

Re: What kind of test can I use?

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On Tue, 07 Aug 2007 20:57:46 -0700, ihorganization@xxxxxxxxxxx wrote:

Hello, and thanks for helping me out.

I need to figure out what kind of test, if any, I can use to reject/not reject a hypothesis.

The data concerns one individual at two different times. Thus the data, I assume, is not independent.

The first set of data was obtained through observation of behaviors outwardly expressed by an individual during sleep in standard conditions. The second set of data was obtained through observation again, but after the individual was placed on medication. Again, the total amount of time over 7 nights a behavior was observed was divided by the total amount of sleep over 7 nights to get a percent of how much, on average, per night, an activity was performed.

What test can I run to see if there is a significant difference in the amounts of each of the motions using only the averages (percentages) and the total number of instances each behavior was observed over 7 nights.

I guess what I'm looking for is a test that can compare the differences in averages only (thus there is no standard deviation to use) but also take into account the number of instances that were used to come up with the average to see if there's a significant difference.

[snip, example]

Well, that is a bad idea, comparing averages with no s.d.

Your best start might lie in plotting behaviors across 14 nights, or even, across the hours for 14 nights.

I have had experience in modeling drug intervention and its effect on sleep EEG. This was for patients whose

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depression gave them unusual sleep at the start, and whose drug treatment had large effects. -- There were several patterns seen for different sleep-variables --

- 1) No change.
- 2) A immediate drop/jump, with the next nights showing
 - a) further change;
 - b) no further change; or
 - c) rebound back toward the original;
- 3) Gradual change after the start of drug (usually, in a 'normalizing' direction... but that would be interesting).

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