The Beautiful are the Bold: Feeling Beautiful Leads to Bolder Choices and Higher Optimism

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Beauty as Social Capital

- “What is beautiful is good”: attractive people are perceived as having a wide range of positive qualities

- Aristotle: “beauty is a greater recommendation than any letter of introduction”

- Beauty premium in the workplace: attractive people get jobs more easily and have higher wages on average
Beauty as Biological Capital

• Attractiveness certifies biological quality

• Mate selection: for both animals and humans, attractiveness is an honest indicator of health, gene quality and reproductive value.

• Differential parental investment: parents allocate more resources and care to higher quality and more attractive offspring
Beauty as Decision Making Capital

- Do attractive and unattractive people choose differently?
- How do feelings of physical attractiveness influence people’s decision making?

- We propose that feeling beautiful increases self-confidence, which influence subsequent behaviors

- Study 1: effects on choice of impoverished options
- Study 2a&2b: effects on choice of compromise options
- Study 3: effect on choice of default options
- Study 4: effects on judgments about future life events
- Study 5: effects on planning fallacy
Manipulation

**Method 1:** Contrast manipulation

Ps viewed pictures of unattractive people vs. neutral scenes and rated familiarity of the photos.

Ps felt **more attractive** after seeing unattractive faces.

**Method 2:** Mindset manipulation

Ps listed 3 things that make them feel beautiful vs. listed 3 things that they did last week.
Impoverished vs. enriched options (Study 1)

**Method:**
Primed beauty using the mindset manipulation
DV: impoverished vs. enriched choices (two scenarios, Shafir 1993)

<table>
<thead>
<tr>
<th>Location A</th>
<th>Location B</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lots of sunshine</td>
<td>• Average weather</td>
</tr>
<tr>
<td>• Strong winds</td>
<td>• Average beaches</td>
</tr>
<tr>
<td>• Beautiful beaches and coral reefs</td>
<td>• Medium-quality hotel</td>
</tr>
<tr>
<td>• Very modern hotel</td>
<td>• Medium-temperature water</td>
</tr>
<tr>
<td>• Very cold water</td>
<td>• Average friendly local people</td>
</tr>
<tr>
<td>• Hostile local people</td>
<td></td>
</tr>
</tbody>
</table>
People who feel beautiful are more likely to choose enriched options

69.7% (p < .05)

40.6%

Beauty

Control
Manipulation checks

**Perceived attractiveness**
Ps in the beauty condition perceived themselves more physically attractive than those in the control condition (6.36 vs. 5.03; 1 = not at all attractive, 9 = very attractive)

**Mood**
At the end, Ps filled PANAS (10 mood adjectives)
No difference found for positive mood index or negative mood index
**Extreme vs. Compromise options (Study 2a & b)**

**Method:**
Primed beauty using the mindset and contrast manipulation in two separate studies.
DV: choices from 3-option choice set (class & roommate scenarios)

<table>
<thead>
<tr>
<th>Roommate</th>
<th>Noise (out of 10)</th>
<th>Cleanliness (out of 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roommate A</td>
<td>8 (very noisy)</td>
<td>8 (very neat)</td>
</tr>
<tr>
<td>Roommate B</td>
<td>5 (average noisiness)</td>
<td>5 (average cleanliness)</td>
</tr>
<tr>
<td>Roommate C</td>
<td>2 (very quiet)</td>
<td>2 (very messy)</td>
</tr>
</tbody>
</table>
People who feel beautiful are less likely to choose compromise options

\((p < .05)\)
Self-confidence as Mediator (Study 2b)

self-confidence: an 8-item generalized self-efficacy scale (Bandura 1989)
Pretest: beauty does not change attribute importance

**Method:**
Primed beauty using the mindset manipulation
Constant sum allocation task: Ps assigned attribute weights to each attribute in two compromise choice scenarios; the total sum should add up to 100.

**Results:**
In class scenario: Ps assigned comparable weights to 3 attributes in beauty and control conditions
In roommate scenario: Ps assigned comparable weights to 2 attributes in beauty and control conditions
Default Options (Study 3)

**Method:**
Primed beauty using the mindset manipulation.
DV: Choice between either a default option or an option to move away from the default.

