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# Yu Ding

Columbia Business School 5T Uris Hall 3022 Broadway New York, NY 10027

Email: yu.ding@columbia.edu

Phone: +1 (917) 244-8878 Homepage: www.yudinglab.com

### **Education**

Ph.D., Marketing, Columbia University, 2022 (expected)

M.S., Statistics, National University of Singapore, 2016

B.A.(with Honors), Marketing, Fudan University, 2013

# **Research Interests**

Theoretical: Consumer trust in science (dissertation topic), companies, and social others

Substantive: Information consumption, social media, influencer marketing, price promotions

Methodological: Bridging consumer psychology with machine learning, ecological psychology

### **Publications**

1. **Ding, Yu** and Yan Zhang (2020), "Hiding Gifts Behind the Veil of Vouchers: The Effect of Gift Vouchers in Conditional Promotions," *Journal of Marketing Research*, 57(4), 739-54. Web Appendix

Selected Media coverage: JMR Scholarly Insights

2. **Ding, Yu** and Krishna Savani (2020), "From Variability to Vulnerability: People Exposed to Greater Variability Judge Wrongdoers More Harshly," *Journal of Personality and Social Psychology*, 118(6), 1101-17. Web Appendix

Lead article. Selected Media coverage: Science

- 3. Ding, Yu, Wayne S. DeSarbo, Dominique M. Hanssens, Kamel Jedidi, John G. Lynch, Jr., and Donald R. Lehmann (2020), "The Past, Present, and Future of Measurement and Methods in Marketing Analysis," Marketing Letters, 31, 175-86. Web Appendix
- 4. Savani, Krishna, Monica Wadhwa, Yukiko Uchida, **Yu Ding**, and N. V. R. Naidu (2015), "When Norms Loom Larger than the Self: Susceptibility of Preference-Choice Consistency to Normative Influence across Cultures," Organizational Behavior and Human Decision Processes, 129, 70-79.

Selected Media coverage: NTU News

# **Selected Research in Progress**

\*indicates equal authorship.

1. **Ding, Yu** and Gita V. Johar, "Fact-Checking Matters: A Novel Crowdsourcing Approach for Improving the Information Ecosystem," working paper. Dissertation essay 2. **Job Market Paper**.

ACR-Sheth Foundation Dissertation Award, 2020

Computational Social Science Grant, Russell Sage Foundation, 2020

Deming Doctoral Fellow Grant, Columbia Business School, 2019

2. **Ding, Yu**, Gita V. Johar, and Michael. W. Morris, "Religious Homogeneity and Intolerance Can Predict Science Denial," working paper. Dissertation essay 1.

Chazen Doctoral Research Grant, Columbia Business School, 2020 Chazen Global Research Grant, Columbia Business School, 2017

- 3. **Ding, Yu** and Ellie Kyung, "Time Flies Only When the Speed is 'Just Right': The U-Shaped Effect of Animation Speed on Perceived Waiting Time," invited revision at *Journal of Consumer Research*.
- 4. Chung, Jaeyeon, **Yu Ding**, and Ajay Kalra, "I Really Know You: How Influencers Can Establish Authenticity Using Self-Disclosure," invited revision at *Journal of Consumer Research*.
- 5. **Ding, Yu\***, Jill Xiong\*, and Gita V. Johar, "Slim = Luxurious? Product Shape and Consumer Perceptions of Product Luxury," working paper.

LVMH-SMU Luxury Research Conference Special Award, 2018 LEF Doctoral Fellow, Luxury Education Foundation, 2018

- 6. Ding, Yu, Elizabeth M.S. Friedman, and Donald R. Lehmann, "The Second-Best Option," in progress.
- 7. Ding, Yu, Zheshuai Yang, and Ran Kivetz, "The Backfire Effect of Quantity Promotion," in progress.

### **Presentations and Talks**

"A Novel Crowdsourcing Approach for Improving the Information Ecosystem"

*Morris lab,* Columbia University, Jun 2021 *Motivation lab,* New York University, Apr 2021 *Johar lab,* Columbia University, May 2020

"Which Posts are Popular on Instagram?"

