Using Eye-Tracking to Assess Underlying Factors in Online Purchasing Behaviors

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L_etR
Language, Eye-Tracking, & Reading

NEUROMARKETING

- Measures physiological and neural signals to gain insight into customers' motivations, preferences, and decisions.
- Informs creative advertising, product development, pricing, and other marketing areas.

PREVIOUS RESEARCH

- Consumers tend to resort to higher star ratings when making their decision to buy a product, especially if they are unfamiliar with the brand or product itself. (Zhu & Zhang, 2006)
- Discounted and low prices result in greater buying intention but lower perception of product quality (Lee et al., 2008)
- When faced with high time-pressure, consumers accelerate their search for information and depend on more prominent features such as images rather than evaluating and comparing price and discount (Rieskamp & Hoffrage, 2008)

METHOD

- Pre-registered method and analysis plan on OSF
- **Design**: 2x2x2x2 design, 16 counterbalancing conditions, 80 products, fully within-subject and within-item
- **Participants**: 64 undergraduates, normal or corrected-to-normal vision
- **IVs**:
    - Time Pressure: Sale Ends Today / None
    - Price: High Price / Low Price
    - Discount: 10% off / 70% off
    - Star Rating: 3 Stars / 5 Stars
- **DVs**:
    - Fixation Times on Advertisement Areas
    - Purchase Intention on a 1-7 Scale

RESULTS

Marshmallow Shaped Hot Chocolate Mugs

★★★★★

$40.75   **New Price: $12.23**

70% off!

Sale Ends Today!

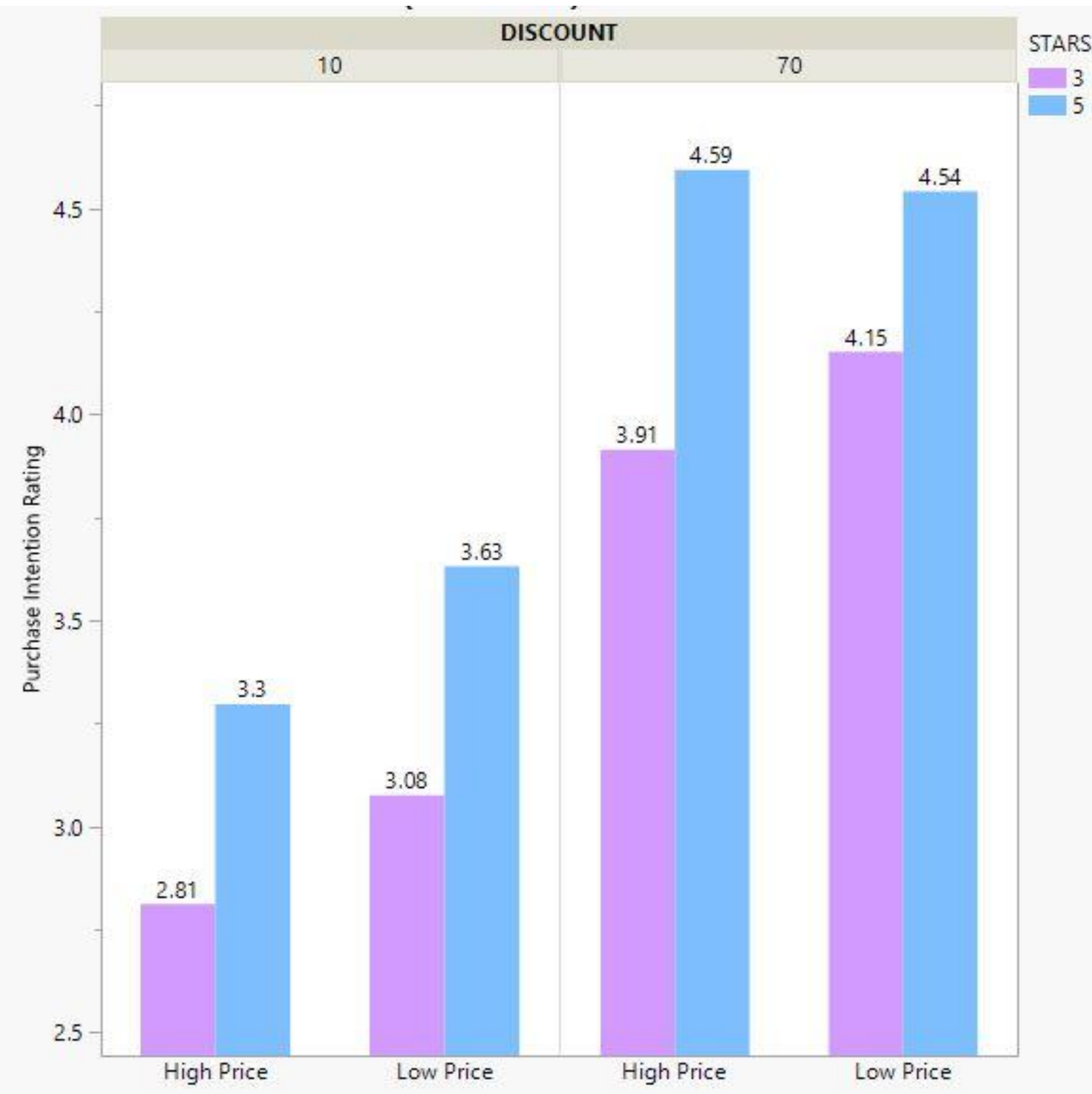Figure 1. Sample product page with variable manipulations

Figure 2. Bar graph depicting average purchase intention across manipulations of discount, price, and star rating

FIXATION TIMES (FT)

- FTs were longer when there were 3 stars ($M = 204$) than 5 stars ($M = 148$, $p < .001$)
- FTs were longer for higher priced items ($M = 181$) than lower priced items ($M = 171$, $p = .02$)
- FTs were longer when the item was priced at 10% off ($M = 335$) than 70% off ($M = 324$), but only when there was an absence of time pressure ($p = .007$)
- FTs were longer when there was a time pressure ($M = 512$) than when there was no time pressure ($M = 491$, $p = .004$).
- FTs were longer for higher priced items ($M = 580$) than lower priced items ($M = 570$, $p = .04$)

PURCHASE INTENTION (PI)

- Items rated 5 stars led to greater PI than items rated 3 stars ($p < .001$).
- Items priced lower than their original price led to greater PI than items priced higher ($p < .001$).
- Items discounted at 70% off led to greater PI than items discounted at 10% off ($p < .001$).

DISCUSSION

- Emphasis placed on variables such as star rating, price, and discount is an indicator that consumers are dependent on heuristics that are easily available and accessible at the point of purchase.
- Although time pressure did not affect overall purchase intention, it did affect where purchasers focused their attention during decision making.
- These findings have significant implications for future ecommerce marketing strategy, especially across efforts to increase purchase intention.