Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
pledC - ledC	Negative Ranks	2[a]	1.75	3.50
	Positive Ranks	1[b]	2.50	2.50
	Ties	7[c]		
	Total	10		
motorC - ledC	Negative Ranks	1[d]	2.00	2.00
	Positive Ranks	2[e]	2.00	4.00
	Ties	7[f]		
	Total	10		
imotorC - ledC	Negative Ranks	3[g]	2.67	8.00
	Positive Ranks	1[h]	2.00	2.00
	Ties	6[i]		
	Total	10		
thermalC - ledC	Negative Ranks	0[j]	.00	.00
	Positive Ranks	5[k]	3.00	15.00
	Ties	1[l]		
	Total	6		
audioC - ledC	Negative Ranks	2[m]	3.50	7.00
	Positive Ranks	4[n]	3.50	14.00
	Ties	4[o]		
	Total	10		
motorC - pledC	Negative Ranks	1[p]	5.00	5.00
	Positive Ranks	4[q]	2.50	10.00
	Ties	5[r]		
	Total	10		
imotorC - pledC	Negative Ranks	1[s]	2.00	2.00
	Positive Ranks	1[t]	1.00	1.00
	Ties	8[u]		
	Total	10		
thermalC - pledC	Negative Ranks	0[v]	.00	.00
	Positive Ranks	5[w]	3.00	15.00
	Ties	1[x]		
	Total	6		
audioC - pledC	Negative Ranks	1[y]	1.50	1.50
	Positive Ranks	3[z]	2.83	8.50
	Ties	6[aa]		
	Total	10		

Ranks

		N	Mean Rank	Sum of Ranks
imotorC - motorC	Negative Ranks	4 ab	2.50	10.00
	Positive Ranks	0 ac	.00	.00
	Ties	6 ad		
	Total	10		
thermalC - motorC	Negative Ranks	0 ae	.00	.00
	Positive Ranks	6 af	3.50	21.00
	Ties	0 ag		
	Total	6		
audioC - motorC	Negative Ranks	3 ah	3.50	10.50
	Positive Ranks	4 ai	4.38	17.50
	Ties	3 aj		
	Total	10		
thermalC - imotorC	Negative Ranks	0 ak	.00	.00
	Positive Ranks	6 al	3.50	21.00
	Ties	0 am		
	Total	6		
audioC - imotorC	Negative Ranks	1 an	1.50	1.50
	Positive Ranks	4 ao	3.38	13.50
	Ties	5 ap		
	Total	10		
audioC - thermalC	Negative Ranks	6 aq	3.50	21.00
	Positive Ranks	0 ar	.00	.00
	Ties	0 as		
	Total	6		

a. pledC < ledC

b. pledC > ledC

c. pledC = ledC

d. motorC < ledC

e. motorC > ledC

f. motorC = ledC

g. imotorC < ledC

h. imotorC > ledC

i. imotorC = ledC

j. thermalC < ledC

k. thermalC > ledC

l. thermalC = ledC

m.

m. audioC < ledC

n. audioC > ledC

o. audioC = ledC

p. motorC < pledC

q. motorC > pledC

r. motorC = pledC

s. imotorC < pledC

t. imotorC > pledC

u. imotorC = pledC

v. thermalC < pledC

w. thermalC > pledC

x. thermalC = pledC

y. audioC < pledC

z. audioC > pledC

aa. audioC = pledC

ab. imotorC < motorC

ac. imotorC > motorC

ad. imotorC = motorC

ae. thermalC < motorC

af. thermalC > motorC

ag. thermalC = motorC

ah. audioC < motorC

ai. audioC > motorC

aj. audioC = motorC

ak. thermalC < imotorC

al. thermalC > imotorC

am. thermalC = imotorC

an. audioC < imotorC

ao. audioC > imotorC

ap. audioC = imotorC

aq. audioC < thermalC

ar. audioC > thermalC

as. audioC = thermalC

Test Statistics[a]

	pledC - ledC	motorC - ledC	imotorC - ledC	thermalC - ledC
Z	-.272[b]	-.577[c]	-1.134[b]	-2.041[c]
Asymp. Sig. (2-tailed)	.785	.564	.257	.041

Test Statistics[a]

	audioC - ledC	motorC - pledC	imotorC - pledC	thermalC - pledC
Z	-.750[c]	-.707[c]	-.447[b]	-2.041[c]
Asymp. Sig. (2-tailed)	.453	.480	.655	.041

Test Statistics[a]

	audioC - pledC	imotorC - motorC	thermalC - motorC	audioC - motorC
Z	-1.300[c]	-2.000[b]	-2.226[c]	-.632[c]
Asymp. Sig. (2-tailed)	.194	.046	.026	.527

Test Statistics[a]

	thermalC - imotorC	audioC - imotorC	audioC - thermalC
Z	-2.214[c]	-1.656[c]	-2.214[b]
Asymp. Sig. (2-tailed)	.027	.098	.027

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.