# Analysis of brand of breakfast cereal by demographic

Background

We are interested in seeing if the pattern of preferences for the various brands of breakfast cereal differs between the two demographic areas. However, the data are at an “individual” level, so it’s impossible to obtain any meaningful information by simply inspecting this “raw” data. We now calculated the frequencies and percentage frequencies of the occurrences of the nominal variable Brand for the first demographic area (i.e. for Area = 1).

The results reveal a clear and distinct pattern of brand preference between the two demographic areas.

|  |  |  |
| --- | --- | --- |
| **Frequencies** | | |
|  | **Area 1** | **Area 2** |
| **A** | 11 | 19 |
| **B** | 17 | 30 |
| **Other** | 42 | 41 |
| **Total** | **70** | 90 |

|  |  |  |
| --- | --- | --- |
| **Percentages** | | |
|  | **Area 1** | **Area 2** |
| **A** | 15.7 | 21.1 |
| **B** | 24.3 | 33.3 |
| **Other** | 60.0 | 45.6 |
| **Total** | **100** | **100** |

***Data in Appendix A***

**Data Interpretation**

* **Area 2 shows a stronger preference for the major brands (A and B).** Over half (54.4%) of respondents in Area 2 prefer either Brand A or B, compared to only 40% in Area 1. Specifically, both Brand A and especially Brand B (33.3%) are more popular in Area 2.
* **Area 1 shows a much stronger preference for "Other" brands.** A significant majority (60%) of Area 1's preferences are for brands other than A or B. This indicates a more fragmented market with less loyalty to the two main brands, or a preference for smaller, niche, or local alternatives.

**Overall interpretation:**

Area 2 shows a stronger preference for the two main brands (especially Brand B), while Area 1 respondents are more dispersed, with a majority favouring other brands. This suggests potential differences in brand awareness, marketing effectiveness, or demographic characteristics influencing purchasing behaviour between the two areas.

## Appendix A

Data 8.3D

