples in commercials influence consumer behavior. Participants are shown video advertisements that feature gay couples and straight couples. As they watch, their heart rate, nonverbal cues, and sweat responses are recorded. Participants are informed their reactions to the advertisements will be recorded and studied but not that the investigators are specifically examining if the sexual orientations of characters in the videos influences them. Therefore, the participants will not be aware of exactly what the investigators are analyzing in relation to the commercials; they enter the study without being informed about the purpose or reason for the experiment.

Steps to Take When Submitting a Study that Includes Deception

- Determine if your study includes deception or incomplete disclosure.

- If yes, determine that your study could not possibly be conducted without the deception and include this explanation in the protocol.
- Ensure your protocol addresses the issues discussed above in the section “Requirements for use of Deception.”
- Decide whether your study will need to include a debriefing. If you aren’t sure, contact the Human Research Protection Program at irb@vt.edu.
- Submit the debriefing document discussed above in section “Debriefing;” or if participants are prospectively agreeing to the deception include a statement in the information sheet.
- Include your process for debriefing in the protocol when discussing the consent process.
- If debriefing will not take place, provide justification in the protocol on why it is not appropriate.
- As appropriate in the protocol, request a waiver or alteration of the consent process and ensure you provide sufficient information for the IRB to make these determinations.

References

This document borrows heavily from guidance developed by other academic institutions and established professional codes and standards.

[The Belmont Report](#), Ethical Principles and Guidelines for the Protection of Human Subjects of Research, accessed December 9, 2021

University of Chicago, [Investigator Guidance](#)

Oregon State, [Guidance on Use of Deception and Incomplete Disclosure in Research](#)

45 CFR §46.111(a)(1) Criteria for IRB approval of research

45 CFR §46.116(c) General requirements for informed consent

University of California, Los Angeles ,
<http://ora.research.ucla.edu/OHRPP/Documents/Policy/8/Deception.pdf>

University of South Carolina, http://orc.research.sc.edu/PDF/guidance_deception.pdf

University of California, Berkeley <http://cphs.berkeley.edu/deception.pdf>

Bankert, E. A., Gordon, B. G., Hurley, E. A., & Shriver, S. P. (2022). Institutional Review Board: Management and Function. Jones & Bartlett Learning.