

# Multivariate statistics: Assignment 1

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## 1 Task 1

### 1.1 CFA to construct a measurement model for the Attitude items

There are 9 attitude items that are scored on a five-point Likert scale.

We first conduct a simple confirmatory factor analysis, assuming each item only has a loading on the concept it aims to measure (organic, packaging, and cruelty free). We will assume the three latent variables are correlated. Figure 1 shows a graphical representation of the model, including all correlations and

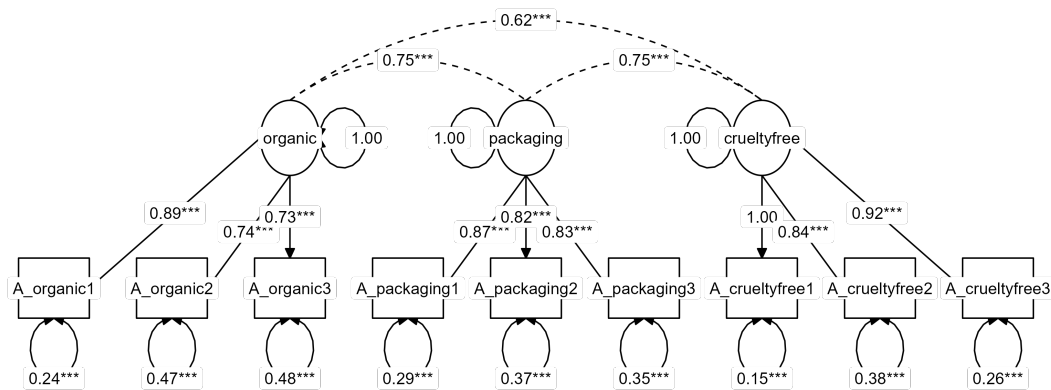


Figure 1: A graphical representation of the simple model for the attitudes.

### 1.2 CFA to construct a measurement model for the Behavior-Intention items

There are 9 behavior-intention items that are scored on a five-point Likert scale.

### 1.3 Structural equation model to evaluate the impact of attitude on behavior intention

## 2 Task 2

### 2.1 Canonical correlation analysis

### 2.2 Split-half approach