

Topic: Easy Power Calculations in G*Power!

  sas, & More!



Welcome to Today's Lecture!

Today's Lecture

- G*Power for calculating sample size
- Demonstration of one use-case

Explore our online learning resources!

Visit us: <https://buff.ly/45amjaQ>

- Online tutorials
- Video demonstration
- Online courses
- Mentoring program
- ...and more!



What is G*Power?

- G*Power is a standalone application you download and install that is ONLY for doing power calculations.
- Advantages
 - Interface helps you be sure you are correct
 - Does all kinds of power calculations
- Disadvantages
 - Very manual
 - Need to be careful about keeping documentation

G*Power Resources

Download G*Power here:

<https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower>

Blog post with explanation:

<https://dethwench.com/gpower-case-example-shows-how-to-calculate-sample-size/>

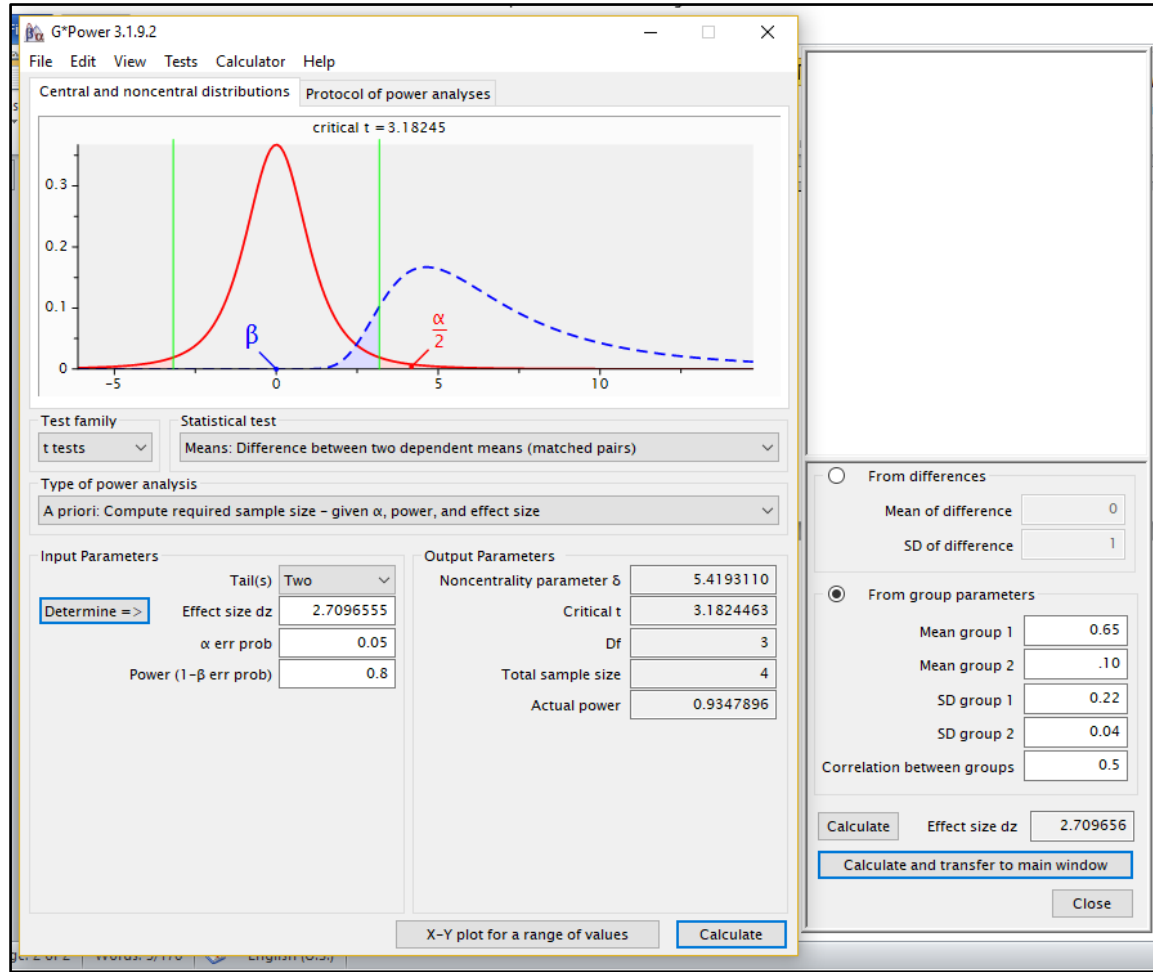
GitHub (spreadsheet):

<https://github.com/DethWench/Doing-the-data/tree/main/GPower%20Case%20Example>



Scenario

- Bleeding on probing (BOP) is an oral health measure
- Happens in gingivitis
- 6 sites on each tooth – BOP (yes/no)
- In the end, you have a proportion
- BOP = 0.75 means 75% of the sites bled
- CX (chlorhexidine mouthwash) can help, but stains teeth, adverse taste
- NSM (natural mouthwash) was comparison
- Outcome: BOP



BOP

- Data on another measure and BOP were collected through a pilot study of 25 people with gingivitis and 26 people without it to help us with means and sd's for sample size calculations
- We used the “**determine**” function (**see button on center pane, with pane to the right extended**) to have GPower calculate effect size for us based on pilot data we entered into the right pane.
- I took a screen shot and put it in Word – easier to see.



Questions?

Facilitator: Monika M. Wahi, MPH, CPH

Email:
dethwench@gmail.com

Blog:
<https://dethwench.com/blog/>

LinkedIn:
<https://www.linkedin.com/in/dethwench/>

Explore our online learning resources!

Visit us: <https://buff.ly/45amjaQ>

- Online tutorials
- Video demonstration
- Online courses
- Mentoring program
- ...and more!