Description and choice data for the domain “Pizzas”

Description of the choice domain 5, `Pizzas`

The prompt question and the universe of five response options in the choice domain `Pizzas` 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.

% Pizzas

The source for this domain is a Montreal pizza restaurant. All these pizzas are either 12 or 13 dollars.

Which one of the following pizzas would you choose?

- Mozzarella, tomato sauce, basil
- Pepperoni, mushrooms, green pepper, mozzarella, tomato sauce
- Red onion, tomato sauce, feta, mozzarella, olive oil, Greek spices, tomato sauce
- Bacon, white onion, mozzarella, parmesan, fresh cream, tomato sauce, ground pepper
- Mushrooms, green pepper, mozzarella, tomato sauce

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

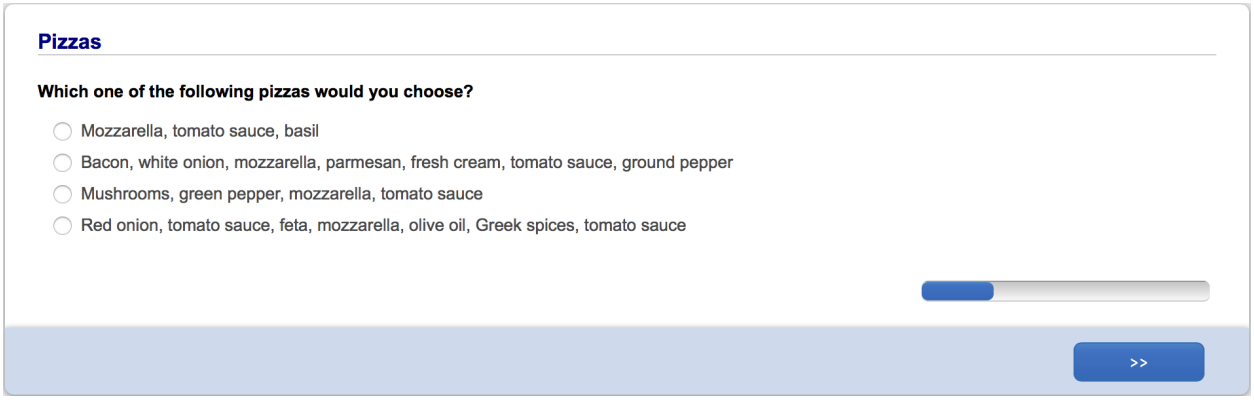


Figure 1: Screenshot for domain Pizzas

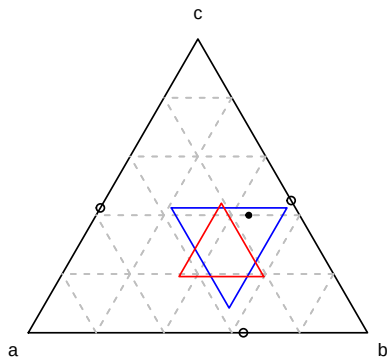
	Choice counts					Choice proportions				
Menu A	$N_A(a)$	$N_A(b)$	$N_A(c)$	$N_A(d)$	$N_A(e)$	$\hat{P}_A(a)$	$\hat{P}_A(b)$	$\hat{P}_A(c)$	$\hat{P}_A(d)$	$\hat{P}_A(e)$
$\{a, b\}$	15	26	-	-	-	0.366	0.634	-	-	-
$\{a, c\}$	23	-	17	-	-	0.575	-	0.425	-	-
$\{b, c\}$	-	22	18	-	-	-	0.550	0.450	-	-
$\{a, b, c\}$	6	18	16	-	-	0.150	0.450	0.400	-	-
$\{a, d\}$	27	-	-	13	-	0.675	-	-	0.325	-
$\{b, d\}$	-	21	-	19	-	-	0.525	-	0.475	-
$\{a, b, d\}$	6	23	-	11	-	0.150	0.575	-	0.275	-
$\{c, d\}$	-	-	17	23	-	-	-	0.425	0.575	-
$\{a, c, d\}$	14	-	13	13	-	0.350	-	0.325	0.325	-
$\{b, c, d\}$	-	21	13	6	-	-	0.525	0.325	0.150	-
$\{a, b, c, d\}$	5	19	6	10	-	0.125	0.475	0.150	0.250	-
$\{a, e\}$	17	-	-	-	23	0.425	-	-	-	0.575
$\{b, e\}$	-	29	-	-	11	-	0.725	-	-	0.275
$\{a, b, e\}$	8	25	-	-	7	0.200	0.625	-	-	0.175
$\{c, e\}$	-	-	21	-	19	-	-	0.525	-	0.475
$\{a, c, e\}$	7	-	15	-	18	0.175	-	0.375	-	0.450
$\{b, c, e\}$	-	26	6	-	8	-	0.650	0.150	-	0.200
$\{a, b, c, e\}$	7	19	12	-	3	0.171	0.463	0.293	-	0.073
$\{d, e\}$	-	-	-	16	24	-	-	-	0.400	0.600
$\{a, d, e\}$	8	-	-	18	14	0.200	-	-	0.450	0.350
$\{b, d, e\}$	-	18	-	10	12	-	0.450	-	0.250	0.300
$\{a, b, d, e\}$	4	15	-	12	9	0.100	0.375	-	0.300	0.225
$\{c, d, e\}$	-	-	6	18	16	-	-	0.150	0.450	0.400
$\{a, c, d, e\}$	9	-	10	9	12	0.225	-	0.250	0.225	0.300
$\{b, c, d, e\}$	-	23	5	9	3	-	0.575	0.125	0.225	0.075
$\{a, b, c, d, e\}$	4	15	8	8	5	0.100	0.375	0.200	0.200	0.125

