

# Glossary of Terms in Research and Bias

A

**Algorithmic bias:**

Computational process that makes a decision or facilitates human decision making, often accompanied by unintended social consequences.

**Anchoring:**

Psychological phenomena where respondents are overly dependent on an initial piece of information to influence subsequent decision-making.

C

**Cognitive bias:**

Valuing subjective interpretation over logic or reason based decision making; A pattern in perception, interpretation, or judgment that consistently leads to an individual misunderstanding something about themselves or their social environment, causing poor choices or irrational decision-making.

**Confirmation bias:**

Tendency to seek out and interpret information that confirms one's preexisting beliefs.

F

**Filter bubble:**

Phenomenon in which websites use algorithms to selectively guess what information a user would like to see, based on information about the user such as location, past click behaviour, and search history. As a result, websites tend to show only information which

agrees with the user's past viewpoint, effectively isolating the user in a bubble that tends to exclude contrary information.

H

**Halo effect:**

A faulty assumption in which a characteristic or feature is universally applied to a specific performance or achievement without justification or merit; Often linked to a subjective perception of “good” or “bad,” and a common condition in the creation and reinforcement of stereotypes.

I

**Institutional bias:**

Prejudices and discriminatory practices that lead to inequality across social groups in educational, political, economic, religious, or legal institutions. Reflected in practices or policies maintained at an institutional level. Can be intentional (such as excluding gays and lesbians from military service) or unintentional (such as the absence of affordable, high-quality groceries in some urban neighborhoods—so-called food deserts).

R

**Response bias:**

Conditions or factors that take place during the process of responding to surveys, affecting the way responses are provided. Includes recall bias, loaded questions, question order bias, and social desirability.

S

**Sampling bias:**

Process of gathering data from respondents in which a population is either overrepresented or underrepresented; Can be caused by flaws in the design of a study's information gathering process.

**Selection bias:**

When data reflecting a subset of the population is then used to make conclusions about the population as a whole; Caused by flaws in the methods used to interpret data.

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