

THE EFFECT OF NUMERICAL MARKERS ON CONSUMER JUDGMENT AND DECISION MAKING

April 22nd, 2017

Moore School of Business, University of South Carolina

ABSTRACTS

Session 1: Quantifying Claims

Making Each Unit Count: The Effect of Discretizing Units on Magnitude Perceptions

Christophe Lembregts, Erasmus University, Netherlands

Bran van den Bergh, Erasmus University, Netherlands

Expressing quantitative information in alternative units has important consequences for magnitude judgments. We show that specifying information in “more discretizing” units (units that trigger a representation of a collection of elements; e.g., 35 chocolates) increases perceived differences between choice options relative to specifying information in “less discretizing” units (500 gram).

“Up to” Is Not Equal for Marketers and Consumers: How Quantification Influences Expectations and Satisfaction

Nell Putnam-Farr, Yale University

Jason Riis, University of Pennsylvania

Across field and lab experiments, we examine how the use of numbers to quantify potential benefits of program participation can positively impact enrollment but negatively affect ongoing participation. Specifically, we find that people adopt numerical information in recruitment messages as personal performance targets, and are less satisfied with the program if they do not meet those targets.

Is Top 10 Better than Top 10%?: How Different Rank Claim Formats Generate Preference Reversals

Julio Sevilla, The University of Georgia

Mathew S. Isaac, Seattle University

Rajesh Bagchi, Virginia Tech

In this research, we show that consumers evaluate the same item on a ranked list more [less] favorably if it is described using a numerical (e.g., top X) versus percentage (e.g., top Y%) format when set size is relatively small [large]. We attribute this preference reversal to a phenomenon we identify as “format neglect.”

Session 2: Pricing

When is HILO Low? Consumer Formation of Retailer Price Image Impressions

Daniel Sheehan, University of Kentucky

Ryan Hamilton, Emory University

Ramnath Chellappa, Emory University

Retailers often take for granted that EDLP results in a lower price image than HILO pricing. In this research, we find that there are common settings under which consumers form a lower price image of a HILO store than an EDLP store, holding average pricing across the two stores constant.

Does Redundant Numeric Information Debias or Strengthen Price Framing Effects?

Stephen A. Atlas, University of Rhode Island

Jiyoon An, University of Rhode Island

We examine how temporal frame presentation order (monthly vs yearly price first) impacts subscription purchases, through a field study involving 16,290 users of a popular mobile subscription, and a controlled experiment. We discuss how attention and sequential cognition determine consumer response to numeric information.

The Round-Number Advantage in Consumer Debt Payoff

Mathew S. Isaac, Seattle University

Yantao Wang, Seattle University

Robert M. Schindler, Rutgers University

Our field and experimental research indicates that people are more likely to pay off debts with round-number endings (e.g., -0 and -5) than similarly-sized debts that do not end in round numbers. We attribute this round-number advantage to the tendency of round numbers to require less cognitive effort than non-round numbers.

Poster Session

% versus Number: How Recommendation Rate is Framed Influences Consumer Choice

Anh Dang, Dominion University

Yuping Liu-Thompkins, Dominion University

Consumers often prefer products with more reviews to those with fewer reviews. We propose that the dominant effect of review volume can be attenuated by presenting recommendation rate of products as numbers (e.g., 44 out of 50 consumers recommend) instead of as percentages (e.g., 88% of 50 consumers recommend).

Buying Multiple Units: Payment Method and Consumer Variety Seeking

Liang Huang, University of South Carolina

Rafay Siddiqui, The Hong Kong Polytechnic University

Anastasiya Pocheptsova Ghosh, University of South Carolina

Consumers often purchase multiple units of the same product (e.g., when buying five yogurt cups). They can pick units of the same type or of a variety of units (e.g., different flavors of yogurt). We show that variety seeking is influenced by payment methods: less painful methods lead to greater variety seeking.

Round = Man, Precise = Machine: The impact of round versus precise number price increases on perceptions of fairness

Anoosha Izadi, University of Houston

Vanessa M. Patrick, University of Houston

The present research investigates the impact of price increase in the form of round (vs. precise) numbers on consumer's fairness perceptions. We theorize that in circumstances, where the ease of justification is low, round (vs. precise) price increases is suggestive of human intent to deceive, thus appear unjustified.

