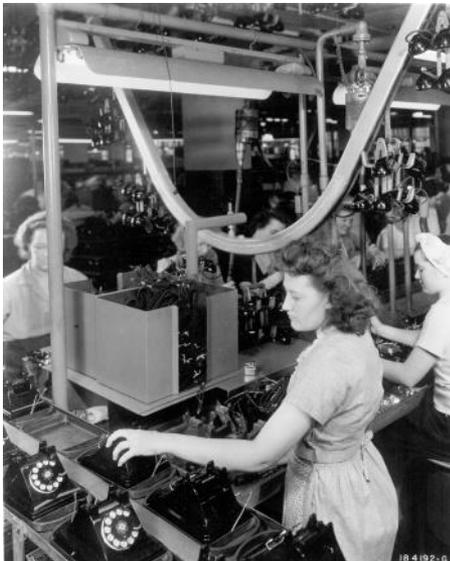


Hawthorne Effect



- But even the control group may experience changes.
- Just the fact that you know you are in an experiment can cause change.



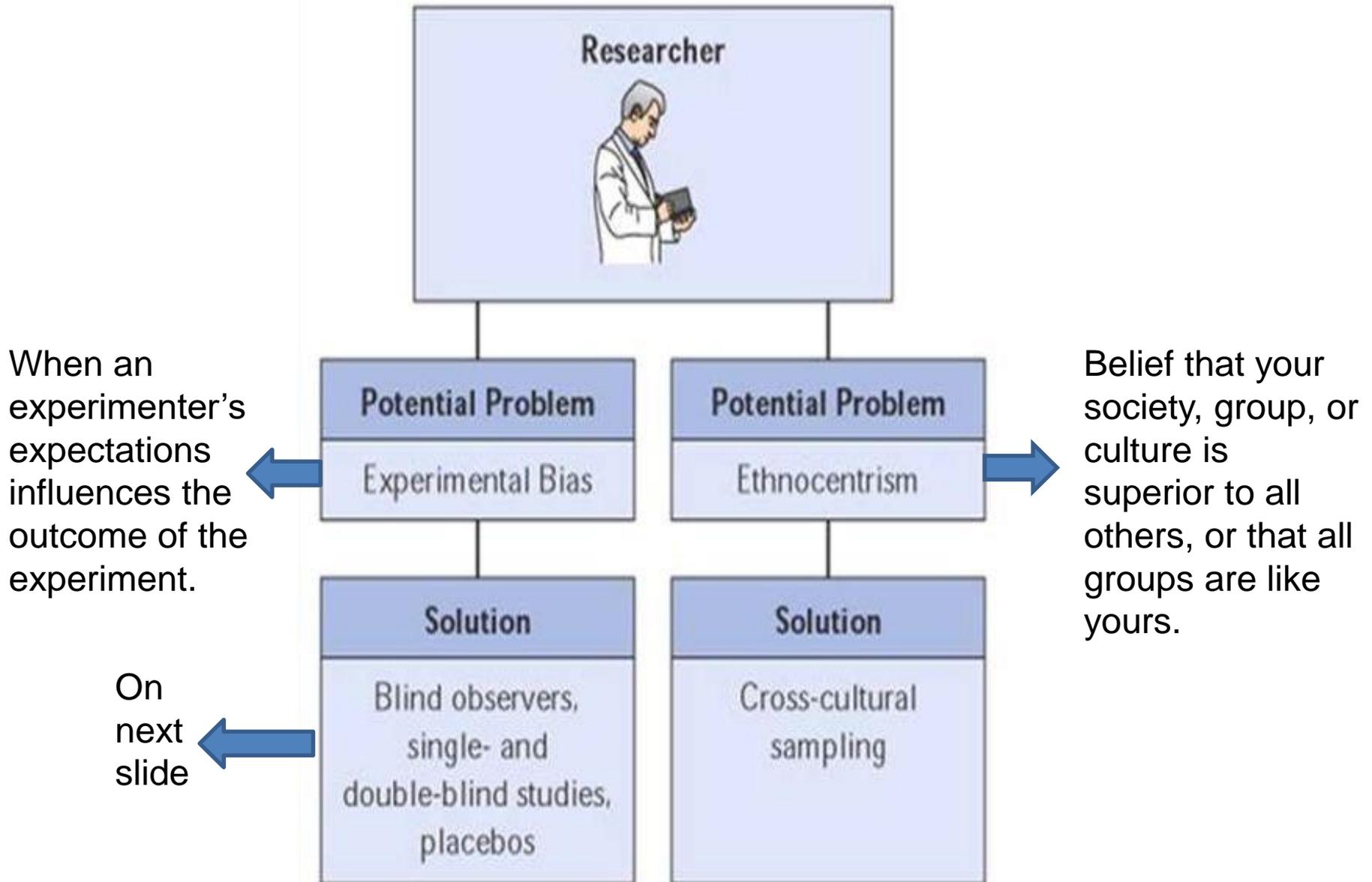
Whether the lights were brighter or dimmer, production went up in the Hawthorne electric plant.

