

**Between-Subjects Factors**

		N
Device	Normal	591
	tPad	591
Method	Clipped	612
	Normal	570
Size	Half	391
	Quarter	406
	ThreeQuarters	385
Participant	P1	108
	P10	108
	P11	108
	P12	45
	P2	108
	P3	108
	P4	107
	P5	88
	P6	102
	P7	90
	P8	102
	P9	108

# Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDevice

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	4.000E8	1	4.000E8
	Error	2079339.219	11.445	181677.588 <sup>a</sup>
Device	Hypothesis	6232676.080	1	6232676.080
	Error	2166507.015	10.423	207860.495 <sup>b</sup>
Method	Hypothesis	6.973E7	1	6.973E7
	Error	2159565.959	11.723	184215.137 <sup>c</sup>
Size	Hypothesis	3953567.927	2	1976783.963
	Error	3041887.289	22.745	133739.454 <sup>d</sup>
Participant	Hypothesis	1990038.560	11	180912.596
	Error	545479.716	2.559	213149.994 <sup>e</sup>
Device * Method	Hypothesis	4095919.377	1	4095919.377
	Error	2151875.526	10.456	205802.109 <sup>f</sup>
Device * Size	Hypothesis	438341.889	2	219170.945
	Error	2827592.082	19.862	142361.326 <sup>g</sup>
Device * Participant	Hypothesis	2085611.688	10	208561.169
	Error	807188.699	4.332	186315.355 <sup>h</sup>
Method * Size	Hypothesis	3836542.454	2	1918271.227
	Error	2724762.927	21.188	128600.998 <sup>i</sup>
Method * Participant	Hypothesis	2021713.612	11	183792.147
	Error	704852.009	4.087	172478.146 <sup>j</sup>
Size * Participant	Hypothesis	2952576.536	22	134208.024
	Error	303044.366	2.874	105432.588 <sup>k</sup>

- a. .984 MS(Participant) + .007 MS(Device \* Participant) + 7.95E-005 MS(Method \* Participant) + .000 MS(Size \* Participant) + .001 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .003 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- b. .976 MS(Device \* Participant) + .002 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .023 MS(Device \* Method \* Size \* Participant) - .002 MS(Error)
- c. .971 MS(Method \* Participant) + .009 MS(Device \* Method \* Participant) + .005 MS(Method \* Size \* Participant) + .020 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- d. .980 MS(Size \* Participant) + .003 MS(Device \* Size \* Participant) + .002 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) + .006 MS(Error)
- e. 1.014 MS(Device \* Participant) + 1.040 MS(Method \* Participant) + 1.009 MS(Size \* Participant) - 1.085 MS(Device \* Method \* Participant) - 1.043 MS(Device \* Size \* Participant) - 1.048 MS(Method \* Size \* Participant) + 1.115 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- f. .975 MS(Device \* Method \* Participant) + .028 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- g. .997 MS(Device \* Size \* Participant) - .004 MS(Device \* Method \* Size \* Participant) + .007 MS(Error)
- h. 1.069 MS(Device \* Method \* Participant) + 1.026 MS(Device \* Size \* Participant) - 1.100 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)
- i. .990 MS(Method \* Size \* Participant) + .003 MS(Device \* Method \* Size \* Participant) + .008 MS(Error)
- j. 1.042 MS(Device \* Method \* Participant) + 1.003 MS(Method \* Size \* Participant) - 1.044 MS(Device \* Method \* Size \* Participant) - .001 MS(Error)
- k. 1.033 MS(Device \* Size \* Participant) + 1.028 MS(Method \* Size \* Participant) - 1.065 MS(Device \* Method \* Size \* Participant) + .004 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDevice

Source		F	Sig.
Intercept	Hypothesis	2201.972	.000
Device	Hypothesis	29.985	.000
Method	Hypothesis	378.511	.000
Size	Hypothesis	14.781	.000
Participant	Hypothesis	.849	.644
Device * Method	Hypothesis	19.902	.001
Device * Size	Hypothesis	1.540	.239
Device * Participant	Hypothesis	1.119	.491
Method * Size	Hypothesis	14.916	.000
Method * Participant	Hypothesis	1.066	.521
Size * Participant	Hypothesis	1.273	.490

