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# Gracious Guilt and Piggish Pride: Effects of Self-Conscious Emotions on Cooperation

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# The Tragedy of the Commons





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### What to do?

• Hardin (1968): "Mutual coercion, mutually agreed upon"

- Platt (1973): Shift reinforcement structures
  - Immediate personal gratification, long-term shared negative consequences (defection)
  - 2. Immediate sacrifice, long-term shared benefits (cooperation)

Cialdini et al. (1990): Highlight social norms



### **Emotions**

• Emotions drive behavior – fast, not slow

 Goal: Identify emotions that will affect cooperation in social traps











### **Self-Conscious Emotions**



Guilt – Arises when we've harmed someone, "behavioral stop mechanism" that motivates prosocial, reparative behavior



Pride – Arises when we've accomplished something admirable, facilitates promoting success for purpose of increasing status and access to resources

How do two self-conscious emotions – guilt and pride – affect cooperative behavior in a commons game?



# Hypotheses

• **H1:** Guilt will lead to decreased consumption

• **H2:** Pride will lead to increased consumption

### **Participants**

Participants: 105 ASU undergraduates

Final N = 91

44.0% Female

Age: *M*=21.7yrs, *SD*=4.1yrs

- 1 hour, "three separate studies"
  - 1. Recalled emotion elicitation
  - 2. Social Trap game
  - 3. Game Feedback Sheet, individual differences

### **Recalled Emotion Elicitation**

### Please write about a recent time when you...

- Neutral: ...did your laundry
- Guilt: ...harmed or betrayed someone close to you
- Pride: ...accomplished something other people respected or found admirable

### Social Trap Game (adapted from Galinsky et al., 2003)

"You and 99 other participants in this study share access to a common pool of \$1,000 dollars. You are free to ask for as much money from that pool as you like. But you should also be careful not to ask for too much, because **if at the end of the study everyone's requests add up to more than the \$1,000 that is in the pool, then nobody, including yourself, will receive anything**. In other words, if the sum total of all 100 requests adds up to more than \$1,000, no one gets any money.

How much money would you like to take from the pool?"

### Game Feedback Sheet

- 1. Describe the rules of the game you played
- 2. How does your outcome as an individual depend on the decisions made by everyone else?
- 3. How do everyone else's outcomes depend on the decision that you made?
- 4. What is the best strategy for success?
- 5. Any other thoughts about the game?

# Participant Ejection

#### 5 removed based on their stories

#### 9 removed based on Feedback Sheet:

- (2) Didn't understand rules of game
  - E.g., thought it was first come, first served
- (1) Didn't believe game would work
  - "I picked the number randomly. I just can't believe that everyone can keep it below the limit"
- (6) \$1,000/100 = \$100
  - "The best way to win is to figure out your share and take a little bit less"
    → "\$90 ©"
  - "The best idea would be for all participants to ask for less than \$100"

### Results

105 original participants:

Any guesses as to how much?

105 original participants: \$4,370.82

Minus the two \$1,000 takers: \$2,370.82

**Final 91 participants: \$1,605.83** 

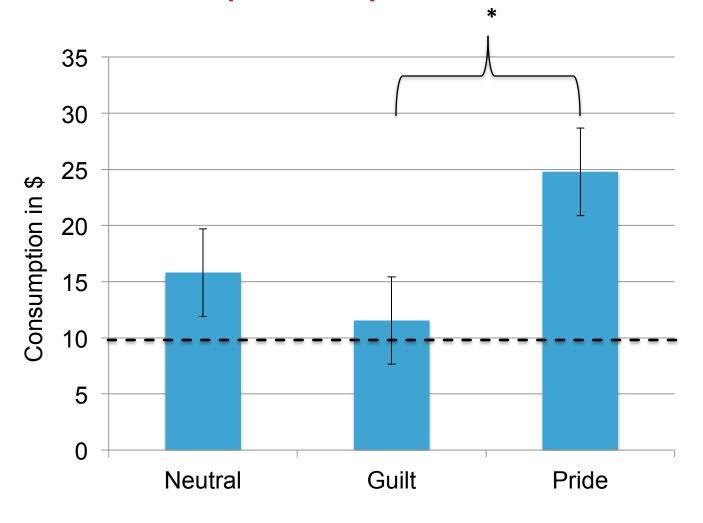
Average request: \$17.65

# Results: Consumption by Emotion

 Main effect of Emotion:

$$F(2, 90) = 3.09,$$

$$p = .051^{\dagger}$$

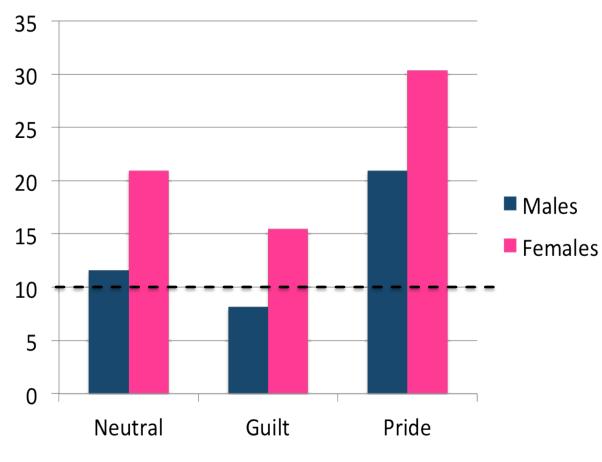


**Emotion Condition** 

# Results: Consumption by Emotion, Sex

• Marginal main effect of Psex: F(1, 90) = 3.51, p $= .065^{\dagger}$ 



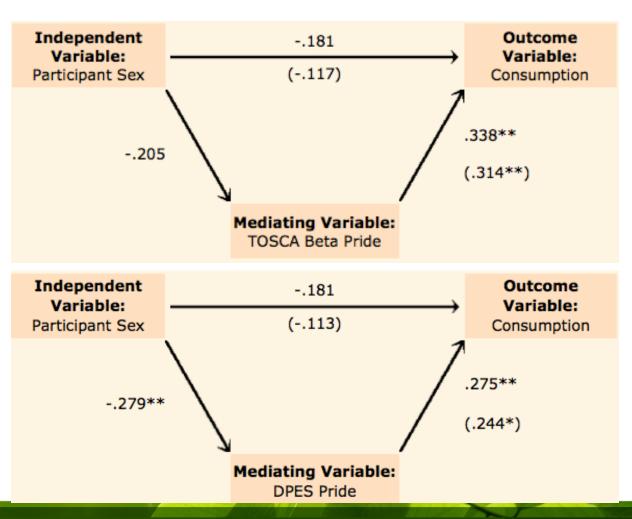


# Sex, Pride, and Greed

Sex effect marginally mediated by dispositional pride

• TOSCA-Beta Pride z = -1.66, p < .10

• DPES Pride z = -1.76, p < .10





# **Categories of Consumption**

### Fair Share is \$10

Prosocial: Less than \$10



Cooperative: \$10



• Selfish: More than \$10



# Frequencies of \$ Requests

**Neutral** 

Guilt

**Pride** 

 $X^{2}$  (4, N = 91) = 11.22, p < .05



# Lessons for Resource Management

- Emotions influence cooperation in predictable ways, consistent with proposed function
  - Emotions may not be as "good" or "bad" as they seem
- Cognitive mechanisms behind failure
  - Difficulty calculating "fair share" and situational parameters
  - Need systematic examination of individual thought patterns and personality characteristics

# Thank you!

### **Collaborators:**

Lani Shiota Susan Ledlow





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