Currently, the National Highway Safety Commission allocates approximately 30% of its funds to auto safety and 70% of its funds to highway safety. Of the three options below that NHSC has to allocate the money, which would you choose?

a) Maintain present budget amounts for the programs: 30% to auto safety and 70% to highway safety.
b) Allocate 50% to auto safety and 50% to highway safety.
c) Allocate 70% to auto safety and 30% to highway safety.
People who feel beautiful are **more** likely to move away from the default.

<table>
<thead>
<tr>
<th>% Choice of Default (30-70 allocation)</th>
<th>75%</th>
<th>68%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beauty</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .01$
Estimates for Future Life Events (Study 4)

**Method:**
Primed beauty using mindset manipulation (Method 2)

DV: participants rated their likelihood of experiencing 12 future life events: both positive and negative, controllable and uncontrollable
- “I will enjoy my first job after graduation”
- “I will get divorced within 7 years after marrying”
- “I will have a starting salary of at least $50,000”
- “I will contract a sexually-transmitted disease”
People who feel beautiful are more optimistic about their future life events

- There were no differences between positive vs. negative, controllable vs. uncontrollable events
- Self-confidence partially mediated the effect of beauty on optimism about future life events.
Planning Fallacy (Study 5)

**Method:**
Primed beauty using contrast manipulation (Method 1)

Task: Participants were given a small take-home task to complete within 12 days.

DV: Ps predicted their exact completion date and time for the task, and we recorded actual hand-in times.
People who feel beautiful are more likely to fall prey to the planning fallacy

Predicted hand-in days
(p < .05)

6.37

4.49

Beauty
Control

Actual hand-in days
(p > .1)

7.89

7.12

Beauty
Control
Self-confidence as Mediator (Study 5)

self-confidence: 3-item generalized self-efficacy scale (Bandura 1989)

\[ \beta = .71^* \]

\[ \beta = -1.03^* \]

\[ \beta = -1.88^*/ \beta = -1.14 \]
Future Research

• Beauty & social distance: feeling beautiful changes the construal level in terms of social distance?

• Beauty & persistence: feeling beautiful makes people persist longer on tasks?

• Beauty & Money as fungible resources? Social Exclusion.

• Feeling beautiful vs Cognitions of Beauty
Prediction and Actual Motivation: The Intuitive Appeal of Gains & The Actual Efficacy of Losses

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Ravi Dhar, Yale University
CONCEPTUAL FRAMEWORK IN BDT RESEARCH - I

VALUE MAXIMIZATION OR PROCEDURAL RATIONALITY

EXAMPLES OF PREFERENCE INVARIANCE

INVARIANCE DUE TO TASK, CONTEXT, DESCRIPTION

UNDERLYING MECHANISMS: PERCEPTUAL, CONFLICT, EFFORT-ACCURACY TRADEOFFS
CONCEPTUAL FRAMEWORK IN BDT RESEARCH - II

**STRAWMAN: PREDICTED UTILITY = EXPERIENCE UTILITY**

MEASURE PREDICTIONS AND EXPERIENCES SEPARATELY

**EXAMPLES OF PREDICTION-EXPERIENCE INCONSISTENCY**

VARIETY SEEKING, CONTRAST EFFECTS, SALIENCE

UNDERLYING MECHANISMS: FOCUSING ILLUSION, EMPATHY GAP, FOCALISM
Incentives that Motivate

• We test for instances when actual motivation diverges from predicted motivation

• Extrinsic Incentives are often used to promote behavior
  ▫ Monetary rewards for completing tasks
  ▫ Hedonic gifts for reaching sales quotas
  ▫ Prizes for attending test prep courses

• These incentives are set based on the lay theories of managers or employees
Framing Incentives as Gains vs. Losses

- **Design:**
  - The amount paid for performance is held constant (e.g., $0.25 per anagram); however, the incentive’s framing (gain vs. loss) framed varied by condition

  - **Gain frame:** $0.25 per task completed (up to $2)
  - **Loss frame:** Receive $2; Lose $0.25 per task left incomplete

