

# IDENTIFY BIASES

The chart below provides an overview of the most common types of bias that can occur in communication sciences and disorders (CSD) research. Use the questions to determine whether the authors took steps to mitigate bias in their research.

Questions	Potential Impact	How to mitigate bias	Questions to ask yourself
<b>Selection bias:</b> when the study participants differ from the group of people investigators want to study	Participants may not represent the target population making results less applicable	Ensure study participants meet clearly defined criteria from the same general population they wish to study	Do the authors specify how the participants were recruited?
<b>Treatment assignment bias:</b> when experimental groups have significantly different characteristics due to a faulty assignment process	Outcomes may be due to inherent differences between the groups, not the treatment	Randomization, Allocation Concealment	Do the authors explain how participants were chosen for experimental and control groups?
<b>Performance bias:</b> when study participants know whether they've been assigned to the experimental or control group	Participants can change their responses or behavior if they know which group they are in	Blind participants	Did the authors ensure that the participants were unaware if they were receiving the treatment under investigation or a placebo (blinded)
<b>Detection bias:</b> when assessors know the participant's group assignment	Assessor may rate participants in one group differently than the other	Blind assessing and/or treating clinicians	Did the authors ensure that the clinicians assessing the study outcomes were blinded as to who received treatment or a placebo?
<b>Attrition bias:</b> when participants leave a study prior to its completion, leading to incomplete outcomes data	Outcome effect may be due to one treatment being more burdensome	Perform an Intention to Treat Analysis	Were all of the patients who entered the trial properly accounted for at its conclusion?
<b>Selective reporting:</b> when authors choose to report incomplete outcomes or analyses	Study doesn't tell the whole story and provides only one side of the real evidence	Authors report all outcomes whether positive, negative or neutral	Were all results reported regardless of their effect?