Hawthorne Effect

FOR EXAMPLE, if a school principal observes a classroom of students reacting politely and enthusiastically to a new student teacher, can he be sure that the students are behaving appropriately because the teacher is excellent?



Potential Researcher Problems:



Potential Researcher Problem Solutions:



- *Researchers may choose to employ:*

BLIND OBSERVERS: Neutral people other than the researcher, who are not invested in the outcome.

- *Researchers may choose to run a*

SINGLE-BLIND STUDY:

Either the researcher or the subject do not know which group received the experimental treatment.

DOUBLE-BLIND STUDY:

The researchers and the subject do not know which group received the experimental treatment.

- *Researchers may choose to include a*

PLACEBO: Inactive substance or fake treatment used as a control.

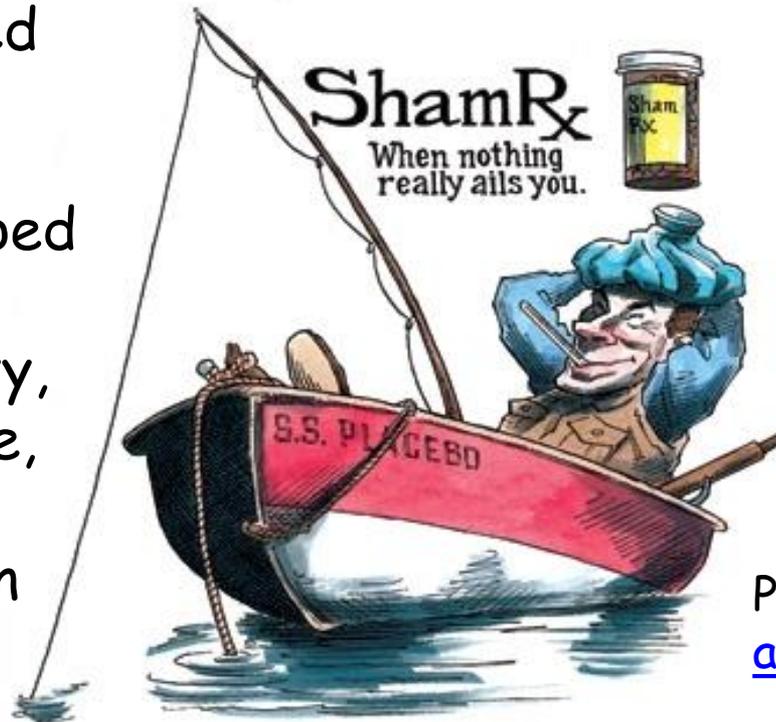


The Placebo Effect

Refers to an improvement in symptoms as a result of medical treatment with an inactive substance or staged medical procedure.

Placebos have helped alleviate pain, depression, anxiety, Parkinson's disease, inflammatory disorders and even cancer.

