Gaming Emotions

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Joint work with Eduardo Andrade
Emotions on Behavior

- Emotions influence cognition and behavior
  - Information Processing
    - Memory, categorization, flexibility, etc. (Schwarz & Clore, 1996)
  - Choices
    - Purchase decisions, consumption, helping, risk-taking, etc. (Cohen, Pham & Andrade, 2008)

How one’s own emotions influence one’s own thoughts and actions
One’s Emotions on Other’s Behavior

How one’s own emotions influence someone else’s behavior

Sellers make better offers to “Angry” vs. “Neutral/Happy” buyers

– integral emotional reactions - van Kleef, de Dreu, & Manstead, 2004
– incidental emotional reactions - Andrade & Ho, 2007
Is Your Boss in Good Mood?

![Bar Chart]

**Fig. 1.** Percentage of unfair offers as a function of the receiver’s purported affect and whether the proposer was told that the receiver knew the proposer had this information (shared condition) or was told that the receiver did not know the proposer had this information (private condition).
If people know that their own emotions can influence someone else’s decisions.

Then...

They might be willing to game emotions - strategically modify the expression of a current emotional state (i.e., to fake an emotional state) in an attempt to influence the counterpart.
Gaming Emotions

Related Literature

- Impression management (Jones & Pittman, 1982; Schlenker, Bonoma, & Tedeschi, 1973)

- Emotional Labor
  - “Forced” display (e.g., Hochschild 1983 - “The Managed Heart: The Commercialization of Human Feelings”)
  - Psychological Costs/Threat to Wellbeing (e.g., Grandey 2003)

- Developmental Psychology
  - Display rules - e.g., children are less likely to display emotions in the presence of their friends (vs. parents) – Zeman & Garber 1996

- Benefits of Strategic Misrepresentation of Emotion Displays
  - Strategic Expression of Happiness (Clark, Pataki and Carver, 1996; Pataki and Clark 2004) - e.g., politeness
Gaming Emotions

- Patients & Doctors
- Speakers & Audience
- Politicians & Media
- Buyers & Sellers
Gaming Emotions

Barry (2008): Emotion and Negotiation Literature

“... with conventional methods we can explore...how individuals respond to emotional gambits, but not necessarily how individuals themselves choose to engage and deploy emotions strategically” (p. 103).
## Research Paradigm

<table>
<thead>
<tr>
<th></th>
<th>Dictator Game</th>
<th>Filler</th>
<th>Ultimatum Game</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manipulation</td>
<td>Measurement 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiment 1</td>
<td>Unfair Offer</td>
<td>Anger 1</td>
<td>Anger 2 (Control)</td>
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<td></td>
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<td></td>
<td>Anger 2 (Displayed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proposer's Offer</td>
</tr>
<tr>
<td>Experiment 2</td>
<td>Unfair Offer</td>
<td>Anger 1</td>
<td>Anger 2 (C)/Anger 3 (D)</td>
</tr>
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<td>e.g., $3.0</td>
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<td>Anger 2 (C)/Anger 3 (D)</td>
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<td>Anger 2 (D)*</td>
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<td>Credibility of the Information</td>
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<td></td>
<td></td>
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<td>Proposer's Offer</td>
</tr>
<tr>
<td>Experiment 3</td>
<td>Unfair Offer</td>
<td>Expectation 1</td>
<td>Choice of Self-Report 2</td>
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<tr>
<td></td>
<td>e.g., $2.5</td>
<td></td>
<td>Choice of Self-Report 2</td>
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<td></td>
<td></td>
<td>Anger 1</td>
<td>Proposer's Offer</td>
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<td>Proposer's Offer</td>
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### Experiment 1

