Overview

- Purpose of the development

- Fast sensory methods

- Learning goals for the course wrt the test types

- Execution of CATA tasting test – 10 minutes

- Data presentation from our test

- Outcome from class tests

- Conclusions and further developments

Purpose of the development

Develop a tool to 'instantly' display analyzed results from selected didactic tastings (CATA and Projective Mapping):

Previous setup:

- Execute tastings via specialized online sensory/consumer data collection tool

- Analyze data after lectures and present and discuss results the following teaching episode (1-2 days later)

Developed setup:

- Execute tasting

- While students discuss a few basic questions, export data and process data in streamlined data analysis setup (shinyapp) that creates plots and tables

- Present and discuss data 1-2 minutes after completion of test, with tasted samples still present

Fast sensory methods

Set of tools for inexpensive/resource efficient use of tastings to make decisions about early-stage prototypes and collect consumer feedback to prototypes/products. Developed in the last decades and applied to tasting from early idea conception and prototype development to final product launch

Two main types of tests:

Vocabulary pre-selected by experimenters - CATA is most used

- List of descriptors presented for each tasted product, respondents give evaluation of presence (CATA), intensity (RATA) development over time (T-C/RATA)

Vocabulary is individually developed by tasters – Projective Mapping is most versatile

- Respondents use physical space to create map of sensory differences as they perceive them

- Describe the sensory properties with a limited set of words

Learning goals related to fast sensory methods

Skills

- Use digital technologies to capture and evaluate work and progress in the development situation.

- Consumer tests with products, including considerations regarding subjects' data rights (GDPR) using relevant digital platforms for both data collection, storage and handling.

Competences

- Adapt techniques for characterization of sensory properties and consumer experiences to test foods in various stages of the innovation cycle.

- Apply relevant statistical methods on obtained data using relevant software.

Tasting
CATA

CATA: Data collection – Tasting!

1. Taste the first sample (follow the order that is on the screen)

2. Rate the liking of the first sample

3. Tick all the words that fit the first sample
   1. Carefully read all the words on the screen
   2. Done by modality (odour, flavour/taste, texture)

4. Taste the second sample

5. Score the liking of the second sample

6. Tick all the words that fit the second sample

7. And so on to you have completed all 4 products

CATA: the test and samples today

Access via QR :

- 4 different samples:
- 959   774   122   654
- Different tasting orders
  - Randomized for carryover effects
- Pay attention to number on displayed on the screen

CATA: Samples today

959

774

122

654

Discussion of your tasting

Discuss with the person(s) sitting next to you; discuss for 2 minutes.

- Was it easy to understand the terms?
- Are there some terms you think are less good?
- Were there some terms you missed?
- Did you recognise the samples? And did that have effect on your test?
- Are we comparing apples and oranges in the set of samples?

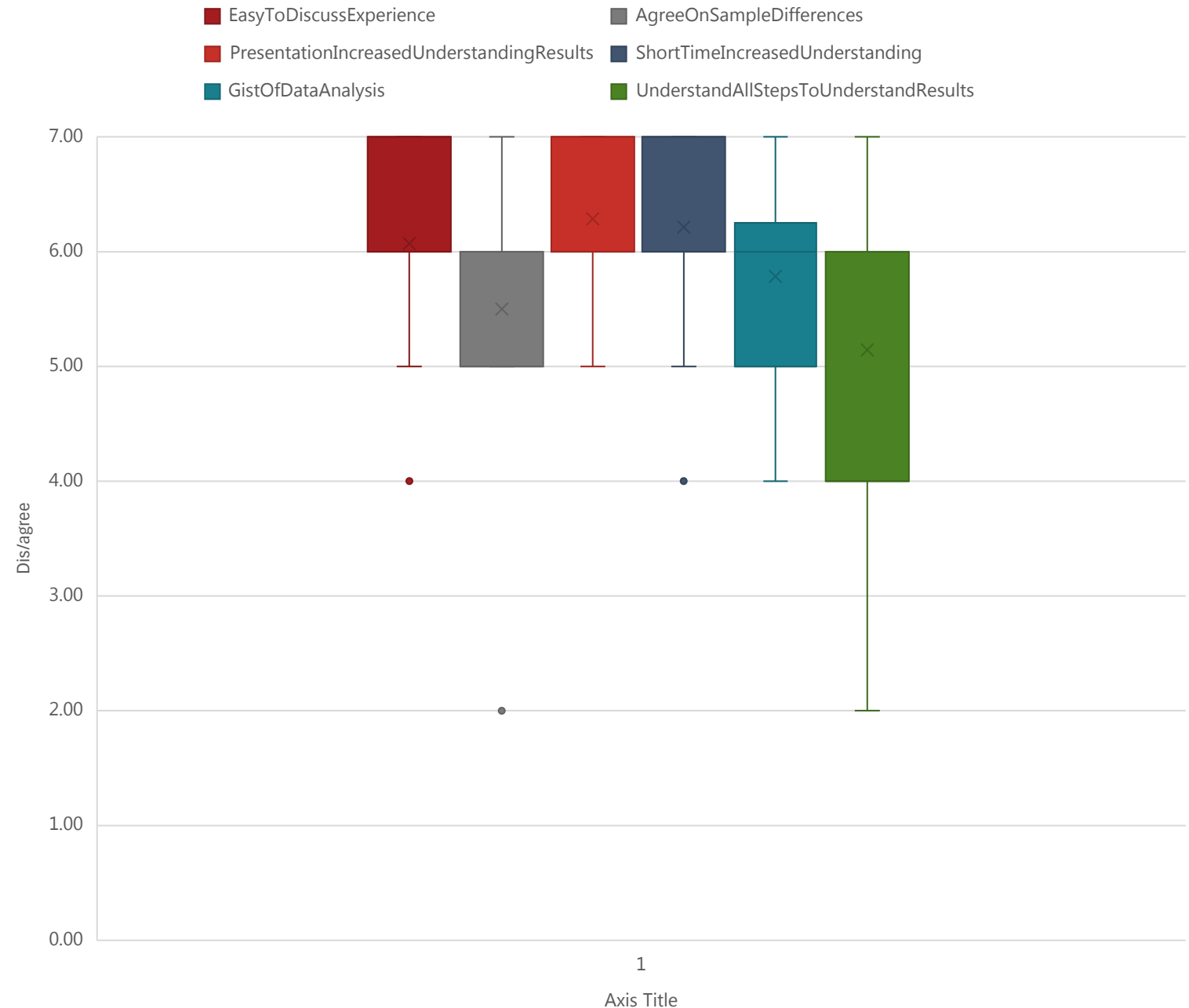- Meanwhile I export and prepare for first analysis of the data

Switch to display of results
In ShinyApps

Outcome in class

- Students' evaluation of their learning outcome
- Similar for both CATA and Projective Mapping

My fear:

overconfidence in their own understanding

Legend:
- EasyToDiscussExperience
- PresentationIncreasedUnderstandingResults
- GistOfDataAnalysis
- AgreeOnSampleDifferences
- ShortTimeIncreasedUnderstanding
- UnderstandAllStepsToUnderstandResults

Conclusions and further development

- Successful with the intentions for the learning goals
  - Ponder if someone can streamline it more for me
  - Discuss with future generations which plots and tables are optimal for different outcomes

- Further developments
  - One more course with didactic tastings
  - Sensory properties of bioactive compounds
    - More ping-pong between lecture and tasting
  - Linking sensory/bodily learning to the sensory mechanisms of how we perceive different classes of compounds

Questions & comments?