Marketing Quant Lab, Columbia University, Nov 2020 Society for Consumer Psychology, Huntington Beach, CA, Mar 2020

"The U-Shaped Effect of Animation Speed on Perceived Waiting Time"

Lehmann Lab, Columbia University, Dec 2019

Association for Consumer Research, Atlanta, GA, Oct 2019

Association for Consumer Research, Dallas, TX, Oct 2018

"People Exposed to Greater Variability Judge Wrongdoers More Harshly"

Society for Personality and Social Psychology, Atlanta, GA, Mar 2018 Association for Consumer Research, San Diego, CA, Oct 2017 Society for Personality and Social Psychology, San Antonio, CA, Mar 2018

"Hiding Gifts behind the Veil of Vouchers: The Effect of Gift Vouchers in Conditional Promotions"

Association for Consumer Research, San Diego, CA, 2017 Marketing seminar, National University of Singapore, Feb 2015

"Slim = Luxurious? Product Shape and Consumer Perceptions of Product Luxury"

Society for Consumer Psychology, Savannah, GA, Mar 2019
Association for Consumer Research, Dallas, TX, Oct 2018
Marketing seminar, Columbia University, Nov 2017
Behavioral lab, Columbia University, Oct 2017
Association for Consumer Research, Berlin, Germany, Oct 2016

# **Teaching Experience**

"Innovate Using Design Thinking" (MBA/Engineering)

Teaching assistant for Gita Johar and Adam Royalty, Columbia Business School, Summer 2021

"Marketing" (MBA/EMBA)

Teaching assistant for Oded Netzer, Columbia Business School, Fall 2020

Teaching assistant for Asim Ansari, Columbia Business School, Spring 2020

Teaching assistant for Gita Johar and Kamel Jedidi, Columbia Business School, Summer 2019

"Pricing Strategy" (MBA)

Teaching assistant for Asim Ansari, Columbia Business School, Spring 2020

"Developing QI: Responsive Decision Making Through Quantitative Intuition" (EMBA)

Teaching assistant for Oded Netzer, Chris Frank, Paul Magnone, Columbia Business School, Summer 2020

"Lead: People, Teams, Organizations" (MBA)

Teaching assistant for Michael Morris, Columbia Business School, Summer 2019 and Summer 2020

"Managerial Decision Making" (MBA)

Teaching assistant for Krishna Savani, Nanyang Business School, Fall 2015

"Asian Markets and Marketing Management" (undergraduate)

Teaching assistant for Yan Zhang, NUS Businss School, Spring 2015

### **Grants and Awards**

ACR-Sheth Foundation Dissertation Award, 2020

Computational Social Science Grant, Russell Sage Foundation, \$9,940, 2020

AMA-Sheth Doctoral Symposium Fellow, Indiana University, 2020

Chazen Doctoral Research Grant, Columbia Business School, \$5,000, 2020

Deming Doctoral Fellow Grant, Columbia Business School, \$10,000, 2019

University of Houston Marketing Doctoral Symposium Fellow, 2019

Luxury Education Foundation Doctoral Fellow, Columbia Business School, \$11,500, 2018

LVMH-SMU Luxury Research Conference Special Award, \$1,000, 2018

Chazen Global Research Grant, Columbia Business School, \$8,080, 2017

#### **Other Honors**

Behavioral Research Lab Fellowship, Columbia Business School, 2016

Doctoral Fellowship, Columbia Business School, 2016-2021

Shanye Corporate Scholarship, Fudan University, 2013

Uniqlo Corporate Scholarship, Uniqlo Co., Ltd., 2012

National Scholarship, Fudan University, 2009-2012

# **Employment**

Lab Manager at Culture Science Institute, Nanyang Business School, 2015-2016 Research Assistant at Marketing Lab, NUS Business School, 2013-2015 Intern, CIC, Shanghai, 2012-2013 Intern, Bain & Company, Hong Kong and Shanghai, 2011-2012

# **Academic Service**

Acta Psychologica Sinica, Ad-hoc reviewer, 2021-present

Journal of Personality and Social Psychology (JPSP), Ad-hoc reviewer, 2021-present