<table>
<thead>
<tr>
<th>Dictator Game</th>
<th>Ultimatum Game</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manipulation</strong></td>
<td><strong>Instructions</strong></td>
</tr>
<tr>
<td>Anger Measurement</td>
<td>Gaming Emotions</td>
</tr>
<tr>
<td><strong>Proposer = $10</strong></td>
<td>Targeted Social Interaction</td>
</tr>
<tr>
<td><strong>Receiver = ?</strong></td>
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</tr>
<tr>
<td><strong>Rule:</strong> Proposer’s Offer has to be accepted</td>
<td><strong>Rule:</strong> Proposer’s Offer can be rejected. Both get $0</td>
</tr>
<tr>
<td><strong>Unfair Offer</strong></td>
<td><strong>Proposer to decide on the offer</strong></td>
</tr>
<tr>
<td>e.g., P:$6.5/R:$3.5</td>
<td>How do you feel?*</td>
</tr>
<tr>
<td><strong>Proposer = $10</strong></td>
<td>How do you feel?*</td>
</tr>
<tr>
<td>e.g., P:$6.5/R:$3.5 vs. P$3.5/R$6.5</td>
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<tr>
<td>*not angry at all=0; moderately angry=50; very angry=100</td>
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Experiment 1

Gaming (Inflating) Anger: n=152

Report 1

Report 2

F(1, 74) = 2.94, p < .10

F(1, 74) = 5.3, p < .05

Interaction: F(1, 74) = 8.2, p = .005
Does the strategy work?

- Proposers offered a larger share of the pie to purportedly angrier receivers
  
  \[ r = .38, p < .05 \]
Experiment 1: Caveats

- Alternative Explanation: Source of anger highlighted in the displayed emotion condition only (so, actual anger).
- *thought processes*

- Rationalization: Easy to justify the inflation of anger without acknowledging s/he is misrepresenting it (e.g., time delay - “boring filler task”).
- 3^rd report of anger in the control condition

- Boundary conditions for the effectiveness
  - Credibility of the Information

- *Proposers were told that receivers reported their anger level either before OR after knowing the information would be sent.*
Experiment 2
Gaming (inflating) Anger: n=184

Reported Anger

Control

Displayed

$F(1, 45) = 20.65, p < .001$

$F(1, 90) = 10.43, p < .01$

Interaction: $F(1, 90) = 13.62, p < .001$
Thought Processes

CODING:

- 0=This is my actual anger level; 1=strategic display of anger; 2=other
- 77% of receivers acknowledged they were gaming emotions (1), and seem comfortable with it:

(1) “…I’m not as angry as I said. I just want him/her to give me more money…,”

(2) “I did revise my anger level by increasing it. I wanted to push the proposer into making an allocation that would be fair to me…,”

(3) “…I decided it was OK to lie and tell the other party I was angrier than I am to ensure that I get a more fair-sized slice of the money…,” and

(4) SWEET REVENGE: “By choosing a low level of anger my proposer will make a money division in his favor, which I can reject.”
Does the strategy work?

- Proposers were told that Receivers reported anger…

- **before** knowing the info would be sent (i.e., emotion gaming unlikely)
  - $r = .32, p < .05$ - angrier Receivers got a larger share of the pie

- **after** knowing the info would be sent (i.e., emotion gaming likely)
  - $r = -.05, p < .10$

$z = 1.77, p < .05$, one-tailed test
Experiment 2: Caveat

- Anger or Expectation?
  - Option to choose which information to display
  - Explain why
Experiment 3

Dictator Game

Manipulation

Anger Measurement

Rule: Proposer’s Offer has to be accepted

Receiver = ?

Unfair Offer
e.g., P:$7.5/R:$2.5

Proposer = $10

The previous offer…
…made me feel X angry
…was X below my expectations

Ultimatum Game

Instructions

Gaming Emotions

Targeted Social Interaction

Rule: Proposer’s Offer can be rejected. Both get $0

Receiver = ?

Proposer to decide on the offer

Choose which one to send.
Then, indicate once again your level of anger/expectation

Proposer = $10

Impression of Receiver – impulsive/irrational/vindictive

University of California
Berkeley
Haas School of Business
Experiment 3
Gaming (inflating) Anger/Expectation: n=59

anger=36  expectation=23  \( z = 1.69, p < .05 \)

\[ F(1, 57) = 36.1, p < .001 \]

\[ F(1, 57) = 8.7, p < .005 \]

\[ F(1, 57) = 2.07, p > .10 \]
Experiment 3

Open-ended question – Justify your choice

Only 3.4% reported being indifferent between both options

Why Anger?

