Consuming Regardless of Quality: Consumers overestimate the impact of quality on the consumption amount

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Introduction

- Does quality affect consumption amount as much as consumers think it will?
- We find that people tend to overestimate the impact of product quality on their consumption amount. This happens because they overestimate the mindfulness of their consumption decisions, resulting in an overestimation of the influence of consumption norms, and an underestimation of the influence of (non-discerning) visceral factors such as hunger and boredom.

Methodology



Figure 1.
Jellybeans (Study 1A-1B & 3-4)

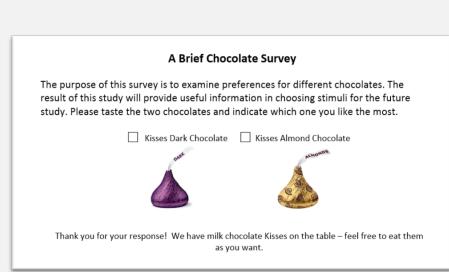


Figure 3.
Ostensible Chocolate Survey (Study 4)

Study IA-IB & 3-4 (Jellybeans, subjective

quality): Subjects tasted a sample of two flavors of jellybeans, indicated the flavor they preferred (higher subjective quality), and predicted how many of their preferred or/and less-preferred jellybeans they thought they would consume. They then received a cup of both flavors (Study IA) or randomly received a cup of either preferred or less-preferred jellybeans (Study IB and 2). Their actual consumption amount was measured after each session.

Study 2 & 5 (Cartoons, objective quality):

Cartoons were pretested to create a set of high-quality (funny) cartoons and low-quality (less funny) cartoons set. Subjects were randomly assigned to either the high-quality or low-quality cartoon set. Subjects saw five sample cartoons from their assigned set and predicted how many cartoons they thought they would view. They then proceeded to watch as many cartoons as they wanted. (Note: viewing a cartoon was not costless, as they had to enter a verification code for each cartoon.)



Figure 2.
Cartoon image (Study 2 & 5)

References

Loewenstein, G. (1996). Out of control: Visceral influences on behavior. Organizational Behavior and Human Decision Processes, 65(3), 272-292.

Luce, M. F. (1992). Buying More Than We Can Use: Factors Influencing Forecasts of Consumption Quantity. ACR North American Advances.

Nordgren, L. F., Harreveld, F.V., & Pligt, J.V. D. (2009). The restraint bias: How the illusion of self-restraint promotes impulsive behavior. *Psychological Science*, 20(12), 1523-1528

Studies IA, IB, 2: Overestimation of the impact of quality on consumption

Study IA Jellybeans

N = 156 Undergraduates

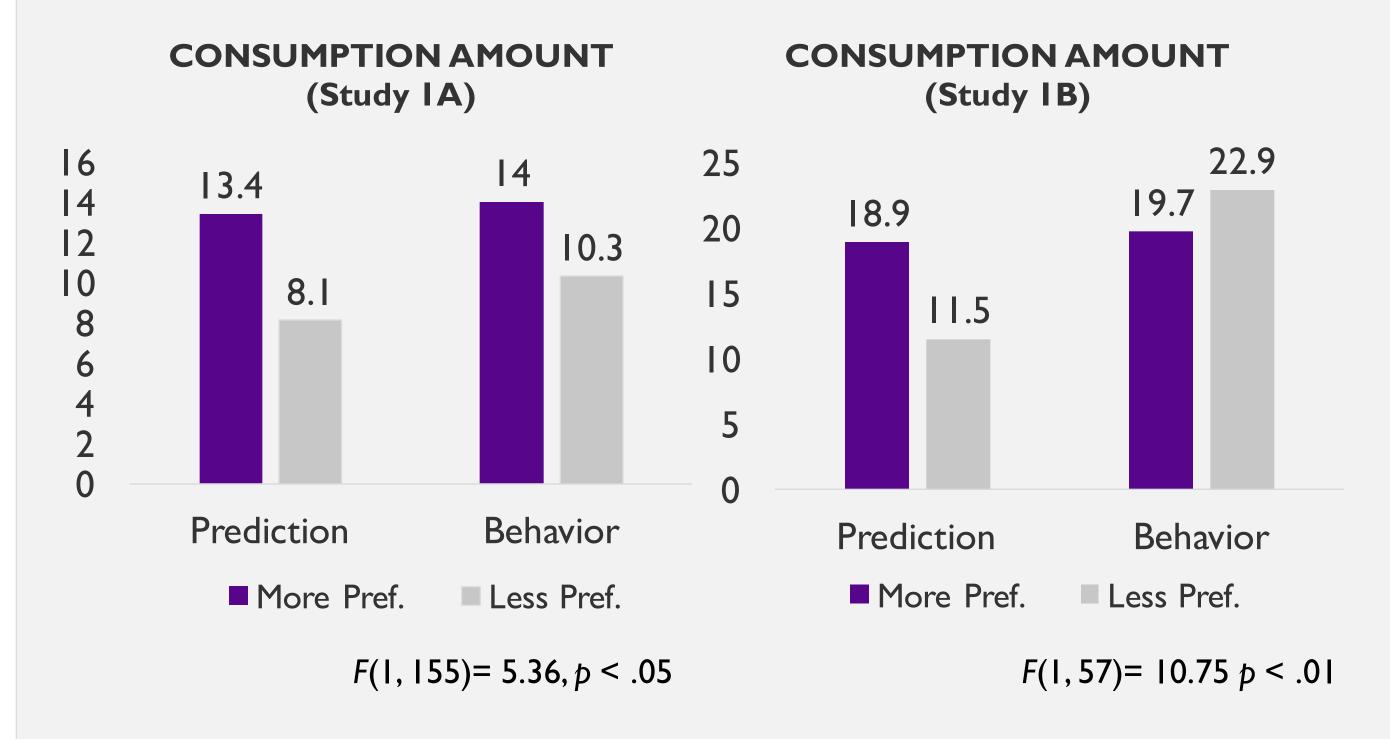
Design: 2 (more vs. less preferred) x 2 (prediction vs. behavior) within-subjects

