Methods’ Merits
(diversity in methods)

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Consumer Understanding Group

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Content

- **Methods**
  - What’s a method?

- **Consumer behaviour**
  - What do we want to find out?

- **Methods and measurement**
  - How can we find out?

- **Drivers for consumer choice**
  - What do we know?

- **Conclusion**
  - What did we learn?
Research methods?

- Good methods/bad methods?

- What is a method?
  
  - A procedure or process for reaching a goal, it can consist of a plan, a technique or a body of skills.

**A method in itself is neither good nor bad.**
Research question and method

Initial problem

Question

Research question

Research method

Asker/client

Validity of method

Validity of research question

Articulation of research question

Proto-professionalism

Sensory/Consumer research
Our Research Questions

- ‘Understanding food choice’
  - Predicting future food choice
  - What is liked, preferred, ‘delicious’, pleasant, …

- Why these questions?
  - Mission to fulfil

- Get consumers to
  - Change their diet
    - Lower incidence of diet related ailments
  - Buy your products
    - Fail rate of new products…
Food Related Behaviour

- Buy and buy again / Eat and eat again
- Establish Behaviour Change
  - Choose differently/new
  - Change habit
- Our research questions are *behavioural*.
- We use *behavioural* science methods
  - Psychology *(psychophysics)*
  - Sociology
  - Economics
  - Anthropology
  - Ethology
Measurement and theory

- Understand consumer behaviour
- Predict consumer behaviour
- Measure behaviour or correlates

‘Replication crisis’ in psychological science
  - Unclear measurements, unclear theory?
(mis)Use of measurement results
  - Prof Stapel was a pathological case
  - Prof Wansink was just ‘sloppy’?
Measurement methods

- **No good measurement without theory**
  - No theory? Then what are you measuring?
- **How can you build a measurement device?**
  - **Sensory methods** *(psychophysics)*
    - Profiling, JAR, CATA, TDS, TDE
  - **Psychophysiology** *(e.g. ANS)*
  - **Neuroscience** *(f)MRI, EEG, ...*
  - **Questionnaires**
    - Essense profiles/Emotion word scoring
    - Personality scales
  - **Consumer interaction**
    - Focus groups/co-creation
    - Citizen science
Summary, leading to conclusion

- We are in the behaviour understanding business
- which is a psychological science topic.
- Theory is needed
- to enable valid measurements.

- What is a good (psychological) theory?
  1. Holistic
  2. Embodied
  3. Phenomenological
  4. Implicit

Cf. my LinkedIn post: Psychological theory and replication.
1. Holistic

- Include many (all) ecologically valid aspects
  - *Multiple* sensory inputs (‘bottom up’)
  - Psychological effects (‘top down’)
- Lab studies
  - High control
  - Small (significant) effects
  - Limited validity
- Field studies
  - Low control
  - Relevant effects (if larger than noise)
  - Validity
2. Embodied

- **Cognition** is not isolated
  - it is grounded in the **body**
  - body is in **interaction**
    - with an environment (situatedness)

- Plus a body is always in a state
  - Emotional
  - Hungry
  - Fatigued
  - ...
3. Phenomenological

- Focus on what the consumer *experiences*
  - Not on what the ‘product’ gives off
  - Not on (physical) descriptions of stimuli

- Note differences between external stimulus and the experience (the *percept*)
  - ‘Illusions’
  - Distortions
4. Implicit

- Research subjects better not know that they are.
  - don’t inform them (too much)
- Have them behave naturally

- Verbal reactions (self-report/explicit)
  - ‘Reasons’ are not ‘causes’

- *Explicit* can be OK when
  - probing *consumer language*
  - getting to know *consumer thoughts*

- Using it to guide product development is risky!
When is a method ‘implicit’?

Suggested *implicitness* criteria:

1. **Subject needs to think about his-/herself?**
   - Not needed: 1 point
   - Not sure: ½ point
   - Needed: 0 point

2. **Subject knows being tested?**
   - Not knowing: 1
   - Not sure: ½
   - Knowing: 0

3. **Subject knows of research question?**
   - Not know: 1
   - Not sure: ½
   - Knows: 0

- Score 0 (explicit) to 3 (implicit)
- Applied to 43 common research methods
Methods ordered on my ‘implicitness score’

Validity w.r.t. observable behaviour?

Observational

psychophysiology

Questionnaire

Self-report

Conversation

implicitness

explicitness
Conclusions

- There are many methods...
- Match the method to the research question.
  - Beware of proto-professionalism
  - Focus on getting research question sharp
- In our field (food consumer science)
  - research questions are behavioural
- (some) theory is needed to understand data
  - Method requires theory
    - holistic, phenomenological, embodied, implicit
- Mind validity of method/data
  - Use proper (implicit) method
Thank you for listening.