
**The Sense and Nonsense
of Consumer Product
Testing: How to Identify
Whether Consumers
Are Blindly Loyal?**

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Priya Raghurir

Stern School of Business, New York University
USA
raghubir@stern.nyu.edu

Tyzoon T. Tyebjee

Leavey School of Business, Santa Clara University
USA

Ying-Ching Lin

National Dong Hwa University
Taiwan, ROC
yclin@mail.ndhu.edu.tw

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The Sense and Nonsense of Consumer Product Testing: How to Identify Whether Consumers Are Blindly Loyal?*

Priya Raghurir¹, Tyzoon T. Tyebjee²,
and Ying-Ching Lin³

- ¹ Professor and Mary C. Jacoby Faculty Fellow, Stern School of Business, New York University, USA, raghubir@stern.nyu.edu
² Professor of Marketing, Leavey School of Business, Santa Clara University, USA, (deceased)
³ Associate Professor, National Dong Hwa University, Taiwan, ROC, yclin@mail.ndhu.edu.tw

Abstract

This paper builds on recent research that shows that product experience is based on the interaction of a range of sensory cues whose effect is non-conscious (e.g., visual cues affect taste perception) to revisit the classic issue of product taste testing. We propose that as consumers are unaware of the influence of a range of stimuli on their judgments and experience it is difficult for managers to collect valid and reliable consumer insights regarding the manner in which perceptual and sensory

* Please address all correspondence to Priya Raghurir, Stern School of Business, New York University, 40 West 4th Street, New York, NY 10012-1126, USA. Ph: 212-998-0724; Fax: 212-995-4006; email: raghubir@stern.nyu.edu. We thank Bruce Buchanan, Rashi Glazer, Teck Ho, and Eric Yorkston for helpful comments on earlier drafts and Geeta Menon and Vicki Morwitz for their insights.

cues affect judgments and how they interact with each other. Therefore, we propose that the methodological paradigm of taste testing can and should be used to examine the effect of strategic and tactical marketing mix decisions in domains when consumer decision-making is non-conscious. Based on previous academic research, specific directions for managers to execute the test are provided: How to design and conduct a taste test, what measures to include and why, and how to analyze taste test results. We provide an example of the insight the methodology can provide using three related taste tests. While we use the attribute of taste as a specific example, the methodology and results can be translated into other domains where consumers may not be able to accurately explicate the reasons for their product experience, but that drive marketing decisions, including and beyond changing intrinsic product attributes.

Contents

| | | |
|----------|--|-----------|
| 1 | Introduction | 1 |
| 2 | Literature Review and Overall Proposition | 7 |
| 2.1 | Tensile Taste | 7 |
| 2.2 | Non-conscious Effects of Influence | 11 |
| 3 | Implications of the Non-conscious Effects of Tensile Taste for Product Testing | 13 |
| 4 | Designing a Taste Test to Provide Reliable Data: Review of the Existing Methods | 23 |
| 4.1 | The Triangle Test | 23 |
| 4.2 | Repeated Pair Comparisons | 24 |
| 4.3 | Recommended Methodology for Blind Taste Tests | 26 |
| 4.4 | How to Analyze a Taste Test: Objective Criterion | 27 |
| 4.5 | Complementing Objective Taste Test Data with Subjective Measures | 29 |
| 5 | The Cola Wars: A Triangle Taste Test Study | 33 |
| 5.1 | Study Objectives | 33 |

| | | |
|----------|--------------------------|-----------|
| 5.2 | Study Participants | 34 |
| 5.3 | Methodology and Measures | 34 |
| 5.4 | Results | 36 |
| 6 | Discussion | 41 |
| 6.1 | Beyond Taste Testing | 42 |
| | References | 45 |

1

Introduction

“Taste V. “Freshness”; Miller Rolls Out Latest Ads “Focused” on Direct Taste Comparisons, As Anheuser-Busch Reacts With Massive “Freshness” Campaign. New Ads Continue Highlighting Miller’s Taste Advantages, While A-B Exhorts Distributors to Spend on “Freshness” Activities. Miller Also Expands Its Highly Successful Blind Taste Challenge, Upping Its Target to Five Million Challenges.¹”

The press release from Miller Brewing Company in 2004 is just one example of how blind taste tests have become a public-relations, advertising and competitive weapon for food and beverage manufacturers. However, is taste blind? Recent research in marketing (see Peck and Childers, 2008 for a review), psychology (Epley et al., 2004), and neuroscience using fMRI technology (McClure et al., 2004) responds with a resounding “No.” Though consumers may be blind to brand, their taste experience is not blind to all the taste, smell, touch, and auditory cues that influence their taste perceptions and preference. The thesis of this paper is that explicitly accounting for the contextual effects on taste based on academic research can improve the reliability of taste

¹<http://www.millerbrewing.com/pressRoom/archiveDetails.asp?ideanumber=124>

2 Introduction

test data, and that manipulating contextual cues and measuring their influence can allow managers to leverage the taste test paradigm to gain customer insights for marketing decisions. Given that consumers can be “blindly” loyal (i.e., base their attitudes to a brand on brand-related cues that go beyond product formulations), blind taste testing can lead to misleading, arguably “nonsensical” results. Explicitly incorporating that people “taste” using their other four senses, visual, auditory, tactile, and olfactory senses, beyond just their gustatory sense, can elevate taste testing from a managerial practice with questionable validity, to a useful and valuable way of measuring consumers’ unconscious responses to products.