### Tests of Between-Subjects Effects

Dependent Variable: ARTMissRatioforDevice

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Size	Hypothesis	326225.729	2	163112.864
	Error	2629691.944	16.014	164212.076 <sup>l</sup>
Device * Method * Participant	Hypothesis	2063758.061	10	206375.806
	Error	2638877.278	16.001	164918.986 <sup>m</sup>
Device * Size * Participant	Hypothesis	2866727.944	20	143336.397
	Error	2649553.399	15.986	165740.382 <sup>n</sup>
Method * Size * Participant	Hypothesis	2716952.284	21	129378.680
	Error	2644619.592	15.993	165360.819 <sup>o</sup>
Device * Method * Size * Participant	Hypothesis	2639627.738	16	164976.734
	Error	1.485E7	1049	14159.176 <sup>p</sup>

l. .995 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)

m. 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

n. 1.005 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)

o. 1.003 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)

p. MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDevice

Source		F	Sig.
Device * Method * Size	Hypothesis	.993	.392
Device * Method * Participant	Hypothesis	1.251	.333
Device * Size * Participant	Hypothesis	.865	.626
Method * Size * Participant	Hypothesis	.782	.705
Device * Method * Size * Participant	Hypothesis	11.652	.000

# Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethod

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.862E8	1	3.862E8
	Error	1855630.354	11.519	161095.752 <sup>a</sup>
Device	Hypothesis	7714.316	1	7714.316
	Error	2160049.130	10.464	206432.455 <sup>b</sup>
Method	Hypothesis	3140692.604	1	3140692.604
	Error	1890206.512	11.879	159119.186 <sup>c</sup>
Size	Hypothesis	3.680E7	2	1.840E7
	Error	2823910.749	22.867	123492.822 <sup>d</sup>
Participant	Hypothesis	1758903.392	11	159900.308
	Error	430245.662	2.215	194229.116 <sup>e</sup>
Device * Method	Hypothesis	6607.560	1	6607.560
	Error	2148553.475	10.505	204534.480 <sup>f</sup>
Device * Size	Hypothesis	515622.703	2	257811.352
	Error	3014960.519	19.858	151826.944 <sup>g</sup>
Device * Participant	Hypothesis	2067189.701	10	206718.970
	Error	649501.310	3.675	176712.082 <sup>h</sup>
Method * Size	Hypothesis	3.465E7	2	1.733E7
	Error	2507831.032	21.224	118161.512 <sup>i</sup>
Method * Participant	Hypothesis	1734612.768	11	157692.070
	Error	395538.560	2.759	143372.293 <sup>j</sup>
Size * Participant	Hypothesis	2718969.258	22	123589.512
	Error	156317.269	1.788	87437.519 <sup>k</sup>

- a. .984 MS(Participant) + .007 MS(Device \* Participant) + 7.95E-005 MS(Method \* Participant) + .000 MS(Size \* Participant) + .001 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .003 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- b. .976 MS(Device \* Participant) + .002 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .023 MS(Device \* Method \* Size \* Participant) - .002 MS(Error)
- c. .971 MS(Method \* Participant) + .009 MS(Device \* Method \* Participant) + .005 MS(Method \* Size \* Participant) + .020 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- d. .980 MS(Size \* Participant) + .003 MS(Device \* Size \* Participant) + .002 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) + .006 MS(Error)
- e. 1.014 MS(Device \* Participant) + 1.040 MS(Method \* Participant) + 1.009 MS(Size \* Participant) - 1.085 MS(Device \* Method \* Participant) - 1.043 MS(Device \* Size \* Participant) - 1.048 MS(Method \* Size \* Participant) + 1.115 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- f. .975 MS(Device \* Method \* Participant) + .028 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- g. .997 MS(Device \* Size \* Participant) - .004 MS(Device \* Method \* Size \* Participant) + .007 MS(Error)
- h. 1.069 MS(Device \* Method \* Participant) + 1.026 MS(Device \* Size \* Participant) - 1.100 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)
- i. .990 MS(Method \* Size \* Participant) + .003 MS(Device \* Method \* Size \* Participant) + .008 MS(Error)
- j. 1.042 MS(Device \* Method \* Participant) + 1.003 MS(Method \* Size \* Participant) - 1.044 MS(Device \* Method \* Size \* Participant) - .001 MS(Error)
- k. 1.033 MS(Device \* Size \* Participant) + 1.028 MS(Method \* Size \* Participant) - 1.065 MS(Device \* Method \* Size \* Participant) + .004 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethod

Source		F	Sig.
Intercept	Hypothesis	2397.193	.000
Device	Hypothesis	.037	.850
Method	Hypothesis	19.738	.001
Size	Hypothesis	148.978	.000
Participant	Hypothesis	.823	.662
Device * Method	Hypothesis	.032	.861
Device * Size	Hypothesis	1.698	.209
Device * Participant	Hypothesis	1.170	.485
Method * Size	Hypothesis	146.628	.000
Method * Participant	Hypothesis	1.100	.539
Size * Participant	Hypothesis	1.413	.511

