# **Template for Reading and Taking Notes on Research Articles (Limit yourself to 1 page of notes!)**

**REFERENCE FOR THE ARTICLE KEY TAKEAWAY**

**Introduction:** *What is the topic of this paper? Why is this study important?*

* Visual characteristics affect speed, accuracy, difficulty, and retention of graphs
* This article is about the use of 3D for adding depth cues, not conveying extra information

**Literature Review:** *What is already known about this topic? What do we need to know about this topic?*

* 3D adds visual complexity without adding information, which is where it should not be used for depicting precise values (Kosslyn 1985; Tufte 1983; Wainer 1984)
* Spence (1990) concluded that dimensionality did not affect accuracy, but types of graphs in study may have influence results
* Extraneous depth cues to be associated with lower accuracy (Carswell, Frankenbergeer, & Bernhard 1991). Differences found with lines/planes, but not for bar and pie charts with/without shading
* Distortions from color, angle, size, and orientation (Goldstein 1989; Howard1982).

**Theoretical Framework:** *Is this study a test of a specific theory or hypothesis? Is the methodology of the study guided by a specific theory?*

* Does adding depth cues to a graph lower viewers’ accuracy for reading that graph?
* If there is lower accuracy, is this lower accuracy due to depth-cue combination or is it simply a result of adding extraneous markings to a figure
* What is the relative importance of the addition of depth cues compared with the relationship between the judged data elements and the graphical context
* How do effects on perception combine with encoding and storage to influence later judgement

**Methods:**

*What type of data were collected and how were these data collected?*

* Ratios 1:1, 1:2, 1:3, 1:4, 1:5 with a fixed 22mm

*Sample (unit of analysis, size and key characteristics):*

* 40 undergraduates in an introductory psychology course

*How were key variables measured?*

*How were the data analyzed?*

**Results:** *What were the most important findings? Was the theory/hypothesis supported or not? Were there any surprising/unexpected findings?*

**Conclusions:** *What are the implications of this study for policy and for research? What were the limitations of the study? What should future researchers do?*