Description and choice data for the domain "Events"

Description of the choice domain 9, Events

The prompt question and the universe of five response options in the choice domain Events are as follows. The labels a, b, c, d and e were not displayed during the experiment and are indicated here to allow cross-referencing with data tables and visualizations below and results in the paper.

% Events

This domain involves comparisons of the probabilities of future events. Logically, the probability of event e must be as least as great as the probability of a, which must in turn be as least as great as the probability of d; also, the probability of b must be at least as great as the probability of c. There is potential for several asymmetric dominance effects in this domain, based on these dominance relations. These would be unconventional effets, as most experimental designs in the literature intended to elicit asymmetric dominance effects feature numerical dominance relations.

Which one of the following events do you think is most likely to happen in the next twenty years?

- Scotland becomes an independent country. Either Catalonia or Quebec become independent countries. Catalonia becomes an independent country. Scotland and Quebec become independent countries. Either Scotland or Quebec become independent countries.

The following figure is a screenshot from the actual experiment, with one of the 26 possible menus for this domain.

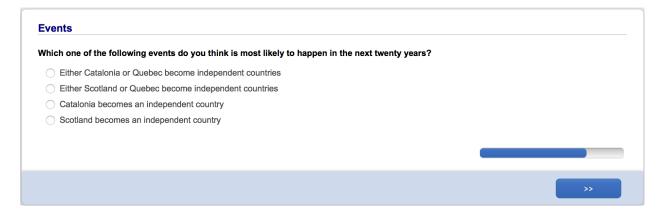


Figure 1: Screenshot for domain Events

	Choice counts					Choice proportions				
Menu ${\cal A}$	$N_A(a)$	$N_A(b)$	$N_A(c)$	$N_A(d)$	$N_A(e)$	$\hat{P}_A(a)$	$\hat{P}_A(b)$	$\hat{P}_A(c)$	$\hat{P}_A(d)$	$\hat{P}_A(e)$
$\{a,b\}$	32	8	-	-	-	0.800	0.200	-	-	-
$\{a,c\}$	32	-	8	-	-	0.800	-	0.200	-	-
$\{b,c\}$	-	15	25	-	-	-	0.375	0.625	-	-
$\{a,b,c\}$	20	15	6	-	-	0.488	0.366	0.146	-	-
$\{a,d\}$	36	-	-	4	-	0.900	-	-	0.100	-
$\{b,d\}$	-	19	-	21	-	-	0.475	-	0.525	-
$\{a,b,d\}$	28	11	-	1	-	0.700	0.275	-	0.025	-
$\{c,d\}$	-	-	18	22	-	-	-	0.450	0.550	-
$\{a,c,d\}$	24	-	5	11	-	0.600	-	0.125	0.275	-
$\{b,c,d\}$	-	11	20	9	-	-	0.275	0.500	0.225	-
$\{a, b, c, d\}$	22	8	3	7	-	0.550	0.200	0.075	0.175	-
$\{a,e\}$	22	-	-	-	18	0.550	-	-	-	0.450
$\{b,e\}$	-	9	-	-	31	-	0.225	-	-	0.775
$\{a,b,e\}$	19	8	-	-	13	0.475	0.200	-	-	0.325
$\{c,e\}$	-	-	17	-	23	-	-	0.425	-	0.575
$\{a,c,e\}$	24	-	4	_	12	0.600	-	0.100	-	0.300
$\{b,c,e\}$	-	4	18	-	18	-	0.100	0.450	-	0.450
$\{a,b,c,e\}$	25	5	7	-	4	0.610	0.122	0.171	-	0.098
$\{d,e\}$	-	-	-	4	36	-	-	-	0.100	0.900
$\{a,d,e\}$	24	-	-	2	14	0.600	-	-	0.050	0.350
$\{b,d,e\}$	-	7	-	8	25	-	0.175	-	0.200	0.625
$\{a,b,d,e\}$	29	2	-	2	7	0.725	0.050	-	0.050	0.175
$\{c,d,e\}$	-	-	18	3	19	-	-	0.450	0.075	0.475
$\{a,c,d,e\}$	21	-	6	4	9	0.525	-	0.150	0.100	0.225
$\{b,c,d,e\}$	-	2	12	5	21	-	0.050	0.300	0.125	0.525
$\{a,b,c,d,e\}$	20	3	8	0	9	0.500	0.075	0.200	0.000	0.225

Table 1: Observed choice counts and proportions.

Choice data for domain 9, Events

Table 1 shows choice counts and choice proportions for this choice domain. For each menu A and each object $x \in \{a, b, c, d, e\}$, $N_A(x)$ is the number of participants who chose object x from menu A and $\hat{P}_A(x)$ is the corresponding proportion of participants who chose x from A. When $x \notin A$, a dash is displayed.

The following figure displays choice proportions for all doubleton and tripleton menus in Barycentric coordinates. See a full description of this graphical representation in the paper. Each panel shows choice proportions for all doubleton and tripleton menus of a different tripleton subset of $\{a, b, c, d, e\}$. The downward-pointed (blue) triangle shows the set of ternary choice proportions that are compatible with regularity and the three binary choice proportions, on the corresponding tripleton. The upward-pointed (red) triangle shows the set of ternary choice proportions compatible with the multiplicative inequality and the three binary choice proportions.