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethod

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Size	Hypothesis	368786.353	2	184393.176
	Error	2883582.494	16.014	180068.180 <sup>l</sup>
Device * Method * Participant	Hypothesis	2046225.153	10	204622.515
	Error	2893695.118	16.001	180844.191 <sup>m</sup>
Device * Size * Participant	Hypothesis	3057658.790	20	152882.940
	Error	2905448.934	15.986	181745.879 <sup>n</sup>
Method * Size * Participant	Hypothesis	2494268.412	21	118774.686
	Error	2900017.099	15.993	181329.214 <sup>o</sup>
Device * Method * Size * Participant	Hypothesis	2894521.336	16	180907.583
	Error	1.610E7	1049	15347.426 <sup>p</sup>

l. .995 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)

m. 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

n. 1.005 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)

o. 1.003 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)

p. MS(Error)



### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethod

Source		F	Sig.
Device * Method * Size	Hypothesis	1.024	.382
Device * Method * Participant	Hypothesis	1.131	.398
Device * Size * Participant	Hypothesis	.841	.647
Method * Size * Participant	Hypothesis	.655	.820
Device * Method * Size * Participant	Hypothesis	11.787	.000

# Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforSize

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.987E8	1	3.987E8
	Error	2176979.656	11.430	190464.540 <sup>a</sup>
Device	Hypothesis	11992.929	1	11992.929
	Error	2238753.609	10.413	214997.010 <sup>b</sup>
Method	Hypothesis	6.971E7	1	6.971E7
	Error	2248413.124	11.698	192201.927 <sup>c</sup>
Size	Hypothesis	1701630.286	2	850815.143
	Error	2872748.842	22.791	126047.136 <sup>d</sup>
Participant	Hypothesis	2087697.341	11	189790.667
	Error	602596.832	2.695	223606.147 <sup>e</sup>
Device * Method	Hypothesis	9720.821	1	9720.821
	Error	2220734.925	10.445	212609.032 <sup>f</sup>
Device * Size	Hypothesis	468863.592	2	234431.796
	Error	2819911.637	19.861	141985.700 <sup>g</sup>
Device * Participant	Hypothesis	2158257.855	10	215825.786
	Error	841042.846	4.387	191709.381 <sup>h</sup>
Method * Size	Hypothesis	1.698E7	2	8487705.388
	Error	2566805.078	21.201	121067.856 <sup>i</sup>
Method * Participant	Hypothesis	2111629.532	11	191966.321
	Error	657580.920	3.857	170500.961 <sup>j</sup>
Size * Participant	Hypothesis	2779894.315	22	126358.832
	Error	230089.861	2.406	95627.356 <sup>k</sup>

- a. .984 MS(Participant) + .007 MS(Device \* Participant) + 7.95E-005 MS(Method \* Participant) + .000 MS(Size \* Participant) + .001 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .003 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- b. .976 MS(Device \* Participant) + .002 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .023 MS(Device \* Method \* Size \* Participant) - .002 MS(Error)
- c. .971 MS(Method \* Participant) + .009 MS(Device \* Method \* Participant) + .005 MS(Method \* Size \* Participant) + .020 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- d. .980 MS(Size \* Participant) + .003 MS(Device \* Size \* Participant) + .002 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) + .006 MS(Error)
- e. 1.014 MS(Device \* Participant) + 1.040 MS(Method \* Participant) + 1.009 MS(Size \* Participant) - 1.085 MS(Device \* Method \* Participant) - 1.043 MS(Device \* Size \* Participant) - 1.048 MS(Method \* Size \* Participant) + 1.115 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- f. .975 MS(Device \* Method \* Participant) + .028 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- g. .997 MS(Device \* Size \* Participant) - .004 MS(Device \* Method \* Size \* Participant) + .007 MS(Error)
- h. 1.069 MS(Device \* Method \* Participant) + 1.026 MS(Device \* Size \* Participant) - 1.100 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)
- i. .990 MS(Method \* Size \* Participant) + .003 MS(Device \* Method \* Size \* Participant) + .008 MS(Error)
- j. 1.042 MS(Device \* Method \* Participant) + 1.003 MS(Method \* Size \* Participant) - 1.044 MS(Device \* Method \* Size \* Participant) - .001 MS(Error)
- k. 1.033 MS(Device \* Size \* Participant) + 1.028 MS(Method \* Size \* Participant) - 1.065 MS(Device \* Method \* Size \* Participant) + .004 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforSize

