Two Roads of Affect Effects: A Meta-Analytic Integration

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Affect Controversy

- The magnitude of affect effects…
  - are very diverse
  - change as a function of the dependent variables being tested
  - can reverse as a function of context

- Multiple inconsistencies in the findings
  - Need for a systematic, empirical review of research
  - Meta-Analysis
Overall Impact of Affect Framework

Affect
- Congruent
- Incongruent

Moderators
- Arousal
- Processing Intensity
  - Processing Motivation
  - Cognitive Complexity
- Representativeness
  - Transparency
  - Personal Relevance
  - Cover Story
- Social Norms
  - Culture
  - Interpersonal Context

Consumer Response
- Evaluation
- Behavior
Meta-Analysis Notes

- Positive Effect Size ($r$) = positive affect *increased* the favorability of consumer response (evaluation/behavior)
- Negative Effect Size ($r$) = negative affect *increased* the favorability of consumer response (evaluation/behavior)

- 107 papers; 262 studies
- Comparisons
  - Positive-Negative (focus of talk)
  - Positive-Neutral
  - Negative-Neutral
Meta-Analysis

- Qualitative reviews are open to author biases
- Meta-analysis can empirically resolves disputes in the literature
  - Accounts for heterogeneity
  - Can test moderators not examined in original studies
  - Improves power of small or inconclusive studies
- More robust, reliable, and generalizable test than any single empirical study
  
(Rosenthal 1984)
Meta-Analysis Methodology

- **Effect size $r$ – Effect Size Measurement**
  - Fisher’s $r$-to-$Z$ transformation ($rz$) to normalize data
  - Combined effect sizes for same dependent variable within a given study

- **Examined fixed and random effects**
  - 95% Confidence Interval
  - Heterogeneity statistics
  - File-Drawer N
Types of Affect Effect

(Evaluation: \( Q(2) = 416.94, p < .001 \); Behavior: \( Q(2) = 332.60, p < .001 \))
PLEASANT ACTIVATION

Sadness
Contentment

Relaxed

Happy

Excitement

Anger

Disgust

UNPLEASANT DEACTIVATION

Depressed

Contentment

Relaxed

Mood

Emotion

AROUSAL VALENCE

(Russell and Barrett 1999)
Arousal

Low arousal

High arousal
Arousal

Low Arousal vs. High Arousal:

Evaluation:
- Low Arousal: 0.31
- High Arousal: 0.22

Behavior:
- Low Arousal: 0.28
- High Arousal: 0.13

Significance:
- Evaluation: ** (p < 0.01)
- Behavior: *** (p < 0.001)

Legend:
- Teal: Low Arousal
- Green: High Arousal
Processing Intensity

Processing Motivation

(e.g., evaluating paintings)
(Pocheptsova & Novemsky 2009)

Low processing motivation

(e.g., evaluating potato chips that you will receive at the end of the study)
(Dunn & Hoegg 2014)

High processing motivation
Processing Intensity: Processing Motivation

![Bar chart showing processing intensity and motivation levels.](chart_image)

- **Evaluation**:
  - Low: 0.31
  - High: 0.23

- **Behavior**:
  - Low: 0.25
  - High: 0.20

Legend:
- **Low**
- **High**
Processing Intensity

Cognitive Complexity

Low cognitive complexity
(e.g., evaluating shoes)
(Griskevicius, Shiota, & Nowlis 2010)

High cognitive complexity
(e.g., read 345-word synopsis of a book and evaluate it)
(Pham and Avnet 2009, Study 2)

(Pham and Avnet 2009, Study 2)
Processing Intensity: Cognitive Complexity

Evaluation

Behavior

Low

High

.32

.25

.26

.20

* +
Representativeness

(e.g., imagine a purchased product performing well)
(Kramer & Yoon 2007)

Transparency

(e.g., write about a happy life event)
(Chang 2006)

Low transparency

High transparency
Representativeness: Transparency

**Evaluation Behavior**

- **Low Transparency**
  - Evaluation: 0.37
  - Behavior: 0.19

- **High Transparency**
  - Evaluation: 0.23
  - Behavior: 0.28

*(e.g., imagine a purchased product performing well)*

*(Kramer & Yoon 2007)*

*(e.g., write about a happy life event)*

*(Chang 2006)*
Representativeness

Personal Relevance

(e.g., complete a word associate task)

(Labroo & Mukhopadhyay 2009)

Low personal relevance

(e.g., describe a personal experience related to the video)

(Andrade & Ariely 2009)

High personal relevance
Representativeness: Personal Relevance

**Evaluation**

- Low: 0.32
- High: 0.28

**Behavior**

- Low: 0.20
- High: 0.28

Describe a personal experience related to the video.
Representativeness

Cover Story

(study is just presented as is)

Cover story absent

Cover story present

(e.g., participants are led to believe they are participating in two studies where the first one in...
Representativeness: Cover Story

“Two Studies”

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Behavior</th>
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<tbody>
<tr>
<td>.30</td>
<td>.24</td>
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<td>.33</td>
<td>.18</td>
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Cover story (Representative)

No cover story
Social Norms: Culture

- Stronger effects for Evaluation in Western cultures
- Stronger effects for Behavior in Eastern cultures

In Western market more likely to admire it

In Eastern market more likely to buy

(Diefendorff & Greguras 2009)
Social Norms: Culture

**Evaluation**
- Western: .19
- Eastern: .35

**Behavior**
- Western: .22
- Eastern: .27

Legend:
- Western
- Eastern
Social Norms

Interpersonal Context

Individuals participate on their own (e.g., Agrawal, Menon, & Aaker 2007)

Individual

Individuals participate in a group setting (Garg, Wansink, & Inman 2007, Study 2)

Group
Social Norms: Interpersonal Context

Evaluation
- Group: 0.30
- Individual: 0.31

Behavior
- Group: 0.15
- Individual: 0.31

Significance level: ***
Conclusions

- **Types of Affect Effects**
  - Affect-congruent
  - Affect-incongruent

- **Greater affect relevance**
  - ...for low arousal
  - ...processing intensity is low
    - low processing motivation
    - low cognitive complexity
  - ...when affect is more representative
    - source is less transparent
    - higher personal salience
  - ...social norms support response
    - Western evaluation and Eastern behavior