Estimation By Subject

June 16, 2015

1 All models

	SPT	MxEU	MnEU	α MM	EU	DFT	CEU	EV	MaxMin	MaxMax	MinReg
All	-3.85	-3.92	-4.31	-4.32	-4.43	-4.57	-5.53	-11.50	-13.31	-14.06	-14.58
1	-2.60	-2.82	-3.13	-2.79	-3.44	-3.50	-3.22	-12.15	-12.57	-14.52	-14.48
2	-5.20	-5.14	-5.70	-5.58	-5.61	-5.93	-6.35	-11.03	-14.17	-14.45	-14.86
3	-3.90	-3.96	-28.73	-29.19	-4.39	-4.53	-8.68	-11.34	-13.14	-12.94	-14.29

Table 1: Mean predicted log likelihoods for the three treatments, and overall.

	SPT	DFT	CEU	MxEU	α MM	EU	MnEU	EV	MaxMax	MaxMin	MinReg
All	9	8	7	7	6	5	4	1	1	0	0
1	2	3	3	4	1	0	2	0	0	0	0
2	4	2	3	1	2	4	0	1	0	0	0
3	3	3	1	2	3	1	2	0	1	0	0

Table 2: Number of subject for whom a theory predicts best.

	SPT	MxEU	α MM	MnEU	EU	DFT	CEU	EV	MaxMin	MaxMax
MxEU	21^{27}	-	-	-	-	-	-	-	-	-
	19^{29}		-	-	-	-	-	-	-	-
MnEU			18^{27}	-	-	-	-	-	-	-
	$^{33}_{15^*}$		16^{32}	15^{29}	-	-	-	-	-	-
DFT	16^{32}			-	19^{29}	-	-	-	-	-
	14^{34}		12^{34}	22^{25}	-	26^{22}	-	-	-	-
	3^{45}		5^{43}_{***}	3^{***}		5^{43}	-	_	-	-
MaxMin	$^{47}_{1^{***}}$			$^{47}_{1^{***}}$	0^{48}	$^{47}_{1^{***}}$	5^{43}_{***}	16^{32}	-	-
MaxMax	1^{47} 1^{***}	1^{47} 1^{***}	3^{45}	2^{46}	2^{46}	3^{45}	$4^{44}_{4^{***}}$	$37 \\ 10^{***}$	18^{29}	-
MinReg	0^{48}	0^{48}	2^{46}	$\substack{47\\1^{***}}$	0^{48}	0^{48}	3^{45}	$35 \\ 13^{***}$	17^{31}	20^{28}

Table 3: Pairwise comparison of theories. Counts m^n mean that the row model is better for m subjects and the column model is better for n subjects. The fit is measured by predicted log likelihoods and significance levels are conventional (* < .05, ** < .01, *** < .001)

	$mean_{.1}$	$mean_{.05}$	mean	median
SPT	-3.54	-3.63	-3.85	-3.32
MxEU	-3.64	-3.75	-3.92	-3.30
αMM	-3.84	-3.96	-4.32	-3.41
MnEU	-4.15	-4.20	-4.31	-4.10
EU	-4.34	-4.36	-4.43	-4.33
CEU	-4.47	-4.67	-5.53	-3.85
DFT	-4.51	-4.54	-4.57	-4.11
EV	-11.82	-11.73	-11.50	-11.80
MaxMin	-13.56	-13.43	-13.31	-14.26
MaxMax	-14.46	-14.27	-14.06	-14.44
MinReg	-14.65	-14.62	-14.58	-14.93

Table 4: Means, trimed means and medians for all models (sorted on trimed mean.1).

2 PT analysis

	mean _{.1}	$mean_{.05}$	mean	median
$\overline{\rm SPT_{\pm}}$	-3.53	-3.62	-3.83	-3.32
SPT	-3.54	-3.63	-3.85	-3.32
SPT_u	-3.56	-3.67	-3.92	-3.37
SCEU	-3.63	-3.73	-3.98	-3.37
SPT_{NA}	-3.64	-3.91	-6.21	-3.13
SPT_2	-3.87	-4.06	-4.91	-3.03
SPT_{GE}	-3.92	-4.09	-4.28	-3.12
SPT_{TK}	-4.19	-4.27	-4.39	-4.16
EU	-4.34	-4.36	-4.43	-4.33
PT	-5.10	-5.67	-14.42	-3.84
SCEV	-11.68	-11.61	-11.40	-11.60
$SPT_{\lambda=1}$	-11.74	-11.66	-11.45	-12.04

Table 5: Means, trimed means and medians for all models (sorted on trimed mean.1.