Source		F	Sig.
Intercept	Hypothesis	2093.266	.000
Device	Hypothesis	.056	.818
Method	Hypothesis	362.709	.000
Size	Hypothesis	6.750	.005
Participant	Hypothesis	.849	.642
Device * Method	Hypothesis	.046	.835
Device * Size	Hypothesis	1.651	.217
Device * Participant	Hypothesis	1.126	.487
Method * Size	Hypothesis	70.107	.000
Method * Participant	Hypothesis	1.126	.501
Size * Participant	Hypothesis	1.321	.496

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforSize

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Size	Hypothesis	330136.788	2	165068.394
	Error	2653520.792	16.014	165699.729 <sup>l</sup>
Device * Method * Participant	Hypothesis	2133144.026	10	213314.403
	Error	2662781.597	16.001	166412.882 <sup>m</sup>
Device * Size * Participant	Hypothesis	2859274.634	20	142963.732
	Error	2673545.457	15.986	167241.531 <sup>n</sup>
Method * Size * Participant	Hypothesis	2556972.977	21	121760.618
	Error	2668571.100	15.993	166858.616 <sup>o</sup>
Device * Method * Size * Participant	Hypothesis	2663538.224	16	166471.139
	Error	1.502E7	1049	14321.771 <sup>p</sup>

l. .995 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)

m. 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

n. 1.005 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)

o. 1.003 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)

p. MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforSize

Source		F	Sig.
Device * Method * Size	Hypothesis	.996	.391
Device * Method * Participant	Hypothesis	1.282	.317
Device * Size * Participant	Hypothesis	.855	.635
Method * Size * Participant	Hypothesis	.730	.754
Device * Method * Size * Participant	Hypothesis	11.624	.000

# Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceMethod

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.938E8	1	3.938E8
	Error	2085927.618	11.445	182264.172 <sup>a</sup>
Device	Hypothesis	4519728.329	1	4519728.329
	Error	2173408.051	10.422	208534.142 <sup>b</sup>
Method	Hypothesis	6.764E7	1	6.764E7
	Error	2169880.161	11.720	185145.323 <sup>c</sup>
Size	Hypothesis	3866114.569	2	1933057.285
	Error	3006831.540	22.754	132145.082 <sup>d</sup>
Participant	Hypothesis	1996523.861	11	181502.169
	Error	556819.046	2.593	214778.278 <sup>e</sup>
Device * Method	Hypothesis	5622179.976	1	5622179.976
	Error	2153008.273	10.457	205893.036 <sup>f</sup>
Device * Size	Hypothesis	453831.803	2	226915.902
	Error	2818245.290	19.861	141897.799 <sup>g</sup>
Device * Participant	Hypothesis	2092429.243	10	209242.924
	Error	796263.921	4.292	185518.780 <sup>h</sup>
Method * Size	Hypothesis	3814287.460	2	1907143.730
	Error	2709345.239	21.189	127866.000 <sup>i</sup>
Method * Participant	Hypothesis	2032201.339	11	184745.576
	Error	691810.043	4.036	171430.192 <sup>j</sup>
Size * Participant	Hypothesis	2916783.774	22	132581.081
	Error	289736.592	2.791	103794.273 <sup>k</sup>

- a. .984 MS(Participant) + .007 MS(Device \* Participant) + 7.95E-005 MS(Method \* Participant) + .000 MS(Size \* Participant) + .001 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .003 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- b. .976 MS(Device \* Participant) + .002 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .023 MS(Device \* Method \* Size \* Participant) - .002 MS(Error)
- c. .971 MS(Method \* Participant) + .009 MS(Device \* Method \* Participant) + .005 MS(Method \* Size \* Participant) + .020 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- d. .980 MS(Size \* Participant) + .003 MS(Device \* Size \* Participant) + .002 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) + .006 MS(Error)
- e. 1.014 MS(Device \* Participant) + 1.040 MS(Method \* Participant) + 1.009 MS(Size \* Participant) - 1.085 MS(Device \* Method \* Participant) - 1.043 MS(Device \* Size \* Participant) - 1.048 MS(Method \* Size \* Participant) + 1.115 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- f. .975 MS(Device \* Method \* Participant) + .028 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- g. .997 MS(Device \* Size \* Participant) - .004 MS(Device \* Method \* Size \* Participant) + .007 MS(Error)
- h. 1.069 MS(Device \* Method \* Participant) + 1.026 MS(Device \* Size \* Participant) - 1.100 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)
- i. .990 MS(Method \* Size \* Participant) + .003 MS(Device \* Method \* Size \* Participant) + .008 MS(Error)
- j. 1.042 MS(Device \* Method \* Participant) + 1.003 MS(Method \* Size \* Participant) - 1.044 MS(Device \* Method \* Size \* Participant) - .001 MS(Error)
- k. 1.033 MS(Device \* Size \* Participant) + 1.028 MS(Method \* Size \* Participant) - 1.065 MS(Device \* Method \* Size \* Participant) + .004 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceMethod

