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PEPSI VERSUS COKE: LABELS, NOT TASTES, PREVAIL

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Summary.—60 subjects tasted cola from two cups, one marked *L*, the other marked *S*. The same product (either Pepsi or Coke) was placed in both cups. Whether both cups contained Pepsi or Coke, subjects overwhelmingly reported cup *S* contained the better-tasting product. In Experiment 2, 30 subjects were asked their preference for either Pepsi or Coke. Then they drank from a Pepsi bottle (which contained Coke) and from a Coke bottle (which contained Pepsi). Subjects were significantly influenced by the label of the product they preferred and not by taste differences between these products. It was concluded that a taste comparison of colas should avoid using any labels, even presumably neutral ones like letters of the alphabet, since such labels may have more powerful influences on product comparisons than taste differences.

In a current television advertising campaign, individuals are asked to sample two colas (Pepsi and Coke) and indicate their preference. In some of these tests, the cups containing the soda are labelled *L* or *S*. An obvious question is whether these labels could have any influence on the taste judgments of the participants. Marketing research has shown the impact of labelling in affecting consumer behavior (Miller, 1978), and it seems reasonable to postulate that individual letters (labels) could act as visually-loaded stimuli which influence preference. The present studies were designed to assess the role of individual letters, and actual product labels, in the Pepsi-Coke taste test.

EXPERIMENT 1

A preliminary survey of evaluations of the letters *L* and *S* was conducted to determine any differences in preference. Students in an introductory psychology class ($N = 58$) were asked to rate the letters on a 10-point scale, with 1 indicating "intense dislike," and 10 indicating "intense liking." The mean rating for *S* ($M = 6.78$) was significantly higher than that for *L* ($M = 6.02$; $t_{56} = 2.38$, $p < .05$). From these results, it was predicted that in a taste test using only one soda, there would be a tendency to prefer the soda in a cup labelled *S* over the same soda in a cup labelled *L*.

Method

The subjects were 60 college students, randomly selected as they walked through the college cafeteria line. Each subject was asked to participate in a taste test. Each then drank from two cups. The cups were identical, except one was clearly labelled *L*, the other *S*. Position of the cups, which were on a table in front of the subject, was alternated for successive subjects, and the subject was always handed the left cup (facing the subject) first. The procedure was conducted over two sessions, separated by 2 wk. For the first session, both cups contained Coke. For the second session, both cups contained Pepsi. Thirty students were tested in each session. Those in session two were questioned to ensure they had not participated in session one. In both sessions, no comments were made by the experimenter concerning what was contained in the cups. Her only in-

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structions to the subjects were: "Please taste each of these and tell me the letter of the cup you prefer."

Results and Discussion

The results for each session were quite clear, and consistent with the earlier reported ratings of the letters *L* and *S*. In Session 1, when both cups contained Coke, 27 of 30 subjects indicated a preference for the cup labelled *S* ($\chi_1^2 = 19.2$, $p < .01$). Similarly, in Session 2, when both cups contained Pepsi, 24 of 30 subjects preferred the cup labelled *S* ($\chi_1^2 = 10.8$, $p < .01$). It was concluded, therefore, that in a taste test of this nature, subjects can be highly influenced by a letter label on the cup, in this case, *L* or *S*. The reasons for this preference are not clear, although one could speculate about different emotional connotations of the letters, frequency in the language, etc. Regardless of interpretation, however, the data suggest that any taste comparison using cups marked *L* or *S* is of questionable validity.

EXPERIMENT 2

If subjects can be influenced by a letter label, one might reasonably expect an even greater influence by the product label itself. In Exp. 2, subjects were asked to state their preference for Coke or Pepsi, and then were given the taste test to "confirm" their preference. For the actual taste test, however, Pepsi was poured into a standard Coke bottle, and Coke was poured into a standard Pepsi bottle.

Method

Thirty college students were tested in a dorm lobby over a period of three days. Each subject was asked to participate in a "Pepsi-Coke survey." The subject was first asked to give a preference for Pepsi or Coke. Then, "as a confirmation of your preference," each subject tasted soda poured into a plain cup from a Pepsi bottle and from a Coke bottle (with order of pouring/tasting alternated). The pouring was done in full view of the subject, and after the preference had been stated.

Results

A total of 22 subjects were influenced by the bottle label and said that the non-preferred soda tasted better than the preferred. Specifically, 6 of the 10 students who indicated a preference for Coke proceeded to say that the soda in the Coke bottle (which was actually Pepsi) tasted better. Similarly, 16 of the 20 students who indicated Pepsi as the preferred drink said that the soda in the Pepsi bottle (which was actually Coke) tasted better. The remaining students correctly indicated a switch had occurred and were thus uninfluenced by the label. Nevertheless, the over-all effect of the label was statistically significant ($\chi_1^2 = 6.54$, $p < .05$).

Comment

The results of the present studies are consistent in showing the effects of external stimuli, be it a letter or a product label, on perceived taste. Clearly, any comparison of products which involves such discernible stimuli must be questioned. In the Pepsi-Coke test, for instance, it would appear inadvisable to label the cups containing the products, even when those labels seem inconsequential, e.g., *L* and *S*.

REFERENCE

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PRESENTATION ORDER EFFECTS IN PRODUCT TASTE TESTS*

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SUMMARY

Presentation order in paired-comparison testing was varied to measure the impact of primacy *versus* recency effects on consumer product evaluations. Overall preference and product rating scores were gathered for 1196 male and female *S*s aged 13-49 years in two consumer research studies covering 11 taste tests. First position preference bias characterized the findings, lending support to the attention decrement hypothesis or a suggested palate desensitization effect on subsequent taste trial behavior.

A. INTRODUCTION

A well documented phenomenon in learning research is the existence of primacy and recency order effects (4, 7). Recall and impression formation from an item list appear to be greater for both initially and most recently presented stimuli than for interim stimuli, which seem to encounter memory inhibition. The question of primacy *versus* recency dominance, however, is not clear-cut and continues to be debated. Referring to Hovland's *caveat* to focus on intervening and situational variables, Crano notes that ". . . the field today is in no more consolidated a position, from the standpoint of theoretical consensus, than it was in 1957" (3, p. 89).

Marketing researchers generally have heeded the psychologist's caution to vary presentation order in consumer product testing. At the same time there have been no reported attempts to determine whether first or last position bias does influence consumer choice. Moreover, while considerable primacy-recency research has been conducted by using visual and auditory stimuli (1, 2, 5), and to a lesser extent motor stimuli (6), little study has been devoted in this area to the sense of taste. The present study measures

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