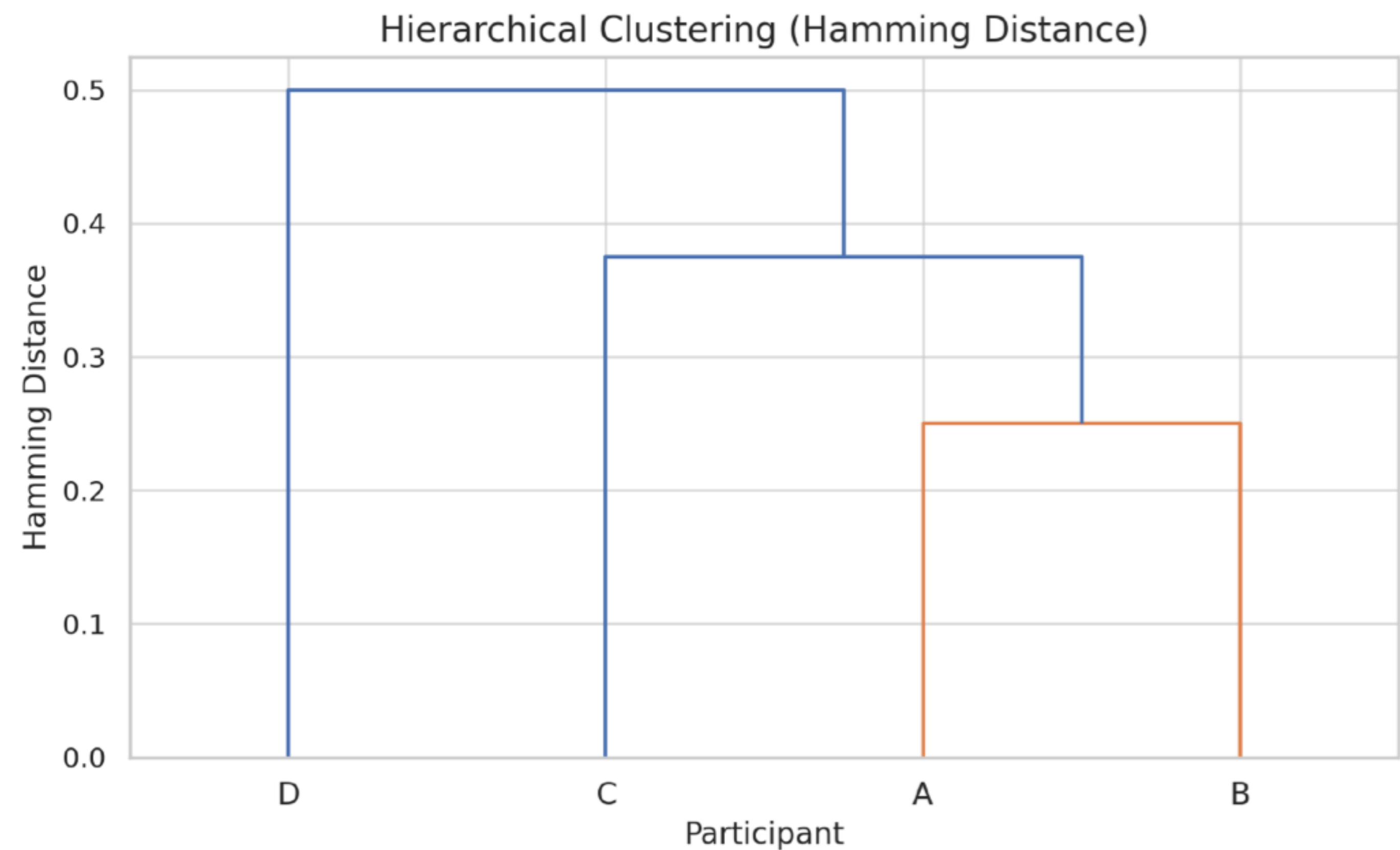
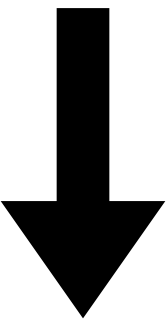


# Distance Metrics: Hamming

binary and categorical data



| Participant | Q1 | Q2 | Q3 | Q4 |
|-------------|----|----|----|----|
| A           | 1  | 0  | 1  | 0  |
| B           | 1  | 1  | 1  | 0  |
| C           | 0  | 0  | 1  | 0  |
| D           | 1  | 1  | 0  | 0  |



|   | A | B | C | D |
|---|---|---|---|---|
| A | 0 | 1 | 2 | 3 |
| B | 1 | 0 | 3 | 1 |
| C | 2 | 3 | 0 | 3 |
| D | 2 | 1 | 3 | 0 |

# Distance Metrics: Cosine

measures the angular difference between two vectors in a multi-dimensional space  
word (or other) count data