Source		F	Sig.
Intercept	Hypothesis	2160.824	.000
Device	Hypothesis	21.674	.001
Method	Hypothesis	365.356	.000
Size	Hypothesis	14.628	.000
Participant	Hypothesis	.845	.645
Device * Method	Hypothesis	27.306	.000
Device * Size	Hypothesis	1.599	.227
Device * Participant	Hypothesis	1.128	.488
Method * Size	Hypothesis	14.915	.000
Method * Participant	Hypothesis	1.078	.517
Size * Participant	Hypothesis	1.277	.492

### Tests of Between-Subjects Effects

Dependent Variable: ARTMissRatioforDeviceMethod

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Size	Hypothesis	322863.555	2	161431.777
	Error	2635586.306	16.014	164581.341 <sup>l</sup>
Device * Method * Participant	Hypothesis	2064581.329	10	206458.133
	Error	2644818.741	16.001	165290.393 <sup>m</sup>
Device * Size * Participant	Hypothesis	2857464.639	20	142873.232
	Error	2655549.546	15.986	166114.278 <sup>n</sup>
Method * Size * Participant	Hypothesis	2701346.235	21	128635.535
	Error	2650590.476	15.993	165733.565 <sup>o</sup>
Device * Method * Size * Participant	Hypothesis	2645573.047	16	165348.315
	Error	1.476E7	1049	14073.779 <sup>p</sup>

l. .995 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)

m. 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

n. 1.005 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)

o. 1.003 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)

p. MS(Error)



### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceMethod

Source		F	Sig.
Device * Method * Size	Hypothesis	.981	.396
Device * Method * Participant	Hypothesis	1.249	.334
Device * Size * Participant	Hypothesis	.860	.630
Method * Size * Participant	Hypothesis	.776	.711
Device * Method * Size * Participant	Hypothesis	11.749	.000

# Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceSize

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.959E8	1	3.959E8
	Error	2080572.461	11.445	181790.720 <sup>a</sup>
Device	Hypothesis	881160.010	1	881160.010
	Error	2168413.820	10.426	207981.470 <sup>b</sup>
Method	Hypothesis	6.790E7	1	6.790E7
	Error	2155319.085	11.725	183820.407 <sup>c</sup>
Size	Hypothesis	4069474.930	2	2034737.465
	Error	2940599.788	22.772	129129.738 <sup>d</sup>
Participant	Hypothesis	1991306.546	11	181027.868
	Error	567190.620	2.632	215536.585 <sup>e</sup>
Device * Method	Hypothesis	327548.038	1	327548.038
	Error	2154881.435	10.460	206015.879 <sup>f</sup>
Device * Size	Hypothesis	7155117.594	2	3577558.797
	Error	2816093.231	19.860	141798.152 <sup>g</sup>
Device * Participant	Hypothesis	2086510.917	10	208651.092
	Error	777924.304	4.221	184316.609 <sup>h</sup>
Method * Size	Hypothesis	4159918.179	2	2079959.089
	Error	2616983.489	21.197	123461.595 <sup>i</sup>
Method * Participant	Hypothesis	2017197.933	11	183381.630
	Error	629338.202	3.793	165916.239 <sup>j</sup>
Size * Participant	Hypothesis	2849057.893	22	129502.631
	Error	245570.761	2.507	97951.783 <sup>k</sup>

