

Errata on Section 4 of “Multiple Hypothesis Testing in Experimental Economics”

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List et al. (2019, Section 4) we benchmark our procedure against the classical Bonferroni and Holm multiple testing procedures using data from Karlan and List (2007). In Tables 3-5, the Holm p -values were computed incorrectly, resulting in some of the p -values in the final column of these tables being too small. The Github code has been corrected, and the correct tables are provided below (changes highlighted in yellow).

Table 3: Multiple treatments (Comparing multiple treatments with a control)

Treatment/control groups	DI	p values			
		Unadj.	Multiplicity adj.		
		Remark 3.1	Theorem 3.1	Bonf.	Holm
Control versus 1:1	0.1234	0.2627	0.2627	0.7880	0.4120
Control versus 2:1	0.2129	0.0477**	0.1297	0.1430	0.1430
Control versus 3:1	0.1245	0.2060	0.3537	0.6180	0.4120

DI refers to difference in means. ** indicates that the corresponding p value is less than 5%

Table 4: Multiple treatments (All pairwise comparisons across multiple treatments and a control)

Treatment/control groups	DI	p values				
		Unadj.	Multiplicity adj.			
		Remark 3.1	Theorem 3.1	Remark 3.7	Bonf.	Holm
Control versus 1:1	0.1234	0.2627	0.5810	0.4973	1.0000	1.0000
Control versus 2:1	0.2129	0.0477**	0.1930	0.1930	0.2860	0.2860
Control versus 3:1	0.1245	0.2060	0.5533	0.4167	1.0000	1.0000
1:1 versus 2:1	0.0895	0.4627	0.7467	0.7467	1.0000	1.0000
1:1 versus 3:1	0.0011	0.9920	0.9920	0.9920	1.0000	1.0000
2:1 versus 3:1	0.0883	0.4633	0.6963	0.4633	1.0000	1.0000

DI refers to difference in means. ** indicates that the corresponding p value is less than 5%

