

Three Levels of Scientific Understanding



Description

- Facts that are derived from systematically **observed** events.
- Facts that *can* be quantified and classified to help us test for possible relationships.

Example: George hugged his mom 5x today and each time he hugged her she gave him a kiss on the forehead.

Prediction

- When **repeat** observations show that there is a consistent relationship between the occurrence of two events.
- Think **CORRELATION**

Example: Strong correlation between hot weather and an increase in drowning deaths.

Control

HIGHEST LEVEL!

- A **functional relationship** exists
- Manipulating one event (IV) results in the change in another event (DV) and this change can *only* be attributable to the independent variable. Think **CAUSATION**.

Example: A behavior intervention (IV) reliably causes tantrum behavior (DV) to decrease.

