

## Hypothesis 2

**Null Hypothesis** – There is no difference in reaction of congruent and Incongruent In shape trials

**Alternate Hypothesis** – Reaction time for both conditions are different

User ID	Timestamp Congruent(Tc)	Timestamp Incongruent in Color(Tic)
20fvibi	0.701414142336164	0.759372419781155
21fbhpa	0.715829908847809	0.773336437013414
21mberi	0.737153023481369	0.831003487110138
22faneb	1.01714502440559	1.48532581329346
22frabh	0.796569973230362	0.892683476209641
22mrnsa	1.23650781313578	1.28582354954311
23fanbo	1.56048199108669	1.38691058754921
23fmnlb	1.29359588027	1.116103717259
23mzura	0.638401955366135	0.677987337112427
24fbada	0.680468618869782	0.778752148151398
24fragi	1.15723178386688	1.15416808923086
24masva	1.12637368837992	1.06159222126007
24mdera	1.26073053148058	1.48689116750445
24myosa	0.738254891501533	0.663255555289132
25fanpa	0.83999091386795	0.964410960674286
25fiswe	1.18492162227631	1.51734442181057
25fnasa	0.644324806001451	0.72440310886928
25madsa	0.696796655654907	0.641776740550995
25maksh	0.691549628973007	0.799093157052994
25mminn	1.18981271319919	1.24764067786081
25mrrais	0.833065748214722	0.83876359462738
26fchsa	0.81779932975769	0.767439216375351
26fkagu	1.11163404252794	1.27623748779297
26mpnko	1.40243053436279	1.55807241797447
27fclis	1.30571934580803	0.951091527938843
27fumra	0.928006308419364	1.20176169607374
27madgo	1.32911940983364	1.67446941799588
28fhefa	1.05376476711697	1.12266480922699
28mobal	1.28215364047459	1.6049884046827
29mstba	0.986896485090256	1.1712567125048

### Paired t-test

Alpha 0.05

Hypothesized Mean Differenc 0

	Incongruency in Color	Congruent Trials
Mean	1.08048734527732	0.998604839261247
Variance	0.100592973025768	0.071774077452225
Observations	30	30
Pearson Correlation	0.84257810650903	
Observed Mean Difference	0.081882506016071	
Variance of the Differences	0.029178663298814	
df	29	
t Stat	2.62554252534201	
P (T<=t) one-tail	<b>0.006833224858077</b>	
t Critical one-tail	1.6991270265335	
P (T<=t) two-tail	0.013666449716155	
t Critical two-tail	2.0452296421327	

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