

# INTERPRETING FINDINGS

ANALYZING AND UNDERSTANDING DATA  
FOR PROGRAM EVALUATION

Jacob Campbell, LICSW  
Heritage University

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SOWK 460



# **THE BLIND MEN AND THE ELEPHANT**

**BY JOHN G. SAXE (READ BY TOM O'BEDLAM)**

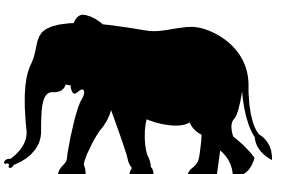
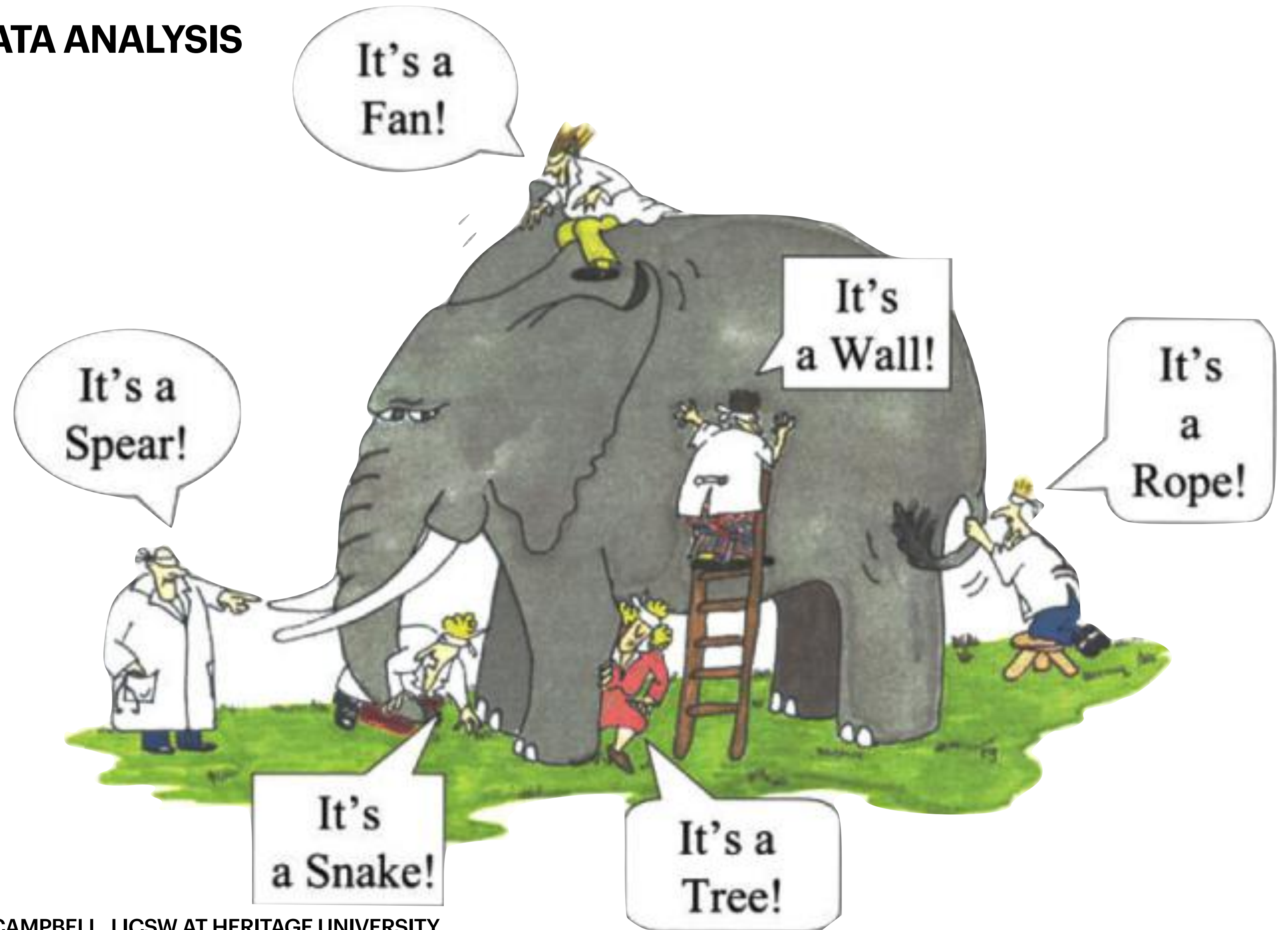
**[HTTPS://YOUTU.BE/BJVbQEFNXiW](https://youtu.be/BJVbQEFNXiW)**



# THE BLIND MEN AND THE ELEPHANT

A PARABLE AND CONNECTION WITH DATA ANALYSIS

They all all touched different parts of the elephant and believed that they were



# AGENDA

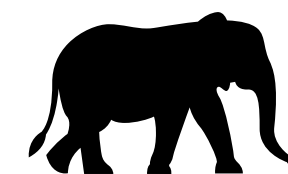
PLAN FOR CLASS TIME

What is the purpose of data analysis

Scales of measurement

Types of calculation

How we implement it for program evaluation



# PURPOSE OF DATA ANALYSIS

## WHY DO WE DO THIS?

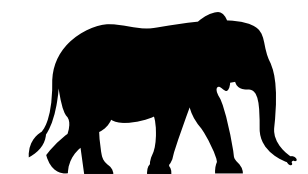
**DESCRIBE AND SUMMARIZE THE DATA**

**IDENTIFY RELATIONSHIPS BETWEEN VARIABLES**

**COMPARE VARIABLES**

**IDENTIFY THE DIFFERENCE BETWEEN VARIABLES**

**FORECAST OUTCOMES**



# SCALES OF MEASUREMENT

**D**ata can be classified into a non-numerical or named categories, and the order in which these categories can be written or asked is arbitrary.

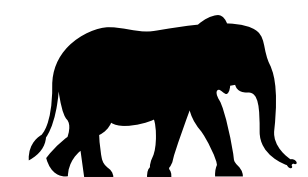
NOMINAL  
SCALE

**T**he data can be classified into non-numerical or named categories an inherent order exists among the response categories. Ordinal scales are seen in questions that call for ratings of quality (for example, very good, good, fair, poor, very poor) and agreement (for example, strongly agree, agree, disagree, strongly disagree).

ORDINAL  
SCALE

**W**here numbers represent the possible response categories there is a natural ranking of the categories zero on the scale has meaning there is a quantifiable difference within categories and between consecutive categories.

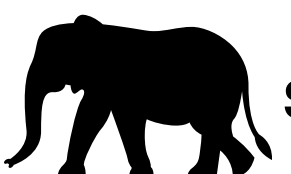
NUMERICAL  
SCALE



# TYPES OF CALCULATION

## METHODS USED TO CALCULATE DATA

- Count (frequencies)
- Percentage
- Mean (average)
- Mode (number of times)
- Median (middle number)
- Range
- Standard deviation (amount of change)
- Cross tabulation (comparative)
- Change score (pretest / post test)
- Quantitative analysis (SPSS)



# **SO WHERE DO WE GO FROM HERE?**

**What kind of data have you collected**

**How are you analyzing it**

**Technical support**