Personality and Social Psychology Bulletin (PSPB), Ad-hoc reviewer, 2020-present

Journal of Consumer Research (JCR), trainee reviewer, 2019-present

Association of Consumer Research (ACR), reviewer, 2016-present

Society of Consumer Psychology (SCP), reviewer, 2015-present

# **Community Service**

Ph.D. Student Social Events Coordinator, Marketing Division, Columbia Business School, 2018-present Academic Division of Ph.D. Student Council, Columbia Business School, 2019-present

### Reference

### Gita V. Johar (Advisor)

Vice Dean for Diversity, Equity, and Inclusion Meyer Feldberg Professor of Business Columbia Business School Columbia University Email: gvj1@gsb.columbia.edu

### Donald R. Lehmann

George E. Warren Professor of Business Columbia Business School Columbia University Email: drl2@columbia.edu

#### **Oded Netzer**

Arthur J. Samberg Professor of Business Columbia Business School Columbia University Email: onetzer@gsb.columbia.edu

# Yan Zhang

Associate Professor NUS Business School National University of Singapore Email: bizyz@nus.edu.sg

# Ellie J. Kyung

Associate Professor Tuck School of Business Dartmouth College Email: ellie.kyung@tuck.dartmouth.edu

### Michael W. Morris

Chavkin-Chang Professor of Leadership Columbia Business School Columbia University Email: michaelmorris@gsb.columbia.edu

#### Krishna Savani

Provost's Chair in Business Nanyang Business School Nanyang Technological University Email: ksavani@ntu.edu.sg

# Abstracts of papers

1. **Ding, Yu** and Gita V. Johar, "Fact-Checking Matters: A Novel Crowdsourcing Approach for Improving the Information Ecosystem," working paper. Dissertation essay 2. **Job Market Paper**.

The veracity of information is of critical importance given the explosion of news transmitted to, and shared by, consumers across different media. However, the scale of existing fact-checking organizations is limited, resulting in a very small proportion of news articles being fact-checked. We address the challenge of scaling up fact-checking operations in the domain of science-related articles by proposing and testing a novel crowdsourcing solution. A big challenge with asking lay consumers to rate the credibility of scientific news articles is that they are likely to be biased by their prior beliefs. We overcome this bias by proposing the use of article similarity ratings rather than credibility ratings, using articles that have been rated for veracity by scientists as a starting point. We find that asking lay consumers to rate the similarity between scientist-rated and unrated articles can provide an unbiased, effective, and efficient way to scale up veracity ratings of scientific articles. Our proposed method (human similarity-judgments) outperforms algorithmrated similarity (e.g., by TF-IDF and by Word Embedding) to more accurately predict an article's scientific veracity. Our method also outperforms previous approaches to judging veracity such as using algorithms that detect semantic markers of false news. We compute a "transitivity index" to identify consumers who are likely to be more accurate at making similarity judgments and show how the veracity predictions can be improved by paying close attention to the consumer segments recruited for the similarity-judgment task. We demonstrate that our method can predict the scientific veracity of articles with over 95% accuracy and that both type-I and type-II errors are minimized. Involving consumers in fact-checking operations can not only help scale up these operations, but can also increase consumer trust in the media ecosystem driven by consumer involvement.

2. **Ding, Yu**, Gita V. Johar, and Michael. W. Morris, "Religious Homogeneity and Intolerance Can Predict Science Denial," working paper. Dissertation essay 1.

This research focuses on consumer trust in science, exploring the societal and ecological factors that can influence consumer's science denial tendency. In this paper, we find that greater religious diversity—both real and perceived—in neighborhoods leads to a higher tolerance for other religions and less science denial. The reason is that tolerance for other religions implies tolerance for other belief systems, so that religious tolerance conduces to trust in science. We measure distrust in science (i.e., science denial) using surveys as well as actual behavior, such as practicing less social distancing during the COVID-19 pandemic or disapproving of scientific research in general. We find supporting evidence from seven studies using U.S. mobile location data, census data, worldwide archival data, experimental data, and national surveys conducted in different countries with participants from various religious groups. These results hold after controlling for a number of potential confounds, such as religiosity, political ideology, and various demographics. This paper establishes a link between people's living environment (i.e., the religious diversity in one's neighborhood) and their attitude towards science. To increase consumer trust in science, we argue that policy makers should emphasize religious integration and heterogeneity in schools, colleges, and communities. A good starting point is to encourage more favorable attitudes towards religious diversity, using well-established marketing techniques.