Everyday Synesthetes: A Broader Perspective on Number-Personality Associations

Hannah Perfecto, University of California, Berkeley

Leif D. Nelson, University of California, Berkeley

Researchers have suggested that people, as if synesthetic, associate personalities with numbers; however, these researchers generalize rules from few exemplars. We show these generalizations are largely unwarranted. Using a within-subjects pilot (N=53) and large-scale between-subjects follow-ups (N=4,812) evaluating all numbers 1-100, we find instances and patterns contrary to existing research.

Front of Package (FOP) Labeling and Food Healthiness Perceptions

Gustavo Schneider, University of South Carolina

In three studies, we demonstrate that the mere presence of FOP labels on foods influence consumers' perceptions of food healthiness. The presence of FOP label positively enhances healthiness perception of foods even for unhealthy nutrients, and consumers judge nutrients differently when its information is present on a FOP label (vs. mandated Nutrition Facts).

More Isn't Always Better: Receiving Additional Information Increases the Desirability Bias

Cassandra L. Smith, University of South Carolina

Andrew R. Smith, Appalachian State University

Paul D. Windschitl, University of Iowa

Jillian O. Stuart, Finlandia University

Shanon Rule, University of Iowa

The desirability bias is the increased perceived likelihood of desired outcomes. Can numerical information debias people? Three studies examined whether or not the addition of visual and/or probabilistic information decreased the desirability bias. Across all three studies, receiving more information actually increased the desirability bias.

How Consumer Price Rate Calculations Affect Deal Evaluations

Daniel Villanova, Virginia Tech University

Rajesh Bagchi, Virginia Tech University

Consumers are often faced with quantity offers and one strategy for evaluating the offer is to compute a price rate, which serves as a common metric for comparison. We examine conditions under which consumers compute price rates as unit prices or their reciprocal, and observe effects on offer evaluations.

Swayed by the Numbers: The Unintended Consequences of Displaying Online Product Review Volumes

Jared Watson, University of Maryland

Anastasiya Pocheptsova Ghosh, University of South Carolina

Michael Trusov, University of Maryland

In this research, we argue that by prominently displaying a product's review volume, retailers often create trade-off scenarios between average product ratings and review volumes, which can result in preference for lower-rated products. This effect is driven by an increased perceived importance of review volumes when volumes are small.

Session 3: Mental Categories

Slip Sliding Money Away: How Response Formats Influence Willingness-to-Pay

Manoj Thomas, Cornell University

Ellie Kyung, Dartmouth College

Although organizations use text boxes and slider scales interchangeably to elicit consumers' willingness-to-pay, nine experiments demonstrate that slider scales elicit more extreme responses than text boxes. This happens because slider scales alter the calibration of the mental number line that people use to evaluate their bids.

Isn't This Odd? Gender Differences in Preferences for Even versus Odd Numbered Products

James Wilkie, University of Notre Dame

Brett Pelham, Montgomery College

Extending Wilkie and Bodenhausen's (2012, 2015) research on numeric gender perceptions, we explore when such associations influence male/female consumer behavior. Across nine studies, we find that preference for products paired with even versus odd numeric information varied by sex, however, this effect was moderated by judgement and decision-making process styles.

What's the Point of Points? How Consumers Perceive, Save, and Spend Loyalty Points

Shelle Santana, Harvard University

Priya Raghbir, New York University

Four studies show that consumers perceive loyalty points to be a relatively frivolous (vs. serious) form of payment which results in consumers using them to pay for relatively frivolous items, even when all redemption options are objectively serious in nature. Financial literacy has only a modest impact on these results.

Session 4: Numeracy Biases

The Mode as an Indicator of Typicality

Daniel Villanova, Virginia Tech

Elise Chandon Ince, University of South Carolina

Rajesh Bagchi, Virginia Tech

Previous research on how consumers evaluate products using ratings information emphasizes the importance of ratings' volume, mean, and dispersion. We propose that consumers also rely on the mode. We demonstrate that consumers' evaluations are shifted by the mode because of the mode's impact on judgments of what ratings are "typical."

Thou Shalt Not Look! How Numerical Markers in Games of Chance Bias Gambling

Rod Duclos, Western University, Canada

Mansur Khamitov, Western University, Canada

We examine how gamblers visually process quantitative information (i.e., their odds), forecast their chance of winning, and bet. Across four studies, we find that manipulating the visual/graphic representation of odds can artificially inflate gambling. In contrast, encouraging gamblers to process their odds numerically (rather than visually/graphically) helps lessen this bias.