

Tips for Behavior-Over-Time Graphs (BOTGs)

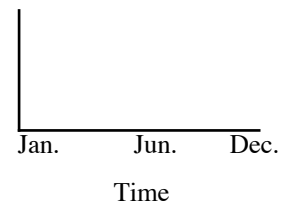
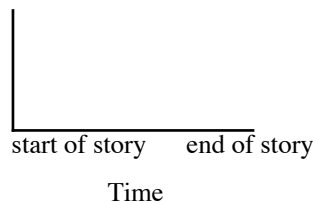
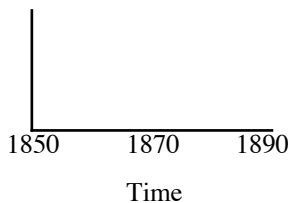
Behavior-Over-Time Graphs (BOTGs): A BOTG is a simple tool that can help people focus on patterns of change over time rather than on isolated events, leading to rich discussions on how and why something is changing. BOTGs focus on trends.

1. A BOTG is a basic line graph showing the trend, or pattern of change, of a variable over time.

2. The X axis:

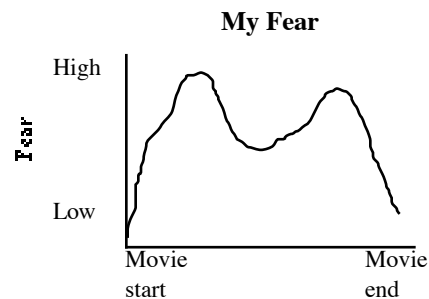
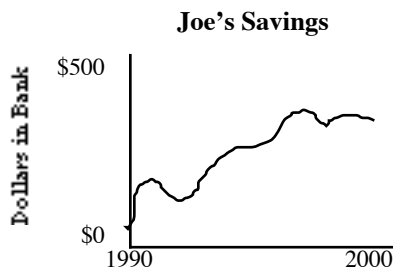
- is **always** labeled in units of time or can reflect change in time.
- has defined beginning and ending points; the precision of the definition can meet your specific purpose.

Care should be taken to explain the logic for the time scale. Why does it start and end where it does? Examination of when and where a particular pattern of behavior starts, ends, or changes direction is also important.



3. The Y axis:

- clearly identifies the variable being graphed and **must** be labeled with that variable's name.
- should not include qualitative words such as more, less, increasing, bigger, etc., in the variable's name; for example, it's difficult to understand "more fear" decreasing over time.
- may represent "concrete" variables (quantities such as population or temperature) or "abstract" variables (like love or stress).
- must have a defined scale. Scales can be numeric (e.g., 2 to 1000 rabbits or "on a scale of 0 to 100...") or descriptive (e.g., low vs. high).



4. Different interpretations of the behavior of the variable are definitely possible. Both similarities and differences among graphs are grounds for rich discussion about individual interpretations or mental models.
5. More than one variable can be plotted on the same graph to compare them for possible interdependence or causal relationships between variables. Differentiate between the lines with careful labeling or the inclusion of a key. This step can contribute to thought-provoking discussions.