3. **Ding, Yu** and Yan Zhang (2020), "Hiding Gifts Behind the Veil of Vouchers: The Effect of Gift Vouchers in Conditional Promotions," *Journal of Marketing Research*, 57(4), 739-54.

To boost sales, marketers often conduct promotions that offer gifts conditional on the purchase of a focal product. Such promotions can present gifts in different formats: customers could be informed that they will receive a gift directly or that they will receive a voucher entitling them to a gift. Normatively speaking, the two formats are equivalent, as a voucher's value is identical to that of the gift it represents. Yet this article suggests that promotion format (voucher vs. direct gift) influences consumers' intention to purchase the focal product. Five lab experiments and one field experiment reveal that, compared with presenting a gift directly, introducing a voucher attenuates the influence of gift value on purchase decisions, decreasing purchase intentions for promotions offering high-value gifts but increasing purchase intentions

for promotions offering low-value gifts. This effect occurs because vouchers break the direct association between the focal product and the gift, reducing people's tendency to compare the gift's value with the focal product's value. The effect observed can be attenuated by increasing the salience of gift value.

4. **Ding, Yu** and Krishna Savani (2020), "From Variability to Vulnerability: People Exposed to Greater Variability Judge Wrongdoers More Harshly," *Journal of Personality and Social Psychology*, 118(6), 1101-17.

Recent decades have seen increased variability in diverse domains, such as the climate and asset prices. As more resources are required to cope with greater variability in the outside world, exposure to greater variability can make people feel that society is more vulnerable. This sense of vulnerability, in turn, can lead people to judge and punish wrongdoers more harshly. Studies 1a–2c found that people who were exposed to graphs representing greater variability were more willing to punish wrongdoers, both in domains that were related to the source of variability and those that were unrelated. Studies 3 and 4 found that people who experienced more variable dice rolls were more likely to punish unethical behaviors in hypothetical scenarios and in experimental games, even at a financial cost to themselves. Studies 5a and 5b provided evidence for the underlying mechanism—sense of vulnerability—using correlational designs. Study 6 provided experimental evidence for the underlying mechanism. These findings suggest that increasing variability in diverse domains can have unexpected psychological consequences.

5. **Ding, Yu**, Wayne S. DeSarbo, Dominique M. Hanssens, Kamel Jedidi, John G. Lynch, Jr., and Donald R. Lehmann (2020), "The Past, Present, and Future of Measurement and Methods in Marketing Analysis," *Marketing Letters*, 31, 175-86.

The field of marketing has made significant strides over the past 50 years in understanding how methodological choices affect the validity of conclusions drawn from our research. This paper highlights some of these and is organized as follows: We first summarize essential concepts about measurement and the role of cumulating knowledge, then highlight data and analysis methods in terms of their past, present, and future. Lastly, we provide specific examples of the evolution of work on segmentation and brand equity. With relatively well-established methods for measuring constructs, analysis methods have evolved substantially. There have been significant changes in what is seen as the best way to analyze individual studies as well as accumulate knowledge across them via meta-analysis. Collaborations between academia and business can move marketing research forward. These will require the tradeoffs between model prediction and interpretation, and a balance between large-scale use of data and privacy concerns.

6. Savani, Krishna, Monica Wadhwa, Yukiko Uchida, **Yu Ding**, and N. V. R. Naidu (2015), "When Norms Loom Larger than the Self: Susceptibility of Preference-Choice Consistency to Normative Influence across Cultures," *Organizational Behavior and Human Decision Processes*, 129, 70-79.

The present research investigated a novel account of how normative influence varies across culture—whether there exist cultural differences in the motivation to adhere to social norms even when similar norms are prevalent across cultures. Experiment 1 established that both Americans and Indians perceived that most others would disapprove of individuals who made choices primarily based on their own preferences compared to individuals who also took other factors into consideration. Experiments 2 and 3 found that when either general normative concerns or specific norms were highlighted, Indians' preference—choice consistency shifted whereas Americans' did not. Experiment 4 demonstrated that motivating people to act counter-normatively (rather than normatively) increased Indians' preference—choice consistency but had no influence on Americans'. The findings indicate that even when the norm content does not differ across cultures, people from a more interdependent culture are more susceptible to normative influence than people from a more independent culture.