• 94% - stronger, more threatening, and vindictive, hence more effective, signal

  (a) “I think anger is a stronger force to push the proposer to raise the offer. Expectation sounds weaker than anger”

  (b) “I chose to send the anger to scare my proposer and to make him/her think that I wouldn't be accepting an offer that didn't favor me as well,”

  (c) “Anger reflects desire for revenge”
Experiment 3

Why Expectations?

• 60% - more precise, informative, hence more persuasive
  (a) “I think the expectation will give the proposer a clearer idea about what I am looking for than any measure of anger would.”
  (b) “…If the proposer knows what I expect; then perhaps they will be more willing to cooperate”

• 40% - anger may backfire
  (a) “Conveying a message of anger may work against me by making the proposer defensive and wanting to give less”
  (b) “Positive feedback almost always leads to a better chance of success. If he knows I'm angry; he might just offend me again”
People are ready to gaming emotions and acknowledging their strategy.
The strategy works only if credible emotion is conveyed.
Emotion gaming (e.g., anger) differs from non-emotion gaming (e.g., violated expectations).

However...

What if the moral or physiological costs of faking emotions increase significantly?
- moral: Avoid Being Taken Advantage of vs. Taking Advantage of
- physiological: Facial Expressions

Intensity vs. Type
- Latter is more difficult

Probability of being caught / can it backfire?
Emotional Game Theory
Coordination Game 1: Nash Bargaining Game

A sum of $10 has been allocated to each pair. Each member of the pair has to simultaneously propose a division of this $10. Precisely, you will be asked in the next screen to indicate how much of the $10 you want to keep for yourself. Your partner will face the same question at the same time—that is, how much of the $10 s/he wants to keep for him/herself.

The outcome to the game goes as follow. If the sum of your offer + your partner’s offer is equal or below $10, then both of you get whatever you have requested. If the sum of the offers goes above $10, then both of you get $0.

Offer
Now please indicate how much you want to keep for yourself out of the $10.

___ $0
___ $2
___ $4
___ $6
___ $8
___ $10
Coordination Game 2: Battle of the Sexes

Please take a look at the payoff matrix below.

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<tbody>
<tr>
<td>top</td>
<td>$4,$2</td>
<td>$0,$0</td>
</tr>
<tr>
<td>down</td>
<td>$0,$0</td>
<td>$2,$4</td>
</tr>
</tbody>
</table>

In this task you have to choose between left or right and your paired-partner has to choose between top or down. Your choice and your partner’s choice happen at the same time. Your potential payoffs are written in a bold format and are contingent not only on your decision but also on the decision of your partner. Precisely, here is how it works. If you choose left and your paired-partner chooses top, you get $4 and your paired-partner gets $2. If you choose right and your paired-partner chooses down, you get $2 and your paired partner gets $4. However, if you choose left and your paired-partner chooses down then both of you get $0.
Coordination Game 3: The Median Action Game

There are 7 participants. Each participant will simultaneously choose one number from the set 1,2,3,4,5,6,7. The payoff of each participant depends on 2 numbers (the median number of the group—column number—and the participant’s own number—row number).

Please choose the number from the set:

__1 __2 __3 __4 __5 __6 __7
Coordination Game 4: Stag Hunt

Please take a look at the payoff matrix below.

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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>top</td>
<td>$8,$8</td>
<td>$0,$8</td>
</tr>
<tr>
<td>down</td>
<td>$8,$0</td>
<td>$9,$9</td>
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</tbody>
</table>

In this task you have to choose between left or right and your paired-partner has to choose between top or down. Your choice and your partner’s choice happen at the same time. Your potential payoffs are written in a **bold format** and are contingent not only on your decision but also on the decision of your partner. Precisely, here is how it works. If you choose left and your paired-partner chooses top, each of you gets $8. If you choose right and your paired-partner chooses down, each of you get $9. However, if you choose left and your paired-partner chooses down, then you get $8 and you paired-partner gets $0. Likewise, if you choose right and your paired-partner chooses top, then your paired-partner gets $8 and you get $0.
Two Main Hypotheses

- **H1**: High level of aggregate positive emotion leads to high level of efficiency in coordination games (?)

- **H2**: High level of emotion matching leads to high level of efficiency in coordination games (?)