- a. .984 MS(Participant) + .007 MS(Device \* Participant) + 7.95E-005 MS(Method \* Participant) + .000 MS(Size \* Participant) + .001 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .003 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- b. .976 MS(Device \* Participant) + .002 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .023 MS(Device \* Method \* Size \* Participant) - .002 MS(Error)
- c. .971 MS(Method \* Participant) + .009 MS(Device \* Method \* Participant) + .005 MS(Method \* Size \* Participant) + .020 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- d. .980 MS(Size \* Participant) + .003 MS(Device \* Size \* Participant) + .002 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) + .006 MS(Error)
- e. 1.014 MS(Device \* Participant) + 1.040 MS(Method \* Participant) + 1.009 MS(Size \* Participant) - 1.085 MS(Device \* Method \* Participant) - 1.043 MS(Device \* Size \* Participant) - 1.048 MS(Method \* Size \* Participant) + 1.115 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- f. .975 MS(Device \* Method \* Participant) + .028 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- g. .997 MS(Device \* Size \* Participant) - .004 MS(Device \* Method \* Size \* Participant) + .007 MS(Error)
- h. 1.069 MS(Device \* Method \* Participant) + 1.026 MS(Device \* Size \* Participant) - 1.100 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)
- i. .990 MS(Method \* Size \* Participant) + .003 MS(Device \* Method \* Size \* Participant) + .008 MS(Error)
- j. 1.042 MS(Device \* Method \* Participant) + 1.003 MS(Method \* Size \* Participant) - 1.044 MS(Device \* Method \* Size \* Participant) - .001 MS(Error)
- k. 1.033 MS(Device \* Size \* Participant) + 1.028 MS(Method \* Size \* Participant) - 1.065 MS(Device \* Method \* Size \* Participant) + .004 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceSize

Source		F	Sig.
Intercept	Hypothesis	2178.051	.000
Device	Hypothesis	4.237	.065
Method	Hypothesis	369.407	.000
Size	Hypothesis	15.757	.000
Participant	Hypothesis	.840	.647
Device * Method	Hypothesis	1.590	.235
Device * Size	Hypothesis	25.230	.000
Device * Participant	Hypothesis	1.132	.488
Method * Size	Hypothesis	16.847	.000
Method * Participant	Hypothesis	1.105	.510
Size * Participant	Hypothesis	1.322	.491

### Tests of Between-Subjects Effects

Dependent Variable: ARTMissRatioforDeviceSize

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Size	Hypothesis	4786955.969	2	2393477.984
	Error	2653011.124	16.014	165670.514 <sup>l</sup>
Device * Method * Participant	Hypothesis	2065526.774	10	206552.677
	Error	2662328.365	16.001	166384.754 <sup>m</sup>
Device * Size * Participant	Hypothesis	2855545.224	20	142777.261
	Error	2673157.683	15.986	167214.666 <sup>n</sup>
Method * Size * Participant	Hypothesis	2607815.155	21	124181.674
	Error	2668153.093	15.993	166831.168 <sup>o</sup>
Device * Method * Size * Participant	Hypothesis	2663089.597	16	166443.100
	Error	1.475E7	1049	14061.825 <sup>p</sup>

l. .995 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)

m. 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

n. 1.005 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)

o. 1.003 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)

p. MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceSize

Source		F	Sig.
Device * Method * Size	Hypothesis	14.447	.000
Device * Method * Participant	Hypothesis	1.241	.338
Device * Size * Participant	Hypothesis	.854	.636
Method * Size * Participant	Hypothesis	.744	.740
Device * Method * Size * Participant	Hypothesis	11.837	.000

# Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethodSize

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.966E8	1	3.966E8
	Error	2108602.908	11.433	184424.503 <sup>a</sup>
Device	Hypothesis	120814.790	1	120814.790
	Error	2182519.080	10.409	209669.442 <sup>b</sup>
Method	Hypothesis	6.846E7	1	6.846E7
	Error	2175199.219	11.704	185853.606 <sup>c</sup>
Size	Hypothesis	1.697E7	2	8486574.660
	Error	2914841.401	22.757	128088.064 <sup>d</sup>
Participant	Hypothesis	2021174.553	11	183743.141
	Error	561363.699	2.614	214780.635 <sup>e</sup>
Device * Method	Hypothesis	105028.445	1	105028.445
	Error	2158158.007	10.442	206674.639 <sup>f</sup>
Device * Size	Hypothesis	244876.707	2	122438.353
	Error	2747738.487	19.861	138345.401 <sup>g</sup>
Device * Participant	Hypothesis	2105146.828	10	210514.683
	Error	839423.079	4.469	187853.092 <sup>h</sup>
Method * Size	Hypothesis	4255798.033	2	2127899.016
	Error	2622720.521	21.190	123772.778 <sup>i</sup>
Method * Participant	Hypothesis	2041388.979	11	185580.816
	Error	722131.381	4.174	173023.144 <sup>j</sup>
Size * Participant	Hypothesis	2827076.268	22	128503.467
	Error	280038.064	2.781	100711.800 <sup>k</sup>

