

# Segmenting consumers based on food choice motivation and product benefit expectations: A case study involving kombucha

Ann E. Colonna<sup>1\*</sup>, Aimee Hasenbeck<sup>1</sup>, Sara R. Jaeger<sup>2</sup>, & John C. Castura<sup>3</sup>

<sup>1</sup>Food Innovation Center, Oregon State University, USA;

<sup>2</sup>The New Zealand Institute for Plant & Food Research Ltd., New Zealand;

<sup>3</sup>Compusense Inc., Canada



## Study

Kombucha is a fermented beverage that is rapidly growing in popularity in the United States. As part of a larger consumer study conducted in Portland, Oregon, kombucha consumers (n=230) participated in a retail simulation (Fig. 1) in a central location test. They evaluated 9 commercial products, made choice selections, and were prompted with questions related to food choice motivations, product expectations and choice satisfaction, and other aspects (psychographic, product usage, etc.). We used exploratory multivariate data analyses and cluster analysis methods to explore connections between food choice motivation and product choice, between expectation and satisfaction, and between food choice motivations and product benefit expectations. In this poster we highlight some of the methods used. Results help to better understand consumer expectations and drivers of purchase and repurchase within category-specific consumer segments.



Fig. 1. Virtual shelf with nine sets of Kombucha beverages.

**Consumers' interaction with products on the shelf** – Various relationships were explored. Consumers spent more time on the first virtual shelf than on the second virtual shelf, perhaps due to familiarity with the choices after having reviewed them once. Consumers to whom kombucha was more important interacted less with the products before selecting a product, perhaps due to familiarity with the products.