**Measures:**
- Persistence (Study 1)
- Performance (Study 2)
- Predicted Motivation (Study 3)
Study 1: The Effect of Incentive Frame on Persistence

Replication: $\chi^2(1) = 7.892, p < 0.01$
Study 2: The Effect of Incentive Frame on Performance

• Same experimental design as Study 1; however, some anagrams could be used to make multiple different words
  • 8 anagrams → 14 possible words (max. earning $3.50)

DV: Performance (number correct)
Study 2: The Effect of Incentive Frame on Performance

Gain
Loss

p < 0.01
Incentives framed in terms of loses increase motivation, as compared to incentives framed in terms of gains.

How will people’s predictions of motivation compare with actual motivation?
Study 3: Incentive Frame Effects on Predicted Motivation

- Intuition Study: (Within Participants)
  - Scenario: Participant in paid studies; six tasks to perform

Occasion 1: *(Gain Framed Incentive)*
For each task you successfully complete, you will receive $0.25. If you complete all six tasks, you will receive $1.50.

Occasion 2: *(Loss Framed Incentive)*
Before you begin working you are given $1.50. If you successfully complete all six tasks, you may retain the $1.50. For each task you do not complete, you must return $0.25.

DV: On which occasion would you work harder to accomplish the tasks?
Study 3: Incentive Frame Effects on Predicted Motivation

Replications: Incentive = $25, p < 0.05 ; Between Participants, p < 0.05
Predicted vs. Experienced Motivation

• What happens in Experienced Motivation?

  *Loss aversion*
  ▫ People persist as they believe giving up a quarter (from the endowment) will feel worse than earning a quarter feels good (Kahneman, Knetsch and Thaler 1991)

• What happens in Prediction?
  ▫ People imagine how enjoyable it would be to work under the incentive frame and use their assessments of enjoyment to infer motivation
  ▫ Lay belief: “Happy-Productive Worker Hypothesis” (Fisher 2003)
Intuition Studies about Enjoyment

• **Study 4a:** When would receiving the incentive be more enjoyable?
  ▫ Gain: 95% of participants
    \[ \chi^2(1) = 31.41, p < 0.001 \]

• **Study 4b:** Motivation / Enjoyment Correlation
  ▫ Correlation: \( R = 0.425; p < 0.01 \)
De-Biasing Predictions

- Prediction: 
  No information about task difficulty
  \(\rightarrow Focus \ on \ enjoyment \ of \ working \ towards \ the \ incentive\)

- Experience: 
  Task perception = Difficult
  \(\rightarrow Focus \ on \ the \ motivation \ required \ to \ exert \ greater \ effort\)

Correct Lay theory but not brought to mind
Study 5: De-biasing Predictions and Reconciling Them with Actual Motivation

- **Framing Manipulation: (Within Participants)**
  - Scenario: Participant in paid studies; six tasks to perform
    - Occasion 1: *(Gain Framed Incentive)*
    - Occasion 2: *(Loss Framed Incentive)*

- **Information Manipulation: (Between Participants)**
  - Control: No sample anagrams
  - Full Information: Sample anagrams

<table>
<thead>
<tr>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEUMO</td>
</tr>
<tr>
<td>DINSLA</td>
</tr>
<tr>
<td>UDARIVMIQU</td>
</tr>
</tbody>
</table>

DV: On which occasion would you work harder to accomplish the tasks?
Study 5: De-biasing Predictions and Reconciling Them with Actual Motivation

\[(\chi^2(1) = 4.274, p < 0.05)\]
Summary

• There is a divergence between peoples’ predictions for how incentive framing would affect motivation and how motivation is actually affected
  ▫ Framing an incentive in terms of losses (as opposed to gains) can have a positive influence on motivation, which is counter-intuitive
  ▫ These predictions can be de-biased with manipulations which encourage participants to focus less on reward enjoyment and more on task difficulty
Additional Work in this Area: Money for You vs. A Donation to Charity

• Framework:
  
  Money to You: $0.25 per task completed
  
  Donation to Charity: $0.25 to UNICEF per task completed

Set of Tasks

• STUDY 1: PERSISTENCE & PERFORMANCE:
  
