

# Biases and Improper Sampling

April 1, 2026

1. A researcher is interested in Iowa State University student's views of gay marriage and gay adoption. The researcher decides to do in-person group interview by contacting a randomly chosen sample from the student population. Before the interview formally began the researcher made the off-hand comment that they were part of the LGBT+ community loud enough that most of the students in the sample heard.
2. A researcher is interested in all Iowa State University student's views of the Trump tax cuts. A sample was obtained from the ISU's School of Business's records of undergraduate and graduate students in their programs and the question was phrased as such:

“On a scale of 1 to 5, with 1 being strongly disagree and 5 being strongly agree how would you rate the following: The Trump tariffs will boost the American economy and make up for the loss of tax revenue.”
3. A researcher is interested in the use of opioids in the student population at Iowa State University. The researcher is afraid that few people contacted will participate so the researcher sends out a bulk email to the entire student population saying that an anonymous discussion will be held discussing the use of student use of opioids in the past 30 days. The email invited anyone who would like to participate to come to the meeting.
4. A researcher is interested in the views of Iowa State Students on regards to a restructuring of the tuition rates. The researcher contacts the State Gym and gains permission to set-up a booth at the entrance to the gym. At the booth the researcher will ask a series of questions relating to tuition and at the end of the interview all participants will be given a free water bottle regardless of their responses.
5. A researcher is interested in the student bodies views of safety on campus, particularly of a students perceptions of their ability to walk around campus at night safely. The researcher happens to teach a course in sociology and sends an email to their class with a link to an anonymous response poll<sup>1</sup> for the students to fill out. If the students fill out the poll they are given a small amount of extra credit. The

---

<sup>1</sup>Anonymous in the sense the researcher won't know which student gave what answer, but they will know who filled out the poll.

course taught is a general educational requirement that any student, regardless of their major, could reasonably be expected to take.

6. A researcher is interested in the sexual health of the students at ISU. A random sample of students is collected from the provost's records and an in-person interview is had. Some questions are fairly standard such as "What do you believe the approximate pregnancy prevention rate for a condom is?" but a few questions become very personal. Some students refused to answer these very personal questions because it made them feel uncomfortable. At the end of the study, there was no discussion of the questions certain students refused to answer.
  
7. Grinnell is interested in heroin usage among it's student body. To select students the college on 10 separate days randomly grabbed students from inside the library to question.
  
8. Grinnell is interested in heroin usage among it's student body. The college randomly selected students within the dining hall and asked them loudly at the table if the student had shot up with heroin in the last two weeks.
  
9. Grinnell is interested in heroin usage among it's student body. They randomly select 100 students from a master list of students. The students received the email asking: "In the last two weeks, that is 14 days not exclusively business days, have you or have you not at some point in that time frame consumed a derived substance or product (or a synthetic of) the floral organism *Papaver somniferum* such as but not limited opiate narcotics which are broadly schedule 2 or 1 drugs according to the US Drug Enforcement Agency in cooperation with the Food and Drug Administration as established by Congress in Comprehensive Drug Abuse Prevention and Control Act of 1970?"
  
10. Grinnell is interested in heroin usage among it's student body. Being a vigilante professor I find one student buying heroin. To learn who else is a "druggo" I follow student to a party and then surveyed with the students I found shooting up.
  
11. Grinnell is interested in heroin usage among it's student body. Taking it upon myself to investigate this I discreetly ask the three students who sit in front of my desk in STA 209 if they have shot up with heroin in the last two weeks.