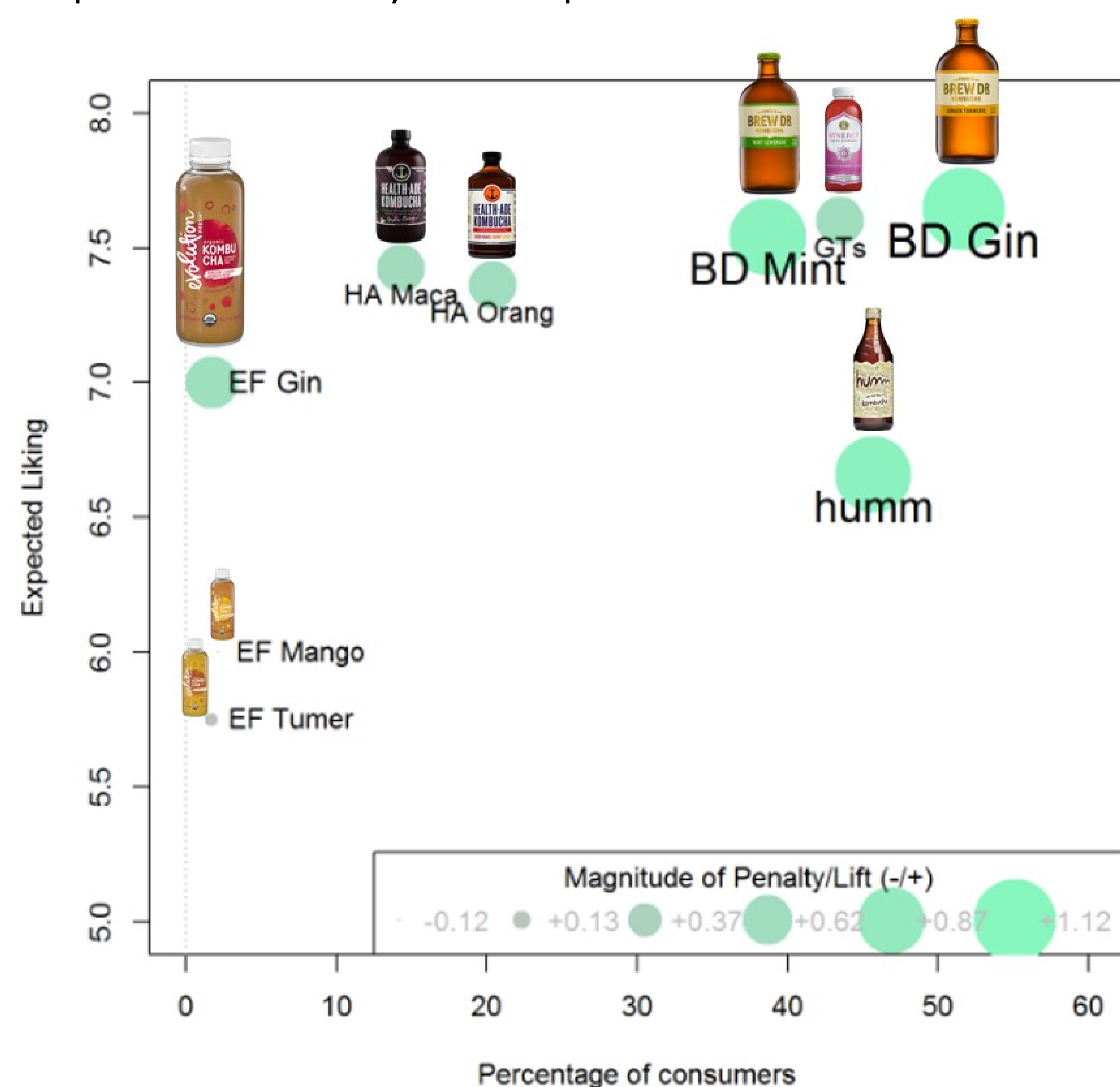


Fig. 2. Difference in expected liking for consumers without prior product exposure (y axis) vs. with prior exposure (bubble size).

**Expected liking** – Consumers expected to like products that they had tasted previously (7.34) more than products that they had not tasted previously (6.36). Penalty-lift (Fig. 2) has various plausible interpretations. Higher lift (larger bubble sizes) could represent exceeded expectations, but this could be a liability if packaging or branding message may dissuade consumers' initial purchase.

**Psychographics** – Psychographics obtained in this study were also investigated. No association was found between the degree of maximizing (or satisficing) and the amount of interaction with products on the shelves. **Food choice motivations** were measured via the single-item food choice motivation scale (Onwezen et al., 2018). The motivation means for the consumers who selected each kombucha were submitted to PCA. Food choice motivations related to pleasure vs. weight control are captured in PC1, and ethics vs. convenience in PC2 (Fig. 3). Consumers were also clustered via parsimonious Gaussian mixture modelling with model selection via the Bayesian information criterion, yielding four clusters. Motivation means for consumers within each clusters aligned well with the benefits sought in consumers' ideal kombucha (Fig. 4). G1 is most motivated by affordability and pleasure, and least motivated by weight control and familiarity. G2 is most motivated by health, mood, and naturalness, and least motivated by familiarity and weight control. G3 is most motivated by pleasure and affordability and least motivated by familiarity and ethics. G4 is most motivated by health and naturalness and least motivated by convenience and familiarity. Health was most important to G4 and least important to G3. Mood was most important to G2 and least important to G1. Convenience was most important to G1 and least important to G4. Pleasure was most important to G3 and least important to G4. Naturalness was most important to G4 and least important to G3. Affordability was most important to G1 and least important to G4. Weight Control was most important to G3 and least important to G1. Familiarity was most important to G4 and least important to G3. Ethics was most important to G1 and least important to G3.