Study IB Jellybeans

N = 59 Undergraduates

Design: 2 (more vs. less preferred; between-ss) x 2 (prediction vs. behavior; within-ss) mixed design

Ruled out an underestimation of variety seeking explanation



Study 2 Cartoons

N = 110 Undergraduates

Design: 2 (more vs. less preferred) x 2 (prediction vs. behavior) between subjects design.

- Replicated the effect with a non-food stimulus
- Both prediction and behavior in separate evaluation mode

F(1, 109) = 7.14 p < .01

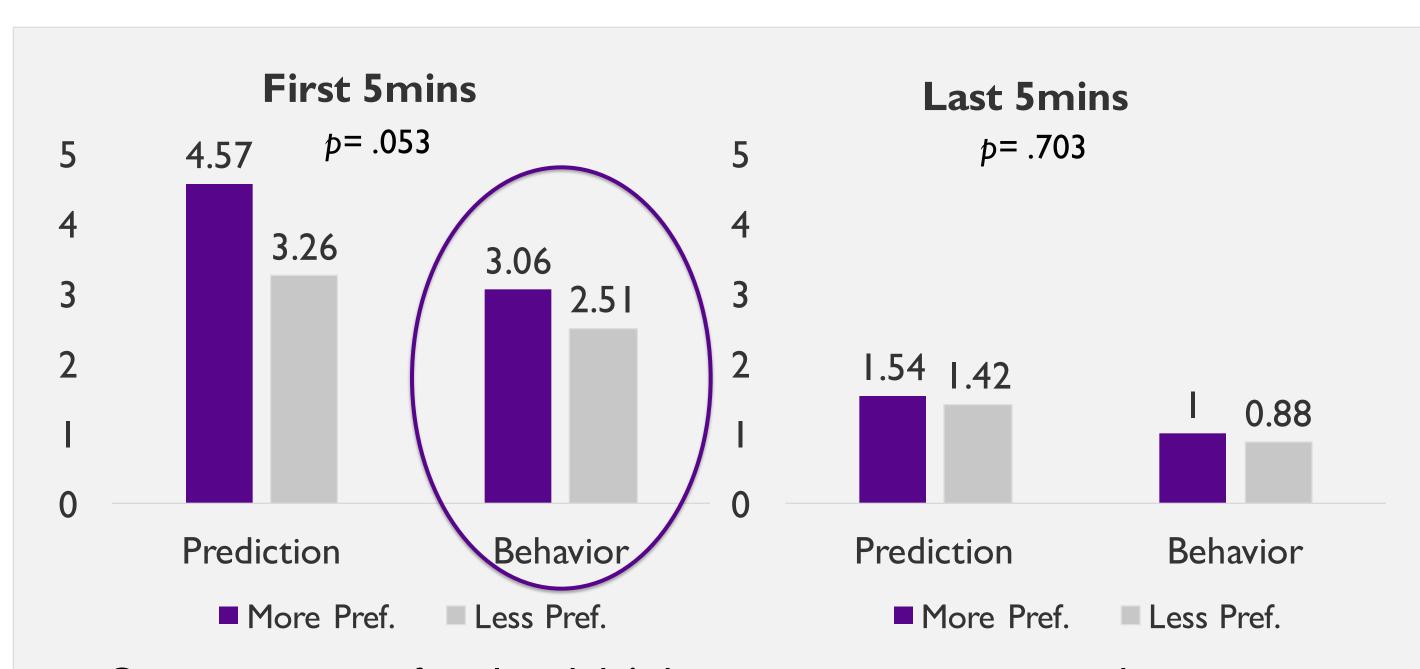
Study 3-5: Underlying mechanism

Study 3: to test underestimation of satiation

N = 217 Undergraduates

Design: 2 (more vs. less preferred) x 2 (prediction vs. behavior) x 4 (time: 5mins, 10mins, 15mins, 20mins) mixed design

