

PASW-SPSS STATISTICS

- David P. Yens, Ph.D.
- New York College of Osteopathic Medicine, NYIT dyens@nyit.edu
- **PRESENTATION 1**
 - **Introduction to SPSS**
 - **Entering Data**
 - **Determining Number of Subjects**
 - **G-Power**





INTRODUCTION TO SPSS

Characteristics of the Program

Help facilities

Entering Data

- Direct entry

- Entry through EXCEL

SAMPLE PROBLEM

HAIR GROWTH, DRUG VS PLACEBO			
DRUG		PLACEBO	
SUBJECT	# HAIRS	SUBJECT	# HAIRS
1	12	6	5
2	14	7	10
3	28	8	20
4	3	9	2
5	22	10	12

SAMPLE STUDY

- This study will assess the movement of lower incisors during leveling and aligning.
- Patients with moderate to severe crowding of the lower incisors will receive low level laser therapy and comprise the study group.
- The control group will consist of patients with moderate to severe crowding of lower incisors who will not receive low level laser therapy.
- **EXPECTATION TO TEST (use t-test)**
 - Movement of laser group: Mean = 2.5 mm, sd = .5
 - Movement of control group: Mean = 2 mm, sd = .5
 - **How many subjects are needed to test difference?**

EFFECT SIZE

- The EFFECT SIZE is like a z-score; it tells you how large the difference is in sd units. It's used in computing the sample size for an experimental study, but it is also used to compare the effects of multiple studies – it permits a basis of comparison.
- Different computations are used for each statistical method.

G-POWER

- **Access to GPower:**
- <http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register>