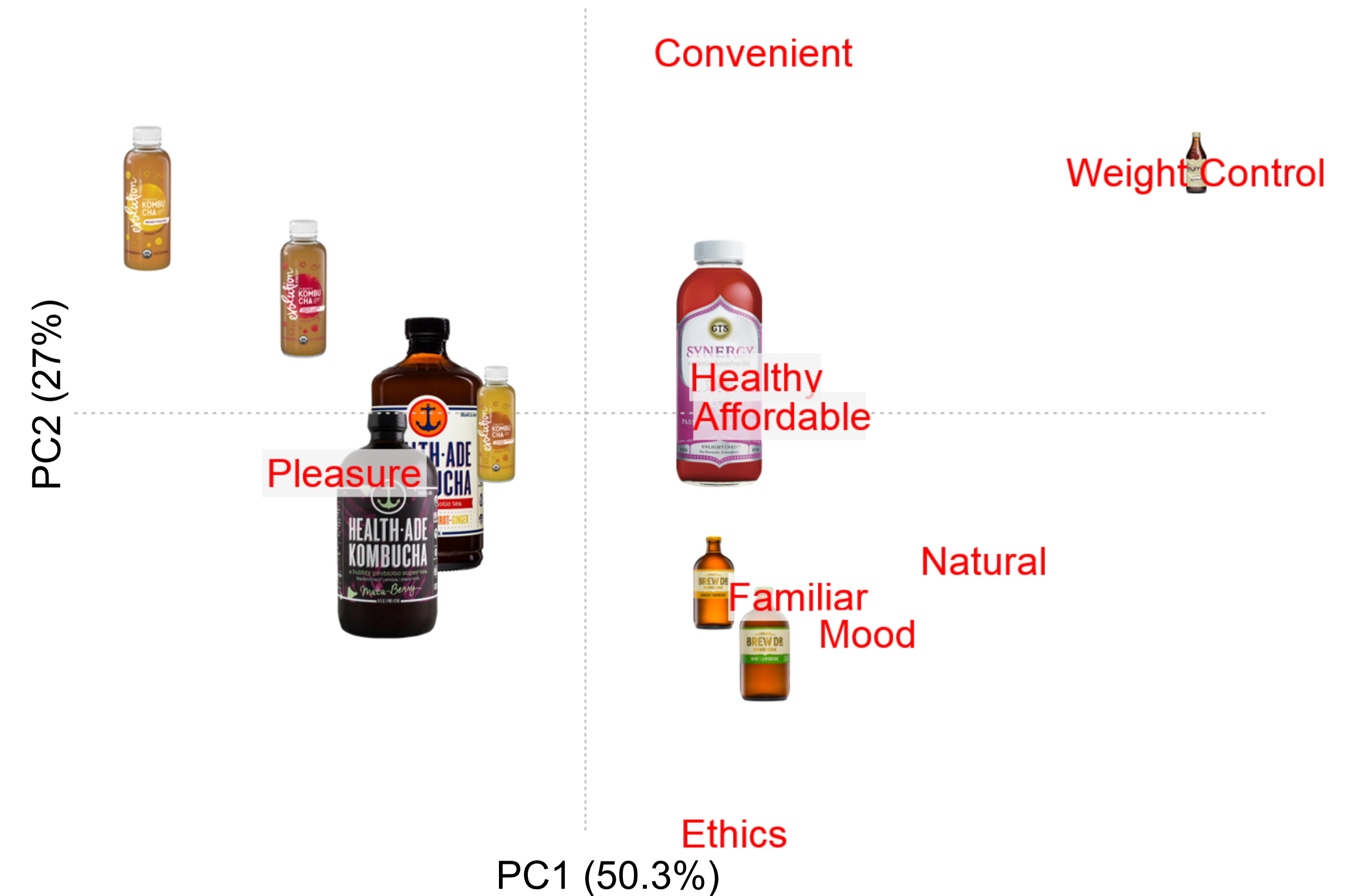


Fig. 3. PCA was used to explore the variability in food choice motivations of consumers who purchased each of the kombuchas.