- a. .984 MS(Participant) + .007 MS(Device \* Participant) + 7.95E-005 MS(Method \* Participant) + .000 MS(Size \* Participant) + .001 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .003 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- b. .976 MS(Device \* Participant) + .002 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .023 MS(Device \* Method \* Size \* Participant) - .002 MS(Error)
- c. .971 MS(Method \* Participant) + .009 MS(Device \* Method \* Participant) + .005 MS(Method \* Size \* Participant) + .020 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- d. .980 MS(Size \* Participant) + .003 MS(Device \* Size \* Participant) + .002 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) + .006 MS(Error)
- e. 1.014 MS(Device \* Participant) + 1.040 MS(Method \* Participant) + 1.009 MS(Size \* Participant) - 1.085 MS(Device \* Method \* Participant) - 1.043 MS(Device \* Size \* Participant) - 1.048 MS(Method \* Size \* Participant) + 1.115 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- f. .975 MS(Device \* Method \* Participant) + .028 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- g. .997 MS(Device \* Size \* Participant) - .004 MS(Device \* Method \* Size \* Participant) + .007 MS(Error)
- h. 1.069 MS(Device \* Method \* Participant) + 1.026 MS(Device \* Size \* Participant) - 1.100 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)
- i. .990 MS(Method \* Size \* Participant) + .003 MS(Device \* Method \* Size \* Participant) + .008 MS(Error)
- j. 1.042 MS(Device \* Method \* Participant) + 1.003 MS(Method \* Size \* Participant) - 1.044 MS(Device \* Method \* Size \* Participant) - .001 MS(Error)
- k. 1.033 MS(Device \* Size \* Participant) + 1.028 MS(Method \* Size \* Participant) - 1.065 MS(Device \* Method \* Size \* Participant) + .004 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethodSize

Source		F	Sig.
Intercept	Hypothesis	2150.645	.000
Device	Hypothesis	.576	.465
Method	Hypothesis	368.347	.000
Size	Hypothesis	66.256	.000
Participant	Hypothesis	.855	.640
Device * Method	Hypothesis	.508	.492
Device * Size	Hypothesis	.885	.428
Device * Participant	Hypothesis	1.121	.488
Method * Size	Hypothesis	17.192	.000
Method * Participant	Hypothesis	1.073	.517
Size * Participant	Hypothesis	1.276	.493

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethodSize

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Size	Hypothesis	122501.025	2	61250.513
	Error	2562980.967	16.014	160047.505 <sup>l</sup>
Device * Method * Participant	Hypothesis	2073891.434	10	207389.143
	Error	2571960.481	16.001	160737.054 <sup>m</sup>
Device * Size * Participant	Hypothesis	2785904.259	20	139295.213
	Error	2582397.314	15.986	161538.276 <sup>n</sup>
Method * Size * Participant	Hypothesis	2614818.014	21	124515.144
	Error	2577574.098	15.993	161168.035 <sup>o</sup>
Device * Method * Size * Participant	Hypothesis	2572694.123	16	160793.383
	Error	1.435E7	1049	13679.824 <sup>p</sup>

l. .995 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)

m. 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

n. 1.005 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)

o. 1.003 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)

p. MS(Error)



### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforMethodSize

Source		F	Sig.
Device * Method * Size	Hypothesis	.383	.688
Device * Method * Participant	Hypothesis	1.290	.313
Device * Size * Participant	Hypothesis	.862	.628
Method * Size * Participant	Hypothesis	.773	.714
Device * Method * Size * Participant	Hypothesis	11.754	.000

# Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceMethodSize

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.978E8	1	3.978E8
	Error	2117772.283	11.436	185177.700 <sup>a</sup>
Device	Hypothesis	390243.320	1	390243.320
	Error	2139804.899	10.438	204999.351 <sup>b</sup>
Method	Hypothesis	6.889E7	1	6.889E7
	Error	2195025.282	11.713	187401.646 <sup>c</sup>
Size	Hypothesis	4651830.462	2	2325915.231
	Error	2928439.378	22.786	128517.124 <sup>d</sup>
Participant	Hypothesis	2029161.295	11	184469.209
	Error	612080.214	2.773	220767.214 <sup>e</sup>
Device * Method	Hypothesis	816916.624	1	816916.624
	Error	2125649.739	10.474	202935.834 <sup>f</sup>
Device * Size	Hypothesis	5536203.278	2	2768101.639
	Error	2853668.445	19.859	143693.425 <sup>g</sup>
Device * Participant	Hypothesis	2055386.245	10	205538.624
	Error	729018.618	4.051	179948.142 <sup>h</sup>
Method * Size	Hypothesis	3702577.876	2	1851288.938
	Error	2601629.804	21.201	122713.262 <sup>i</sup>
Method * Participant	Hypothesis	2057578.572	11	187052.597
	Error	561660.568	3.531	159055.286 <sup>j</sup>
Size * Participant	Hypothesis	2834662.895	22	128848.313
	Error	228903.198	2.375	96360.728 <sup>k</sup>

