

Table 32-3 Test-Retest Reliability Results for Grip Strength in Patients with Carpal Tunnel Syndrome

```
RELIABILITY
/VARIABLES=trial1 trial2
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=MEANS
/ICC=MODEL(RANDOM) TYPE(ABSOLUTE) CIN=95 TESTVAL=0.
```

Reliability

Run using Scale > Reliability Analysis > Statistics: Intraclass Correlation Coefficient / ANOVA table: F test / Model: Two-Way Random / Type: Absolute Agreement-- Used to calculate SEM based on test-retest

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	50	100.0
	Excluded ^a	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.950	.954	2

Item Statistics

	Mean	Std. Deviation	N
trial1	66.0800	15.03715	50
trial2	66.5400	13.19432	50

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	66.310	66.080	66.540	.460	1.007	.106	2

ANOVA

		Sum of Squares	df	Mean Square	F	Sig
Between People		18668.890	49	380.998		
Within People	Between Items	5.290	1	5.290	.275	.602
	Residual	941.210	49	19.208		
	Total	946.500	50	18.930		
Total		19615.390	99	198.135		

Grand Mean = 66.3100

Intraclass Correlation Coefficient

	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.905 ^a	.839	.945	19.835	49	49	.000
Average Measures	.950	.912	.972	19.835	49	49	.000

Two-way random effects model where both people effects and measures effects are random.

- a. The estimator is the same, whether the interaction effect is present or not.
- b. Type A intraclass correlation coefficients using an absolute agreement definition.