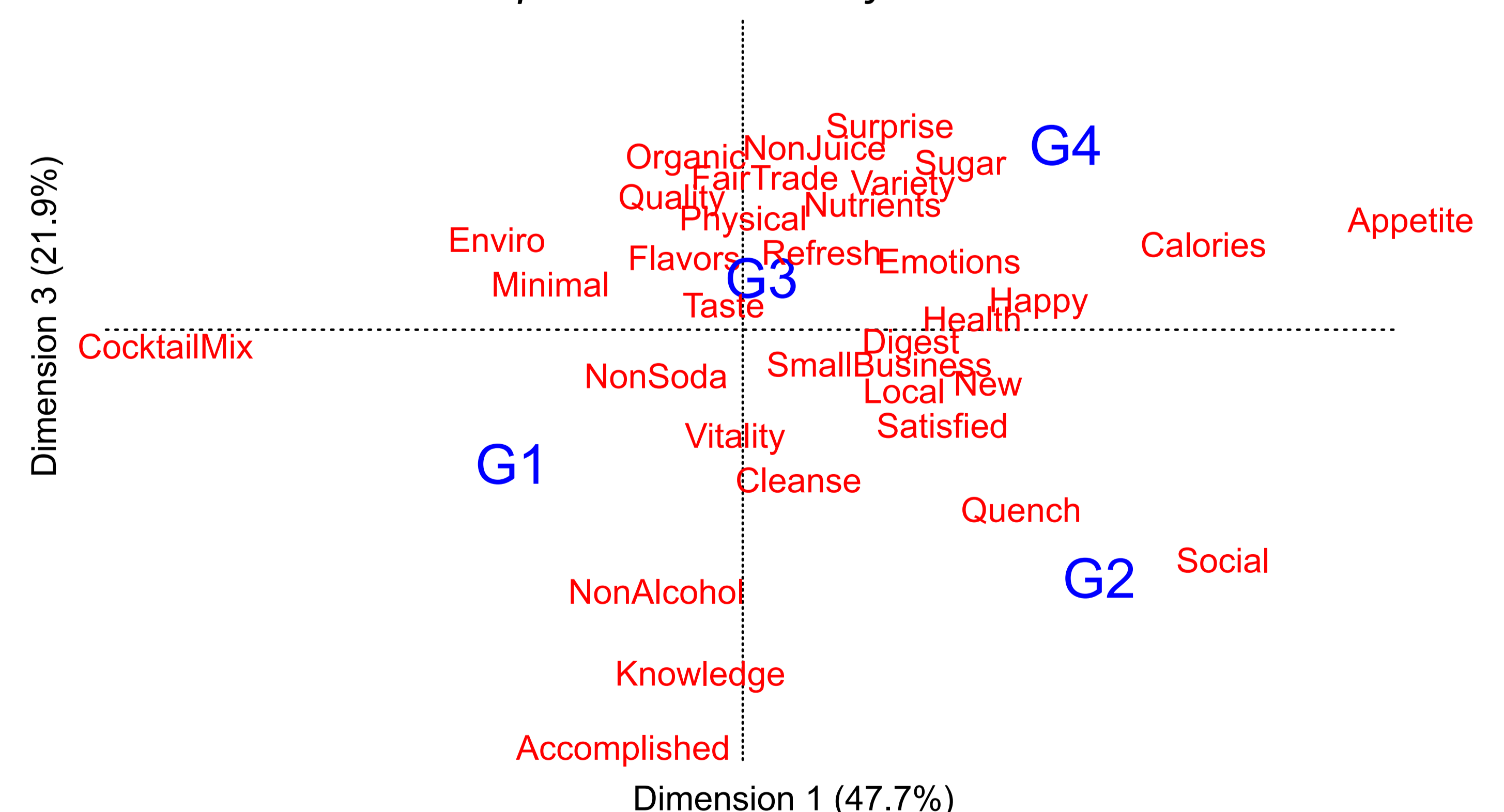


Fig. 4. CA plot based on expected benefits of kombucha for four consumer clusters obtained based on their food choice motivations.

## Conclusions

This poster describes results from a recent study, and analyses are ongoing. Initial analyses suggest that obtaining information about consumers' food choice motivations provide useful information for understanding consumers' product choice.