It has been known for some time that consumers have a low ability to discriminate (Morrison, 1981), reliably express a preference, and identify the products tasted, but are overconfident that they can do so accurately (Buchanan and Henderson, 1992). There is also evidence in the consumer psychology literature that people appear to taste what they expect to taste, with those expectations driven by the brand name (Allison and Uhl, 1964; Bellizzi and Martin, 1982; LeClerc et al., 1994), the package in which the product is presented (McDaniel and Baker, 1977), and the nutritional label on the package (Levin and Gaeth, 1988). Further, these expectations appear to be strongly held and resilient to the actual taste experience (Roberts and Taylor, 1975), with the recalled taste experience affected by post-experience advertising (Braun, 1999).

Given that almost a half-decade of research in testing methodology (Ferris, 1958; Hopkins and Gridgeman, 1955; Horsnell, 1969, 1977), with specific applications to marketing (Greenhalgh, 1966; Hyett and McKenzie, 1976; Morrison, 1981; Moskowitz et al., 1980; Roper, 1969), has shown that taste may not be blind, the common use of blind taste tests by industry gives pause for thought. It is curious that blind taste tests continue to be used by companies to shape marketing strategy (Campbell Soup in Hong Kong, Weber, 1993), develop new products (Smith’s Crisps in Holland, Gibson, 1998; Minute Maid in Canada, Brennan, 1986), and advertise product superiority claims (Burger King fries versus McDonald’s, Taco Bell versus Burger King’s Gordita, and Papa John’s versus Pizza Hut, Cebrzynski, 1998; for a review of other

examples see Buchanan, 1985; Ghose and Lowengart, 2001). Clearly, the use and report of blind taste tests can be effective at persuading consumers and capturing market share (Virgin Cola versus Pepsi and Coke, Prince, 1996), as well as shaping a key competitor's strategic response (Pepsi's "Challenge" versus Coke, forced Coke's hand to reconsider its formulation; Dubow and Childs, 1998), but the use of blind taste tests to develop a company's strategy and introduce a new product can have unintended and potentially disastrous consequences (Coke's introduction of New Coke; Dubow and Childs, 1998).

In this paper, we revisit the classic issue of product taste testing based on recent advancements made in psychology, neuroscience, and marketing, on how sensory cues (e.g., taste, smell, sight, sound, and feel) affect product judgments (for a review see Peck and Childers, 2008). Peck and Childers (2008) report an exponentially growing interest in the effect of sensory cues on consumer behavior: Whereas only 6 of the 81 articles in their review (of all senses except visual perception) were published prior to 1980, 18 were published in the 1980s, and almost double that number were published in the 1990s ($n = 29$), with as many published over the following five years. In fact, "sensory marketing" is a legitimate new and growing field of interest among consumer researchers (Krishna, 2009).

We specifically examine the implications of the growing acceptance that the five different sensory modalities (e.g., the olfactory, auditory, tactile, gustatory, and visual systems) interact with each other, rather than exert independent influences, to define a customer's experience (Calvert et al., 2004). Further, we propose that as consumers are unaware of the influence of a range of stimuli on their judgments and experience (Fitzsimons et al., 2002), they cannot explicate them, leading to methodological challenges for managers to collect valid and reliable consumer insights regarding the antecedents of a consumers' experience. We propose that the methodological paradigm of taste testing can and should be used to examine the effect of strategic and tactical marketing mix decisions, including and beyond changing intrinsic product attributes. This is particularly pertinent for domains when consumer decision-making is non-conscious and where consumers may not be able to accurately explicate the content of, and the reasons for,

4 *Introduction*

their experience. Such an approach will not only yield reliable insights for managers that would be elusive using standard survey techniques, but will also add to the nascent, but growing, literature in marketing on how sensory product experience is multi-modal.

These issues, while based on the specific domain of taste testing speak more generally to the issue of consumer research such as other types of sensory testing (including tactile, olfactory, visual, and auditory tests), advertising copy testing, concept testing, price discrimination studies, package design studies, store layout studies, and others. Thus, the goal of this paper is to use the taste test as a paradigm to understand how consumers make a range of sensory decisions combining intrinsic product information with the information available in the environment: Specifically, the research testing context. Our reasoning and methodology can be translated to examine the effect of other sensory systems which share the characteristics of non-conscious and interactive effects, such as smell (Morrin and Ratneshwar, 2003; Spangenberg et al., 1996), touch (Peck and Childers, 2003), vision (Hoegg and Alba, 2007; Krishna, 2006), and sound (Mattila and Wirtz, 2001; Spangenberg et al., 2005; Yorkston and Menon, 2004; Yorkston and de Mello, 2005). The proposed approach to testing can also be translated to non-sensory domains that are affected by sensory input, such as perception of speed (Gorn et al., 2004), inferences of quality (Compeau et al., 1998), and spending behavior (Hirsch, 1995).

The remainder of the paper is organized as follows. Section 1 summarizes extant literature and concludes with our key propositions. Section 2 examines the implications of the propositions for testing. Beyond guidelines to control for or measure unintended effects, we propose that managers can leverage these effects and use the taste testing paradigm to test for the independent and interactive effects of a range of stimuli that are difficult to capture using traditional survey methodology techniques. The manner in which taste tests can be used to make a range of marketing decisions is described. Section 3 provides specific directions to execute the test: how to design and conduct a taste test, what measures to include and why, and how to analyze taste test results. Section 4 provides an empirical demonstration of the methodology using three samples drawn from two countries, testing formulations that are

similar or dissimilar to each other, and discusses the managerial and theoretical insights available from these demonstrations. Finally, Section 5 concludes with implications for other sensory and non-sensory modalities.

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