## Description and choice data for the domain "Music"

## Description of the choice domain 11, Music

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

## % Musical artists

The choice objects in this domain are the top selling musical artists of all time, according to Wikipedia. They should be familiar to a large majority of respondents.

Which one of the following musical artists do you like the best?

• The Beatles
• Elvis Preslev
• Michael Jackson
• Madonna
• Elton John

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 Music

|                 | Choice counts |          |          |          |          | Choice proportions |                |                |                |                |
|-----------------|---------------|----------|----------|----------|----------|--------------------|----------------|----------------|----------------|----------------|
| Menu ${\cal A}$ | $N_A(a)$      | $N_A(b)$ | $N_A(c)$ | $N_A(d)$ | $N_A(e)$ | $\hat{P}_A(a)$     | $\hat{P}_A(b)$ | $\hat{P}_A(c)$ | $\hat{P}_A(d)$ | $\hat{P}_A(e)$ |
| $\{a,b\}$       | 29            | 11       | -        | -        | -        | 0.725              | 0.275          | -              | -              | -              |
| $\{a,c\}$       | 26            | -        | 14       | -        | -        | 0.650              | -              | 0.350          | -              | -              |
| $\{b,c\}$       | -             | 23       | 17       | -        | -        | -                  | 0.575          | 0.425          | -              | -              |
| $\{a,b,c\}$     | 19            | 8        | 13       | -        | -        | 0.475              | 0.200          | 0.325          | -              | -              |
| $\{a,d\}$       | 26            | -        | -        | 14       | -        | 0.650              | -              | -              | 0.350          | -              |
| $\{b,d\}$       | -             | 27       | -        | 13       | -        | -                  | 0.675          | -              | 0.325          | -              |
| $\{a,b,d\}$     | 22            | 13       | -        | 5        | -        | 0.550              | 0.325          | -              | 0.125          | -              |
| $\{c,d\}$       | -             | -        | 26       | 14       | -        | -                  | -              | 0.650          | 0.350          | -              |
| $\{a,c,d\}$     | 25            | -        | 7        | 8        | -        | 0.625              | -              | 0.175          | 0.200          | -              |
| $\{b,c,d\}$     | -             | 21       | 11       | 8        | -        | -                  | 0.525          | 0.275          | 0.200          | -              |
| $\{a,b,c,d\}$   | 19            | 8        | 11       | 2        | -        | 0.475              | 0.200          | 0.275          | 0.050          | -              |
| $\{a,e\}$       | 25            | -        | -        | -        | 15       | 0.625              | -              | -              | -              | 0.375          |
| $\{b,e\}$       | -             | 22       | -        | -        | 18       | -                  | 0.550          | -              | -              | 0.450          |
| $\{a,b,e\}$     | 15            | 11       | -        | -        | 14       | 0.375              | 0.275          | -              | -              | 0.350          |
| $\{c,e\}$       | -             | -        | 22       | -        | 18       | -                  | -              | 0.550          | -              | 0.450          |
| $\{a,c,e\}$     | 24            | -        | 8        | -        | 8        | 0.600              | -              | 0.200          | -              | 0.200          |
| $\{b,c,e\}$     | -             | 9        | 14       | -        | 18       | -                  | 0.220          | 0.341          | -              | 0.439          |
| $\{a,b,c,e\}$   | 15            | 5        | 14       | -        | 6        | 0.375              | 0.125          | 0.350          | -              | 0.150          |
| $\{d,e\}$       | -             | -        | -        | 13       | 27       | -                  | -              | -              | 0.325          | 0.675          |
| $\{a,d,e\}$     | 20            | -        | -        | 7        | 13       | 0.500              | -              | -              | 0.175          | 0.325          |
| $\{b,d,e\}$     | -             | 15       | -        | 9        | 16       | -                  | 0.375          | -              | 0.225          | 0.400          |
| $\{a,b,d,e\}$   | 20            | 5        | -        | 5        | 10       | 0.500              | 0.125          | -              | 0.125          | 0.250          |
| $\{c,d,e\}$     | -             | -        | 17       | 4        | 19       | -                  | -              | 0.425          | 0.100          | 0.475          |
| $\{a,c,d,e\}$   | 14            | -        | 10       | 4        | 12       | 0.350              | -              | 0.250          | 0.100          | 0.300          |
| $\{b,c,d,e\}$   | -             | 12       | 11       | 3        | 15       | -                  | 0.293          | 0.268          | 0.073          | 0.366          |
| $\{a,b,c,d,e\}$ | 12            | 9        | 12       | 2        | 5        | 0.300              | 0.225          | 0.300          | 0.050          | 0.125          |

Table 1: Observed choice counts and proportions.

## Choice data for domain 11, Music

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.

```
## Warning in tritrafo(x, y, z): negative components
## Warning in tritrafo(x, y, z): negative components
## Warning in tritrafo(x, y, z): negative components
```