  ▫ Minutes spent on task
    • Money to You: 18
    • Donation: 25
  
  ▫ # Correctly solved – max = 14
    • Money to You: 5.3
    • Donation: 6.2

• STUDY 3: INTUITION
  
  ▫ Money to You: 63% predicted this incentive was more motivating
  ▫ Donation: 37% predicted this incentive was more motivating

Measures:
  Persistence & Performance (Study 1)
  Intuition (Study 2)
When Shopping Carts come “pre-loaded”
Default Effects in Assortments

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Yale University
Background

☐ Opt in

Check this box if you would like to be enrolled in the University’s retirement program

(if you do nothing, you will not be enrolled)

☐ Opt out

Check this box if you would like to be removed from the University’s retirement program

(if you do nothing, you will remain enrolled)
No research into default for assortment choice

No items were “default”

All 16 items were “default”
Study 1 Results

- People purchased a larger amount of goods when more items are pre-selected as the default.

- People are equally (or more) satisfied when some products are pre-selected as the default.

### Total Items Purchased

<table>
<thead>
<tr>
<th>Defaults</th>
<th>Items Purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5.4</td>
</tr>
<tr>
<td>4</td>
<td>6.4</td>
</tr>
<tr>
<td>12</td>
<td>7.3</td>
</tr>
<tr>
<td>16</td>
<td>8.4</td>
</tr>
</tbody>
</table>

### Satisfaction with Choices

<table>
<thead>
<tr>
<th>Defaults</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5.3</td>
</tr>
<tr>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>12</td>
<td>5.6</td>
</tr>
<tr>
<td>16</td>
<td>5.5</td>
</tr>
</tbody>
</table>
Process

Product (U)

Utility

ReservationUtility_{include}

ReservationUtility_{exclude}

Non-Default (standard)
purchased if $U(\text{option}) > ReservationUtility_{include}$

Default
purchased if $U(\text{option}) > ReservationUtility_{exclude}$

# of options in inclusion = # of options in exclusion

$ReservationUtility_{include} = ReservationUtility_{exclude}$
Study 2 – Popular Defaults

- Selections from Study 1 were ranked

- Two conditions: Most Popular vs. Less Popular set as defaults
  - 4 “Most Popular”
    - Legal Pads, Spiral Notebooks, Binder clips and Paper clips
  - 4 “Less Popular”
    - Mini Highlighters, Soft Grip Clips, Small Binder Clips, Super Glue

- Prediction
  - When less popular are defaults, overall number purchased will increase
    - Driven by an increase in the number of non-defaults purchased
**Study 2 Results - Popular Defaults**

- People purchase more items when the LESS popular products are designated “default”
Thank You
Study 3 – Variety

Low Variety – all t-shirts
- $19.99 Classic Plain T-shirt
- $29.99 Short Sleeve Polo
- $25.99 Mesh Sporty T-shirt

High Variety –
- 1 t-shirts
- 1 long sleeve
- 1 sweatshirt
- 1 sweater
- $34.99 Long Sleeve Polo
- $29.99 Ribbed Shirt
- $39.99 Lightweight Long Sleeve Sports Top
- $24.99 Long Sleeve Cotton T-shirt
- $54.99 Track Jacket
- $46.99 Light Mesh Pullover
- $59.99 Lightweight Fleece
- $45.99 Sweatshirt
- $44.99 Black Turtle Neck Sweater
- $54.99 Long Cardigan
- $59.99 V-Neck Sweater
- $49.99 Wool Cable Knit
Study 3 Results: High-Variety

- Seeing high variety default assortment primes Variety Seeking mindset
- People purchased more overall (both default and non-default items) when defaults were High-Variety
- Variety seeking lowers both inclusion and exclusion thresholds

![Bar Chart]

<table>
<thead>
<tr>
<th></th>
<th>Total Purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Variety</td>
<td>4.2</td>
</tr>
<tr>
<td>Low Variety</td>
<td>3.5</td>
</tr>
</tbody>
</table>

- 2.6 Default, 1.6 Not Default
- 2.2 Default, 1.3 Not Default