A New Tool to Optimize Product Characteristics and Study Population Segmentation

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Study Background

- Objectives of consumer investigations
  - Understand consumer expectations
  - Identify potential population segmentation
  - Discover the drivers of consumer perceptions (liking, freshness, moisturization, etc.)
  - Establish products’ properties that will optimize consumer perceptions

- Recently developed methodology:
  **Landscape Segmentation Analysis® (LSA)**

  - Usually applied to hedonic investigations
  - This study: Expected **Moisturizing** and **Refreshing** properties of soap bar images

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Landscape Segmentation Analysis

- LSA first “unfolds” liking and creates a space relevant to consumer acceptability.
- Descriptive data are then added by regressing the attributes on the map.
  - Some attributes can be fit on the map and are drivers of liking.
  - Others can’t and are not relevant for consumer acceptability.

Consumers

- Crunchy
- Berry
- Sweet
- Smooth
- Vanilla
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Expected Moisturizing and Refreshing Properties of Soap Bar Images
Study Design

- Pictures of bar soaps rated on *moisturizing* and *refreshing* expectation
- 25 different pictures, central composite design on 4 variables (Translucency, Shine, Hue and Saturation), 5 levels per variable
- Total of 31 pictures (middle point evaluated 7 times)
Study Design (continued)

- Study conducted in the Tokyo area in Japan
- 610 female consumers, split in two groups
  - Group 1: Moisturizing (310 consumers)
  - Group 2: Refreshing (300 consumers)
- Expected Moisturizing and Refreshing properties rated on a 15-point scale
- Sessions lasted about 30 minutes
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Expected Moisturizing and Refreshing Properties of Soap Bar Images

RESULTS

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Moisturizing LSA

Individual points show the location of the "ideal" moisturizing soap image for each consumer.
Moisturizing LSA vs. PCA

- Similarity due to the linearity of perceived moisturizing properties
Moisturizing vs. Refreshing LSA’s

- Relative product locations are almost identical
- But consumer locations are not

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RESULTS

Drivers of Perception

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Moisturizing Perception: Drivers

- Translucency
- Shine
- Hue
- Saturation
Refreshing and Combined LSAs: Drivers
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RESULTS

Optimum Products
Moisturizing Perception: Optimum
Optimum (continued)

Refreshed LSA

Combined LSA

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Moisturizing Perception: Optimum

Translucency

Saturation

Optimum Moisturizing

0.44

0.36

7x
Refreshing Perception: Optimum
Combined Moisturizing & Refreshing LSA
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CONCLUSIONS

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Conclusions

- LSA was successfully applied to the investigation of perceived *moisturizing* and *refreshing* properties of soap images.
- For the individual as well as for the combined analyses, the population landscape was uncovered.
- Translucency and Saturation were identified as drivers for both properties.
- The location of the mean consumers’ optimum images were estimated.
- Using a ‘reverse-engineering’ approach, the corresponding images were created.
- This approach can be readily applied to other types of consumer investigations such as hedonic and product concept investigations.
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Any Questions?

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