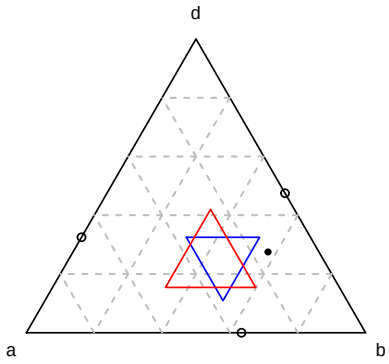
Table 1: Observed choice counts and proportions.

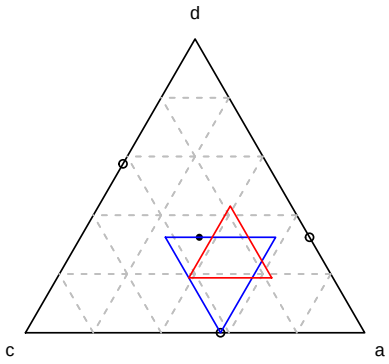
Choice data for domain 5, Pizzas

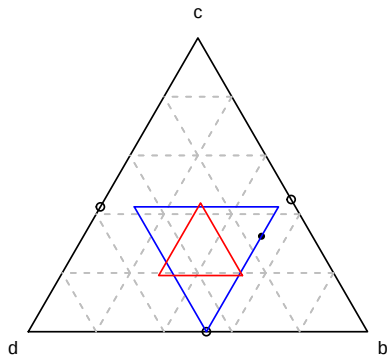
Table 1 shows choice counts and choice proportions for this choice domain. For each menu A and each object $x \in \{a, b, c, d, e\}$, $N_A(x)$ is the number of participants who chose object x from menu A and $\hat{P}_A(x)$ is the corresponding proportion of participants who chose x from A. When $x \notin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

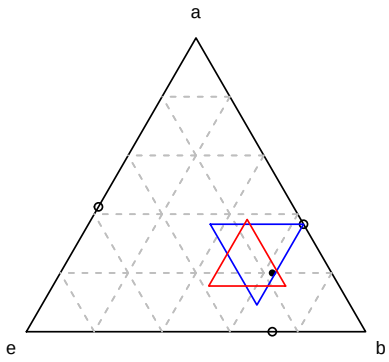
The following figure displays choice proportions for all doubleton and tripleton menus in Barycentric coordinates. See a full description of this graphical representation in the paper. Each panel shows choice proportions for all doubleton and tripleton menus of a different tripleton subset of $\{a, b, c, d, e\}$. 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.

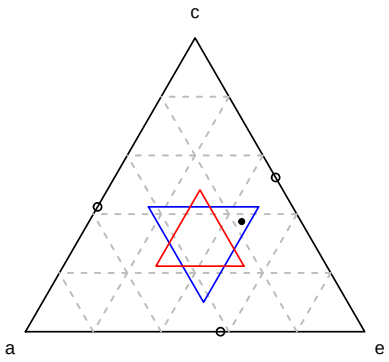

c
a
b

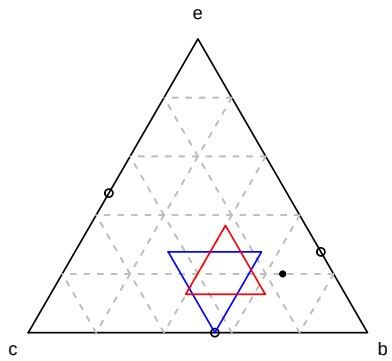

d
a
b

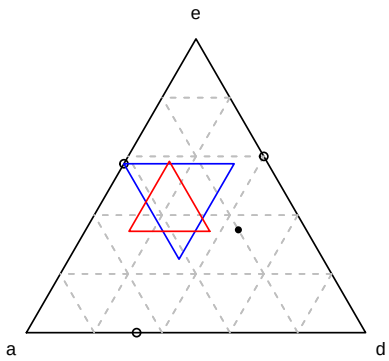

d
c
a

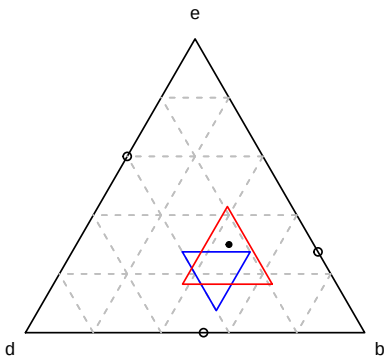

c
d
b


a
e
b


c
a
e


e
c
b


e
a
d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d
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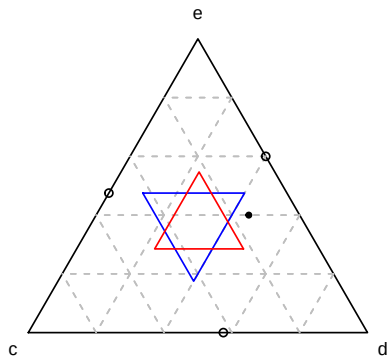
e
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