

Table S2. Statistical comparison of interaction methods on each quality dimension (multi-user study); *adjusted p-value.

Dimension	Interaction Methods [Median]					Results		
	Auto.	Cross.	Voice.	Gest.	Posit.	Outcome	Z-Value	P-value*
Accuracy	4.5	5	1	2	4	Auto > Gest	-3.328	0.009
						Auto > Voice	-3.825	0.001
						Cross > Gest	-3.443	0.006
						Cross > Voice	-3.825	0.001
						Gest > Voice	-2.971	0.030
						Posit > Gest	-3.349	0.008
						Posit > Voice	-3.831	0.001
Ease of Use	4	4.5	1.5	2	4	Auto > Gest	-3.342	0.008
						Auto > Voice	-3.552	0.004
						Cross > Gest	-3.626	0.003
						Cross > Voice	-3.647	0.003
						Posit > Gest	-3.579	0.003
						Posit > Voice	-3.439	0.006
Speed	4.5	5	1	2	4	Auto > Gest	-3.581	0.003
						Auto > Voice	-3.758	0.002
						Cross > Gest	-3.590	0.003
						Cross > Voice	-3.769	0.002
						Gest > Voice	-3.066	0.022
						Posit > Gest	-3.597	0.003
						Posit > Voice	-3.773	0.002
Learnability	4.5	5	4	3	5	Auto > Gest	-3.194	0.014
						Auto > Voice	-3.086	0.020
						Cross > Gest	-3.204	0.014
						Posit > Gest	-3.448	0.006
						Posit > Voice	-3.228	0.012
Fun	3	3	2.5	4	4	Posit > Auto	-2.980	0.029
						Posit > Voice	-3.316	0.009
Multi-Selection	5	5	2	2.5	4	Cross > Gest	-3.104	0.019
						Cross > Voice	-3.097	0.020
Modification	4	5	1	2	4	Auto > Gest	-2.845	0.044
						Auto > Voice	-3.367	0.008
						Cross > Gest	-3.586	0.003
						Cross > Voice	-3.676	0.002
						Cross > Posit	-2.946	0.032
						Posit > Gest	-2.996	0.027
						Posit > Voice	-3.235	0.012
Awkwardness	5	4.5	1	2	4	Auto > Gest	-3.250	0.012
						Auto > Voice	-3.552	0.004
						Cross > Gest	-3.259	0.011
						Cross > Voice	-3.552	0.004
						Posit > Voice	-3.559	0.004
Shared Interaction	5	5	2	1	2	Auto > Gest	-3.763	0.002
						Auto > Voice	-3.649	0.003
						Auto > Posit	-3.552	0.004
						Cross > Gest	-3.675	0.002
						Cross > Voice	-3.548	0.004
						Cross > Posit	-3.434	0.006
Privacy Concern	4	4	3	4	4	Auto > Voice	-3.082	0.021
						Cross > Voice	-2.958	0.031
Social Engagement	2	2.5	3	3	3			
Overall Rating	4	5	1	2	4	Auto > Gest	-3.184	0.015
						Auto > Voice	-3.787	0.002
						Cross > Gest	-3.234	0.012
						Cross > Voice	-3.787	0.002
						Gest > Voice	-3.401	0.007
						Posit > Voice	-3.779	0.002