



Psychology as Science

The slide features a green background with a small icon of laboratory glassware in the top left corner and a colorful image of a brain in the center.

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**Ways of knowing :**

- Tenacity - repetitive claims (adverts).
- Authority - font of truth (dictionary).
- Experience - direct observation (Tampa weather is hot).
- Reason & Logic - deduction (Men are stupid, Mike is a man. Therefore Mike is stupid).
- Science - set of procedures to provide a convincing argument.

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Tenacity - repetitive claims (adverts).



The slide shows a person sitting on the floor in a dark room, looking at a glowing television screen that displays the McDonald's logo.

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Authority - font of truth (dictionary).



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Experience - direct observation (Tampa weather is hot).



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Reason & Logic - deduction (Men are stupid, Mike is a man. Therefore Mike is stupid).



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Science - set of procedures to provide a convincing argument.



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Review Ways of Knowing:

- Tenacity 
- Experience 
- Authority 
- Reason & Logic 

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Components of the Scientific Method

- Objectivity - free from bias (multiple choice vs. essay) 
- Quantification - numbers (72 inches) 
- Replication - study is repeated (SAT & GPA) 
- Self-Correction - share data (rebuttals are published) 

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### Components of the Scientific Method

- Control 
  - 1- By manipulation of things of interest (amount of drugs or training).
  - 2- By elimination of unwanted factors (random assignment).

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### Components of the Scientific Method

> The scientific method rocks: ROCQS



> Replication, objectivity, control, quantification, self-correction

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### The Psychological Experiment

- Independent Variable - the cause (reinforcement schedule) 
- Dependent Variable - the effect (rats caught per hour) 
- Extraneous Variables - nuisance variables (sex of experimenter) 

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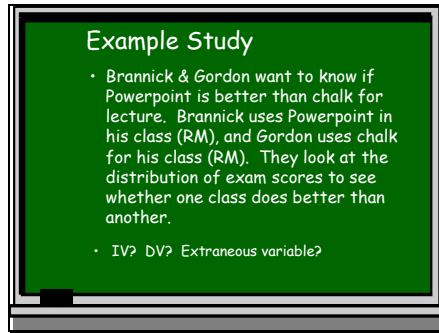
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### Example Study

- Brannick & Gordon want to know if Powerpoint is better than chalk for lecture. Brannick uses Powerpoint in his class (RM), and Gordon uses chalk for his class (RM). They look at the distribution of exam scores to see whether one class does better than another.
- IV? DV? Extraneous variable?

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