

Clinical Epidemiology

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QUIZ 17

In nearly every research paper and poster ever published or presented in a health sciences field, there is a Table 1. What purpose does Table 1 serve? What 4 SPSS tests are commonly done to populate that table with numbers?

If you're comparing two *different* groups of people in a continuous variable, what test do you use? If you're comparing the *same* group of people (on that same continuous variable) on two separate occasions, what test do you use?

Here is an SPSS output:

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
power_mean	Equal variances assumed	91.262	.000	6.072	926	.000	33.7084119	5.55189813	22.8126501 44.6041737
	Equal variances not assumed			6.805	915.595	.000	33.7084119	4.95319449	23.9874789 43.4293450
rangeOfMotion_mean	Equal variances assumed	.883	.348	3.688	926	.000	.020681646	.005608277	.009675239 .031688052
	Equal variances not assumed			3.848	866.994	.000	.020681646	.005374543	.010133009 .031230282
consistency_mean	Equal variances assumed	.610	.435	-.205	926	.837	-.19573226	.953294252	-2.0666000 1.67513547
	Equal variances not assumed			-.209	806.094	.835	-.19573226	.938403100	-2.0377343 1.64626974

There are three dependent variables being analyzed: power, range of motion, and consistency. Which of those variables meet Levene's test? Which of those variables are considered a "significant" finding?

Consider the Pearson correlation coefficient (reported as “r”). What does a positive r mean? What does a negative r mean?



Gun control has been a passionate political topic for a long time. Pro-gun and anti-gun organizations constantly report statistics about gun ownership and violence. What kind of research is this? (Hint: what's the name of the class?)