	SPT_{\pm}	SPT	SPT_u	SCEU	SPT_{NA}	SPT_2	SPT_{GE}	SPT_{TK}	EU	PT	SCEV
SPT	24^{24}	-	-	-	-	-	-	-	-	-	-
SPT_u		22^{26}	-	-	-	-	-	-	-	-	_
SCEU	25^{23}	24^{24}		-	-	-	-	-	-	-	-
SPT_{NA}		24^{24}		26^{22}	-	-	-	-	-	-	-
SPT_2	$^{31}_{17^*}$	-	19^{29}	18^{30}	23^{25}	-	-	-	-	-	-
SPT_{GE}			18^{30}		21^{27}	22^{26}	-	-	-	-	-
SPT_{TK}	$^{30}_{18**}$		18^{*}		20^{28}	19^{29}	20^{28}	-	-	-	-
EU	16^{*}				16^{32}	18^{30}	-	19^{29}	-	_	-
PT	13***			$34 \\ 14^{***}$	33 15***	$34 \\ 14^{***}$	$34 \\ 14^{***}$	$^{31}_{17^{**}}$	23^{25}	_	-
SCEV	0^{48}		1^{47} 1^{***}	1^{47} 1^{***}	5^{43}	2^{46}	1^{47} 1^{***}	$\overset{44}{^{4***}}$		9^{39}	
$SPT_{\lambda=1}$	0^{48}	2^{46}	$^{47}_{1^{***}}$	$\substack{47\\1^{***}}$	43 5***	2^{46}	$^{47}_{1^{***}}$	3^{***}	$\overset{44}{4^{***}}$	39 9***	17 ³¹

Table 6: Pairwise comparison of the variations of Prospect Theory. Interpretation of the counts and significance levels are as in Table 3.

	SPT_{\pm}	SPT	SPT_u	SCEU	SPT_{NA}	SPT_2	SPT_{GE}	SPT_{TK}	
MxEU			24^{24}	23^{25}	18^{30}	23^{25}	22^{26}	25^{23}	29**
	19^{29}				23^{25}	25^{23}	26^{22}	28^{20}	35^{13}_{***}
MnEU	14^{34}	13^{35}	18^{**}	17^{31}	17^{31}	20^{28}	20^{28}	19^{29}	28^{20}
EU	16^{32}	15^{33}	18^{30}	17^{31}_{**}	16^{32}	18^{30}	19^{29}	19^{29}	25^{23}
	16^{32}_{***}	16^{32}	18^{30}_{***}	18^{30}	19^{29}	18^{30}	18^{30}	20^{28}	23^{25}
CEU	14^{34}_{***}	14^{34}	15^{33}_{***}	15^{33}_{***}	16^{32}	20^{28}	17^{31}_{***}	20^{28}	28^{20}
EV	2^{46}	3^{45}	3^{45}	3^{45}	7^{41}_{***}	5^{43}	$4^{44}_{4^{***}}$	3^{45}	9^{39}
MaxMin	1^{47}	1^{47}	1^{47}	1^{47} 1^{***}	$4^{44}_{4^{***}}$	4^{44}_{***}	4^{44}_{***}	3^{45}	7^{41}_{***}
MaxMax	$\overset{47}{1^{***}}$	1^{47} 1^{***}	1^{47} 1^{***}	1^{47}	$\overset{44}{4^{***}}$	3^{45}	2^{46}	2^{46}	5^{43}
MinReg	0^{48}	0^{48}	0^{48}	0^{48}	3^{45}	2^{46}	2^{46}	1^{47} 1^{***}	6^{42}

Table 7: Variations of PT versus other models