7. **Ding, Yu** and Ellie Kyung, "Time Flies Only When the Speed is 'Just Right': The U-Shaped Effect of Animation Speed on Perceived Waiting Time," invited revision at *Journal of Consumer Research*.

Waiting for content to render online is still a frequent experience, particularly on mobile devices. Loading animations, repeated images that display at some rate, are typically displayed during this wait. What is the relationship between the loading animation's speed and perceived wait time? Although prior research suggests a linear relationship where faster speeds should result in judgments of shorter duration, across 4652 participants in 14 experiments, we find a U-shaped effect where moderate animation speeds (300-500 ms per movement), as opposed to static, slow (900 ms) or fast speeds (100 ms), result in the shortest perceived wait times (experiments 1a-1h, 2). We refer to this as the Goldilocks effect of animation speed. The effect manifests only when speed is needed as a cue to infer time and does not manifest for retrospective evaluations (experiment 3) or known temporal durations (experiment 4). Attention is shown to underlie this effect through a dual-task paradigm (experiment 5). Importantly, this U-shaped effect is reflected in the online customer experience through both website quitting and multi-tasking behavior (experiment 6) and attitudes towards products explored during a mobile shopping experience (experiment 7). Anxiety and motivation are ruled out as possible alternative explanations.

8. Chung, Jaeyeon, **Yu Ding**, Ajay Kalra, "I Really Know You: How Influencers Can Establish Authenticity Using Self-Disclosure," invited revision at *Journal of Consumer Research*.

We investigate how influencers' can enhance perceptions of authenticity of their posts on social media platforms. We demonstrate that influencers can engage in self-disclosure strategies to deliver an authentic image. The three devices we examine are: expressing emotions (both positive and negative), using authentic language that includes pronouns, and sharing intimate moments with whom they share close social ties. We test our hypotheses analyzing the texts and photographs of 55,631 posts of 763 influencers on Instagram and find support that consumers "like" posts that incorporate relatively more self-disclosure. Using an experimental approach, we also find that self-disclosure strategies augment perceptions of authenticity and trust, and thereby impact downstream consequences on purchase behavior. We also find that using self-disclosure is more effective for celebrities than those who are non-celebrity influencers. We observe that while sponsored posts are less liked by consumers, embedding them in posts that self-disclose mitigates the negative response.

9. **Ding, Yu\***, Jill Xiong\*, and Gita V. Johar, "Slim = Luxurious? Product Shape and Consumer Perceptions of Product Luxury," working paper.

We propose that consumers' luxury perceptions of a product are determined by whether a specific feature of the product (it's shape) deviates from the mean and whether the direction of the deviation matches consumers' beliefs regarding people with high socio-economic status. As people with high socio-economic status are believed to have slim-body shapes, especially in developed countries, we argue that consumers are likely to perceive slimmer shaped products as more luxurious - the slimness-is-luxury effect. Across nine studies, we find that participants draw slimmer shapes for products that target the luxury market (Studies 1a and 1b) and that they are more likely to choose a slimmer product as a gift when their friends have luxury tastes, even if it is less functional (Study 2). We test the proposed underlying mechanism, beliefs about slim body shape and high socio-economic status, by manipulating the belief (Study 3), collecting data from different cultures (Study 4), and measuring individual differences in beliefs (Study 5). We also identify a boundary condition such that this slimness-is-luxury effect is not observed for products with irregular shapes; overgeneralization from human bodies to product shapes is less likely in these cases, helping pin down the underlying mechanism (Study 6). In a field study, we find that people pay more for a slimmer product, presumably because they consider it more high-end (Study 7). Finally, we analyze a large dataset obtained from a large wine-selling website. We find that the slimness-is-luxury effect holds for luxurious wines, and that there is an optimal point for wine bottles' slimness so that slimmer is not always better (Study 8). These findings are robust and have simple, yet important, managerial implications for product packaging and pricing.