Description and choice data for the domain “Colour combos”

Description of the choice domain 8, `Colour combos`

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

% Colour pairs

The source for this domain is the website `The top tens'', page`Two colors that look good side by side.’’ The color combinations here are ranked 1, 4, 5, 13 and 14. We chose a selection of five high ranking combinations among which there were many colors in common. Using a similarity measure equal to the number of colours in common between two pairs, there are two doubleton choice sets where the two colour pairs have no colours in common ($\{a, e\}$ and $\{b, d\}$) and eight where the two colour pairs have one colour in common. This gives six tripleton pairs in which one might expect a similarity effect.

Which one of these colour combinations do you like best?

- Black and red
- Black and purple
- Black and blue
- Blue and red
- Blue and purple

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

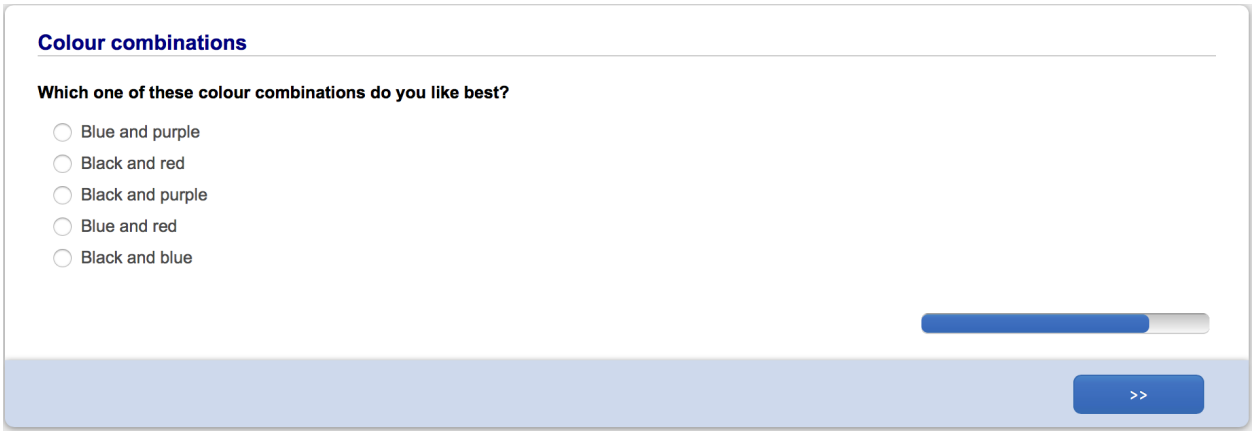


Figure 1: Screenshot for domain Colour combos

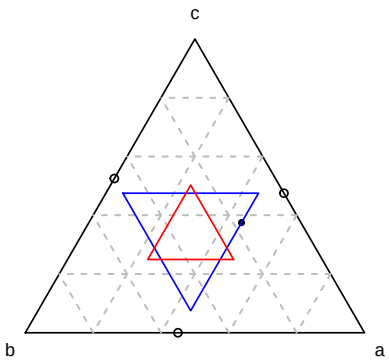
	Choice counts					Choice proportions				
Menu A	$N_A(a)$	$N_A(b)$	$N_A(c)$	$N_A(d)$	$N_A(e)$	$\hat{P}_A(a)$	$\hat{P}_A(b)$	$\hat{P}_A(c)$	$\hat{P}_A(d)$	$\hat{P}_A(e)$
$\{a, b\}$	18	22	-	-	-	0.450	0.550	-	-	-
$\{a, c\}$	21	-	19	-	-	0.525	-	0.475	-	-
$\{b, c\}$	-	19	21	-	-	-	0.475	0.525	-	-
$\{a, b, c\}$	18	7	15	-	-	0.450	0.175	0.375	-	-
$\{a, d\}$	25	-	-	15	-	0.625	-	-	0.375	-
$\{b, d\}$	-	19	-	21	-	-	0.475	-	0.525	-
$\{a, b, d\}$	22	7	-	11	-	0.550	0.175	-	0.275	-
$\{c, d\}$	-	-	21	19	-	-	-	0.525	0.475	-
$\{a, c, d\}$	20	-	11	9	-	0.500	-	0.275	0.225	-
$\{b, c, d\}$	-	6	17	17	-	-	0.150	0.425	0.425	-
$\{a, b, c, d\}$	13	7	11	9	-	0.325	0.175	0.275	0.225	-
$\{a, e\}$	21	-	-	-	19	0.525	-	-	-	0.475
$\{b, e\}$	-	19	-	-	21	-	0.475	-	-	0.525
$\{a, b, e\}$	12	12	-	-	16	0.300	0.300	-	-	0.400
$\{c, e\}$	-	-	19	-	21	-	-	0.475	-	0.525
$\{a, c, e\}$	15	-	15	-	10	0.375	-	0.375	-	0.250
$\{b, c, e\}$	-	14	14	-	12	-	0.350	0.350	-	0.300
$\{a, b, c, e\}$	12	5	13	-	11	0.293	0.122	0.317	-	0.268
$\{d, e\}$	-	-	-	21	19	-	-	-	0.525	0.475
$\{a, d, e\}$	19	-	-	13	8	0.475	-	-	0.325	0.200
$\{b, d, e\}$	-	17	-	15	8	-	0.425	-	0.375	0.200
$\{a, b, d, e\}$	10	8	-	16	7	0.244	0.195	-	0.390	0.171
$\{c, d, e\}$	-	-	14	11	15	-	-	0.350	0.275	0.375
$\{a, c, d, e\}$	14	-	5	10	11	0.350	-	0.125	0.250	0.275
$\{b, c, d, e\}$	-	9	14	7	10	-	0.225	0.350	0.175	0.250
$\{a, b, c, d, e\}$	13	7	2	6	12	0.325	0.175	0.050	0.150	0.300