- a. .984 MS(Participant) + .007 MS(Device \* Participant) + 7.95E-005 MS(Method \* Participant) + .000 MS(Size \* Participant) + .001 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .003 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- b. .976 MS(Device \* Participant) + .002 MS(Device \* Method \* Participant) + .001 MS(Device \* Size \* Participant) + .023 MS(Device \* Method \* Size \* Participant) - .002 MS(Error)
- c. .971 MS(Method \* Participant) + .009 MS(Device \* Method \* Participant) + .005 MS(Method \* Size \* Participant) + .020 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)
- d. .980 MS(Size \* Participant) + .003 MS(Device \* Size \* Participant) + .002 MS(Method \* Size \* Participant) + .009 MS(Device \* Method \* Size \* Participant) + .006 MS(Error)
- e. 1.014 MS(Device \* Participant) + 1.040 MS(Method \* Participant) + 1.009 MS(Size \* Participant) - 1.085 MS(Device \* Method \* Participant) - 1.043 MS(Device \* Size \* Participant) - 1.048 MS(Method \* Size \* Participant) + 1.115 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- f. .975 MS(Device \* Method \* Participant) + .028 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)
- g. .997 MS(Device \* Size \* Participant) - .004 MS(Device \* Method \* Size \* Participant) + .007 MS(Error)
- h. 1.069 MS(Device \* Method \* Participant) + 1.026 MS(Device \* Size \* Participant) - 1.100 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)
- i. .990 MS(Method \* Size \* Participant) + .003 MS(Device \* Method \* Size \* Participant) + .008 MS(Error)
- j. 1.042 MS(Device \* Method \* Participant) + 1.003 MS(Method \* Size \* Participant) - 1.044 MS(Device \* Method \* Size \* Participant) - .001 MS(Error)
- k. 1.033 MS(Device \* Size \* Participant) + 1.028 MS(Method \* Size \* Participant) - 1.065 MS(Device \* Method \* Size \* Participant) + .004 MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceMethodSize

Source		F	Sig.
Intercept	Hypothesis	2148.347	.000
Device	Hypothesis	1.904	.197
Method	Hypothesis	367.582	.000
Size	Hypothesis	18.098	.000
Participant	Hypothesis	.836	.647
Device * Method	Hypothesis	4.025	.071
Device * Size	Hypothesis	19.264	.000
Device * Participant	Hypothesis	1.142	.487
Method * Size	Hypothesis	15.086	.000
Method * Participant	Hypothesis	1.176	.489
Size * Participant	Hypothesis	1.337	.494

### Tests of Between-Subjects Effects

Dependent Variable: ARTMissRatioforDeviceMethodSize

Source		Type III Sum of Squares	df	Mean Square
Device * Method * Size	Hypothesis	7715329.766	2	3857664.883
	Error	2694590.110	16.014	168267.659 <sup>l</sup>
Device * Method * Participant	Hypothesis	2033195.057	10	203319.506
	Error	2704068.838	16.001	168993.417 <sup>m</sup>
Device * Size * Participant	Hypothesis	2893745.064	20	144687.253
	Error	2715085.816	15.986	169836.713 <sup>n</sup>
Method * Size * Participant	Hypothesis	2591754.079	21	123416.861
	Error	2709994.507	15.993	169447.030 <sup>o</sup>
Device * Method * Size * Participant	Hypothesis	2704843.263	16	169052.704
	Error	1.491E7	1049	14213.883 <sup>p</sup>

l. .995 MS(Device \* Method \* Size \* Participant) + .005 MS(Error)

m. 1.000 MS(Device \* Method \* Size \* Participant) + .000 MS(Error)

n. 1.005 MS(Device \* Method \* Size \* Participant) - .005 MS(Error)

o. 1.003 MS(Device \* Method \* Size \* Participant) - .003 MS(Error)

p. MS(Error)

### Tests of Between-Subjects Effects

Dependent Variable:ARTMissRatioforDeviceMethodSize

Source		F	Sig.
Device * Method * Size	Hypothesis	22.926	.000
Device * Method * Participant	Hypothesis	1.203	.358
Device * Size * Participant	Hypothesis	.852	.637
Method * Size * Participant	Hypothesis	.728	.755
Device * Method * Size * Participant	Hypothesis	11.893	.000