- Conducted in one-on-one sessions using pre-wrapped jellybeans
- Participants predicted how many jellybeans they would eat in 5, 10, 15, and 20 minutes
- Actual consumption amount was measured every 5mins



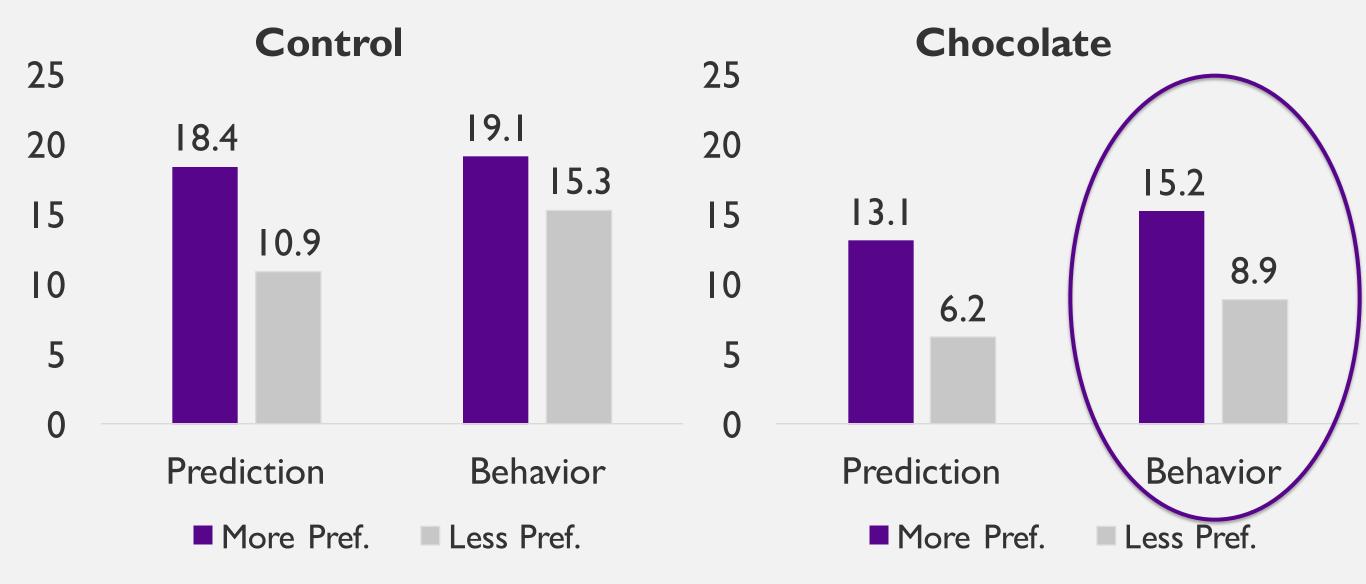
- Overestimation of quality didn't become more pronounced overtime, inconsistent with underestimation of satiation
- Even at the initial stage of consumption (prior to satiation) actual consumption was not affected by quality

Study 4: to test underestimation of the impact of visceral motives

N = 140 Undergraduates

Design: 2 (more vs. less preferred) \times 2 (prediction vs. behavior) \times 2 (prior food consumption: yes vs. no) mixed design

• To reduce the impact of hunger (visceral state) on behavior, half of the participants ate chocolates before the main study



• Consistent with the underestimation of the impact of visceral motives, actual consumption became more discerning when hunger was sated

Study 5: to test underestimation of the impact of visceral motives

N = 272 Mturk participants

Design: 2 (more vs. less preferred) x 2 (boredom reminder: yes vs. no) between-subjects design

- Half of the participants were reminded of potential boredom before they made the prediction about their consumption amount
- Only prediction was measured
- In the no-reminder condition, we replicated the previous finding; participants predicted that they would view more from the high-quality (vs. low-quality) cartoon set. However, this pattern was reversed when they were reminded of the possibility that they might get bored

Conclusions

- People overestimate the impact of quality differences on how much they consume
- Inconsistent with inadequate accounting for satiation, the overestimation pattern already occurred at the initial stage of consumption (Study 3).
- The actual consumption became more discerning to the quality difference when the hunger was sated (Study 4), and the overestimation of the importance of quality disappeared when subjects were reminded of boredom before the prediction measures (Study 5).
- The effect was not driven by underestimation of variety-seeking (Study 1B), nor difference in joint vs. separate evaluation mode (Study 1A & 2).