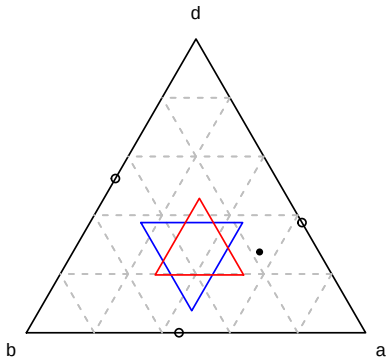
Table 1: Observed choice counts and proportions.

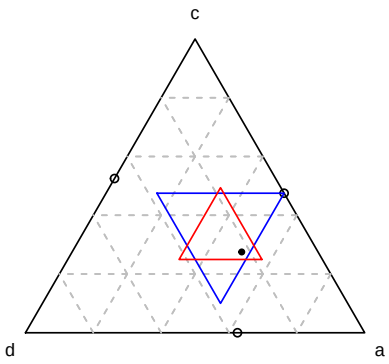
Choice data for domain 8, Colour combos

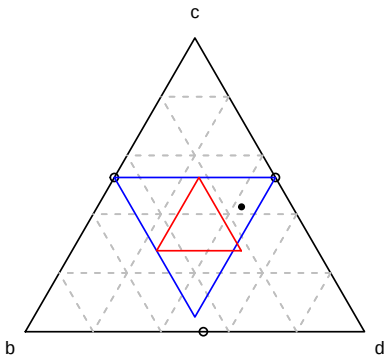
Table 1 shows choice counts and choice proportions for this choice domain. For each menu A and each object $x \in \{a, b, c, d, e\}$, $N_A(x)$ is the number of participants who chose object x from menu A and $\hat{P}_A(x)$ is the corresponding proportion of participants who chose x from A. When $x \notin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

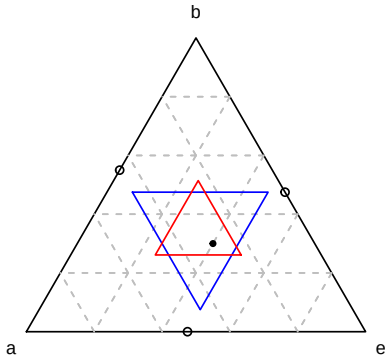
The following figure displays choice proportions for all doubleton and tripleton menus in Barycentric coordinates. See a full description of this graphical representation in the paper. Each panel shows choice proportions for all doubleton and tripleton menus of a different tripleton subset of $\{a, b,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

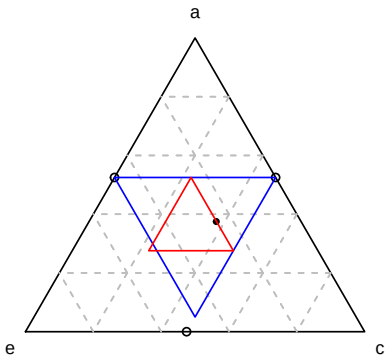

c
b
a

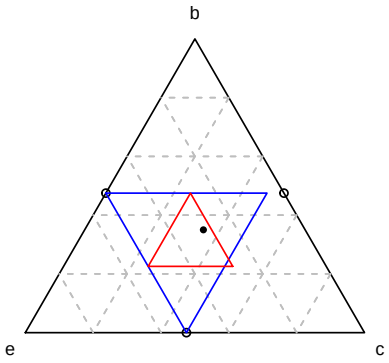

d
b
a

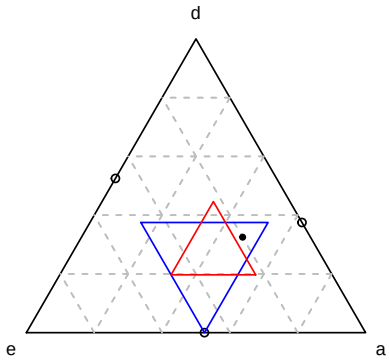

c
d
a

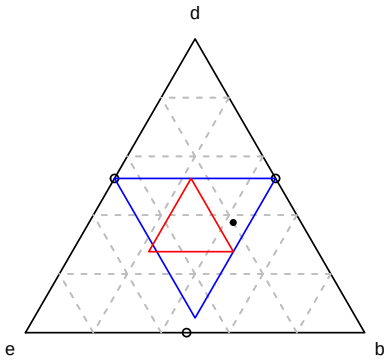

c
b
d

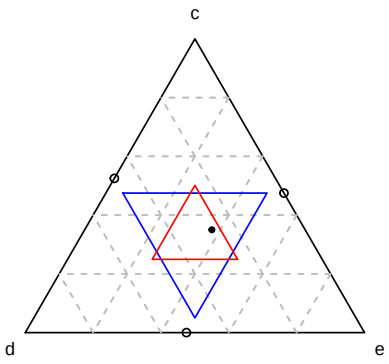

b
a
e


a
e
c


b
e
c


d
e
a


d
e
b


c
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