

DEVELOPMENT OF CONSUMER TYPOLOGIES FROM APPROPRIATENESS RATINGS

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Abstract

This study was designed to determine whether consumers could be grouped on the basis of their perceptions of the appropriateness of various food-use combinations, and, if so, whether these categories replicate across subject sets. Results indicate there are at least three, and possibly five, stable people groups vis-a-vis food attitudes.

Introduction

For the last 25 years, market segmentation has been an important concept in consumer research. Previous studies of food products exemplify how different typologies are developed for different purposes in the same product area. However, as far as the present authors have been able to determine, the work by Baird and Schutz (1976) is the only published research concerned specifically with typing people on the basis of their attitudes toward a variety of foods. In their study, Black, Anglo, Mexican, and Chinese homemakers participating in a nutrition education program were asked to rate the appropriateness of 20 foods with respect to each of 25 uses or characteristics. These data were factor analyzed to group the subjects into types. Approximately two-thirds of the homemakers fell in negative groups such as the Hostiles, Social Isolates or Unhappy Eaters and one-third fell in positive groups such as the Sociables and Confident Independents. Because of possible implications not only for nutrition education, but also for such areas as food product development and taste panel research, the present authors decided to conduct a similar study of a less specialized group of subjects evaluating a broader group of foods and uses. They also investigated whether a typology would replicate across subject sets.

Method

The chunk sampling method was used to select 200 female respondents, 50 each in Los Angeles, Chicago, Atlanta, and Boston. These respondents were asked to rate every combination of 56 foods with 48 uses. Separate foods and uses factor analyses were done for each city and for the total group (see Schutz *et al.*, 1975). Each of the foods analyses resulted in five factors, whereas the uses analyses all produced four factors. The two variables that loaded highest on each food factor and the three variables that loaded highest on each use factor were selected as representative of those factors.

Next, 160 questionnaires were randomly drawn and assigned to one of two subsamples. For each subsample, the 120 food-use ratings served as the basis for calculating the scaled distance between profiles for each pair of people (Rummel, 1970). The scaled distances for each subsample were then factor analyzed.

Results and Discussion

Each factor analysis produced five factors, accounting for 67% of the variance in subsample 1 and 66% of the variance in subsample 2. Subjects were categorized as being in one of the five factor groups on the basis of their factor loadings. For each subsample, the means for each of the 120 food-use combinations were compared with corresponding factor group means.

In both subsamples, Factor 1 is noted for higher-than-average mean ratings for both liver and chili in several situations, i.e., "with friends," "as a main dish," and "when I want something easy to prepare," and higher ratings for just liver "for teenagers" and "for dinner". These data, together with the high rating for jello "at parties" and cottage cheese "for dinner," suggest that these homemakers are self-assured creative cooks. This group seems similar to Baird and Schutz's Confident Independents.

Subjects in the Factor 2 group are negative about food. Their negative ratings tend to show up most with respect to "social" uses, i.e., "with friends," "at parties," and "for guests". These people seem to have much in common with Baird and Schutz's Social Isolates.

Factor 3 subjects have higher-than-average ratings for a variety of foods crossed with one use, "when unhappy," and a variety of uses crossed with one food, "cottage cheese". One gets an impression of women who use food for emotional support and hence are apt to gain weight. Then they use diet foods such as cottage cheese to reduce. These women seem similar to the Unhappy Eaters.

Factors 4 and 5 are minor factors in terms of both number of subjects falling in these groups and proportion of variance accounted for. The only distinguishing feature of Factor 4 is the lower-than-average ratings for liver and chili. The people in this group seem to be food conservatives. For Factor 5, there are a cluster of lower-than-average ratings for cottage cheese and higher-than-average ratings for candy bars. These ratings suggest a group of people who do not want to lose weight or have given up trying.

In summary, this research indicates that item-use appropriateness ratings can be used to type consumers in a meaningful manner. Although this study dealt with food, the method could obviously be used for other products. With respect to food, the research suggests that there are three, and possibly, five, relatively stable types. The composition of a given group in terms of these types could have implications for the outcome of a variety of food and nutrition programs.

References

- Pamela C. Baird and Howard G. Schutz, "The Marketing Concept Applied to 'Selling' Good Nutrition," Journal of Nutrition Education, 8 (January-March, 1976), 13-17.
- R. J. Rummel, Applied Factor Analysis (Evanston, IL: Northwestern University Press, 1970).
- Howard G. Schutz, Margaret H. Rucker and Gerald F. Russell, "Food and Food-Use Classification Systems," Food Technology, 29 (March 1975), 50-64.