Table 5: Multiple outcomes, subgroups, and treatments

Outcome	Subgroup	Treatment/control groups	DI	p values			
				Unadj.	Multiplicity adj.		
				Remark 3.1	Theorem 3.1	Bonf.	Holm
Response rate	Red county in a red state	Control versus 1:1	0.0079	0.0217**	0.4643	1.0000	0.7583
Response rate	Red county in a red state	Control versus 2:1	0.0100	0.0017***	0.0480**	0.0800*	0.0733*
Response rate	Red county in a red state	Control versus 3:1	0.0107	0.0017***	0.0470**	0.0800*	0.0717*
Response rate	Blue county in a red state	Control versus 1:1	0.0024	0.5973	1.0000	1.0000	1.0000
Response rate	Blue county in a red state	Control versus 2:1	0.0080	0.0987*	0.8997	1.0000	1.0000
Response rate	Blue county in a red state	Control versus 3:1	0.0108	0.0247**	0.5000	1.0000	0.8387
Response rate	Red county in a blue state	Control versus 1:1	0.0003	0.9060	0.9990	1.0000	1.0000
Response rate	Red county in a blue state	Control versus 2:1	0.0010	0.7190	1.0000	1.0000	1.0000
Response rate	Red county in a blue state	Control versus 3:1	0.0034	0.2290	0.9953	1.0000	1.0000
Response rate	Blue county in a blue state	Control versus 1:1	0.0006	0.8667	1.0000	1.0000	1.0000
Response rate	Blue county in a blue state	Control versus 2:1	0.0026	0.5033	1.0000	1.0000	1.0000
Response rate	Blue county in a blue state	Control versus 3:1	0.0032	0.3740	1.0000	1.0000	1.0000
Dollars given not including match	Red county in a red state	Control versus 1:1	0.4260	0.0903*	0.9027	1.0000	1.0000
Dollars given not including match	Red county in a red state	Control versus 2:1	0.4097	0.0557*	0.7860	1.0000	1.0000
Dollars given not including match	Red county in a red state	Control versus 3:1	0.3214	0.0710*	0.8483	1.0000	1.0000
Dollars given not including match	Blue county in a red state	Control versus 1:1	0.0374	0.8950	1.0000	1.0000	1.0000
Dollars given not including match	Blue county in a red state	Control versus 2:1	0.4325	0.1853	0.9853	1.0000	1.0000
Dollars given not including match	Blue county in a red state	Control versus 3:1	0.5728	0.0933*	0.8983	1.0000	1.0000
Dollars given not including match	Red county in a blue state	Control versus 1:1	0.0256	0.8683	1.0000	1.0000	1.0000
Dollars given not including match	Red county in a blue state	Control versus 2:1	0.0928	0.5893	1.0000	1.0000	1.0000
Dollars given not including match	Red county in a blue state	Control versus 3:1	0.0243	0.8847	1.0000	1.0000	1.0000
Dollars given not including match	Blue county in a blue state	Control versus 1:1	0.0074	0.9747	0.9747	1.0000	1.0000
Dollars given not including match	Blue county in a blue state	Control versus 2:1	0.0380	0.8650	1.0000	1.0000	1.0000
Dollars given not including match	Blue county in a blue state	Control versus 3:1	0.2173	0.2847	0.9997	1.0000	1.0000
Dollars given including match	Red county in a red state	Control versus 1:1	1.5042	0.0080***	0.2170	0.3840	0.3120
Dollars given including match	Red county in a red state	Control versus 2:1	2.5335	0.0010***	0.0247**	0.0480**	0.0450**
Dollars given including match	Red county in a red state	Control versus 3:1	3.2419	0.0003***	0.0003***	0.0160**	0.0160**
Dollars given including match	Blue county in a red state	Control versus 1:1	0.8370	0.0603*	0.8037	1.0000	1.0000
Dollars given including match	Blue county in a red state	Control versus 2:1	2.8217	0.0080***	0.2163	0.3840	0.3040
Dollars given including match	Blue county in a red state	Control versus 3:1	4.5776	0.0023***	0.0667*	0.1120	0.0957*
Dollars given including match	Red county in a blue state	Control versus 1:1	0.7737	0.0087***	0.2290	0.4160	0.3207
Dollars given including match	Red county in a blue state	Control versus 2:1	1.9283	0.0007***	0.0133**	0.0320**	0.0307**
Dollars given including match	Red county in a blue state	Control versus 3:1	2.5722	0.0003***	0.0003***	0.0160**	0.0157**
Dollars given including match	Blue county in a blue state	Control versus 1:1	0.9967	0.0133**	0.3240	0.6400	0.4800
Dollars given including match	Blue county in a blue state	Control versus 2:1	2.1371	0.0023***	0.0653*	0.1120	0.0933*
Dollars given including match	Blue county in a blue state	Control versus 3:1	2.1658	0.0020***	0.0577*	0.0960*	0.0840*
Amount change	Red county in a red state	Control versus 1:1	1.8252	0.1310	0.9497	1.0000	1.0000
Amount change	Red county in a red state	Control versus 2:1	0.5491	0.6443	1.0000	1.0000	1.0000
Amount change	Red county in a red state	Control versus 3:1	0.0681	0.9593	0.9987	1.0000	1.0000
Amount change	Blue county in a red state	Control versus 1:1	92.3221	0.4410	1.0000	1.0000	1.0000
Amount change	Blue county in a red state	Control versus 2:1	93.7227	0.4410	1.0000	1.0000	1.0000
Amount change	Blue county in a red state	Control versus 3:1	94.2640	0.4410	1.0000	1.0000	1.0000
Amount change	Red county in a blue state	Control versus 1:1	51.9652	0.4530	1.0000	1.0000	1.0000
Amount change	Red county in a blue state	Control versus 2:1	0.4450	0.6817	1.0000	1.0000	1.0000
Amount change	Red county in a blue state	Control versus 3:1	1.1372	0.2593	0.9973	1.0000	1.0000
Amount change	Blue county in a blue state	Control versus 1:1	0.9294	0.4617	1.0000	1.0000	1.0000
Amount change	Blue county in a blue state	Control versus 2:1	0.2938	0.8277	1.0000	1.0000	1.0000
Amount change	Blue county in a blue state	Control versus 3:1	0.5147	0.6577	1.0000	1.0000	1.0000

DI refers to difference in means. *, **, and *** indicate that the corresponding p-values are less than 10%, 5%, and 1%, respectively

References

- KARLAN, D. and LIST, J. A. (2007). Does Price Matter in Charitable Giving? Evidence from a Large-Scale Natural Field Experiment. *American Economic Review*, **97** 1774–1793.
- LIST, J. A., SHAIKH, A. M. and XU, Y. (2019). Multiple hypothesis testing in experimental economics. *Experimental Economics*, **22** 773–793.