Conscious Belief +
subconscious associations
= relief from symptoms



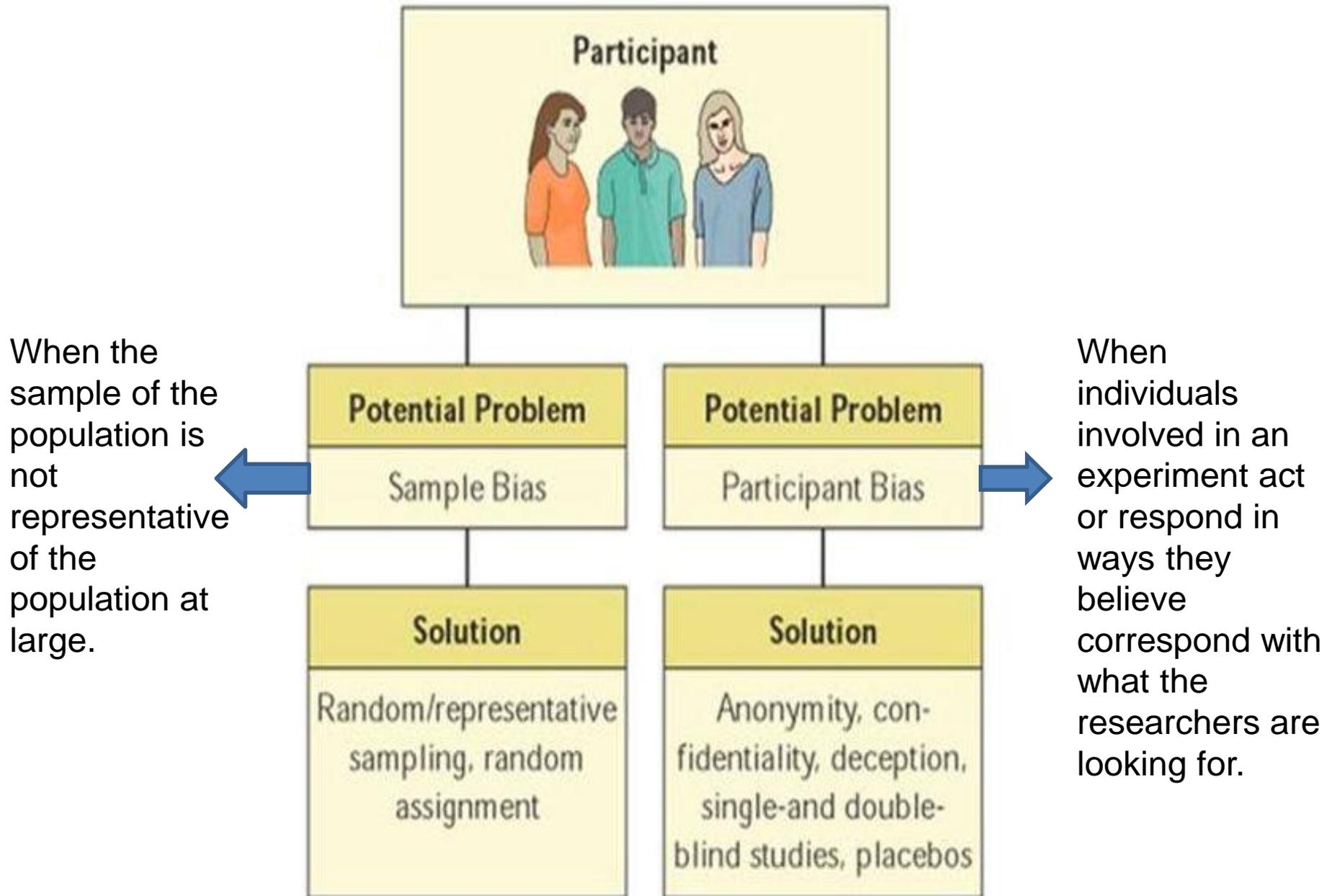
- Up to 58% of US physicians prescribe placebos, according to a study by the NIH.
- 62% believe prescribing placebos is ethical.

Penn and Teller - [alternative medicine](#)

The Placebo Effect – sham surgery



Potential Participant Problems:



What is the: IV? DV? Control V? Potential Confounding V?

- A researcher was interested in the effects of reward on intrinsic motivation.
- Some children were told that they would be given a special award for drawing with magic markers (an activity they already enjoyed). Other children were simply asked to draw with the magic markers.
- One week later, the children were unobtrusively observed for how much time they spent drawing with the markers.
- The children who expected and received a reward for drawing with the markers were less likely to draw with them later.

What is the: IV? DV? Control V? Potential Confounding V?

- Within a classroom setting, subjects were asked to listen to a guest instructor.
- All subjects were given a description of the instructor.
- Some subjects read a description containing the phrase “People who know him consider him to be a rather cold person...”, while other people read a description where the word “warm” was substituted for the word cold (otherwise, the descriptions were identical).
- After the lecture, subjects were asked to rate the instructor.
- Subjects who were told the instructor was warm gave him more favorable ratings compared to subjects who were told that the instructor was cold.