Stereotype Content, Disgust & Moral Decision Making: Evidence from Social & Affective Neuroscience

Lasana T. Harris, Ph.D.
New York University

Inclusive Leadership, Stereotyping & the Brain
Columbia University, Business School, September, 2009
Thank You

- Liz Phelps
- Ernst Fehr
- Christine Hosey
- Stefanie Molicki
- Molain Saintlus
- Jenny Lui
- MacArthur Initiative on Law & Neuroscience

- Susan Fiske
- Mina Cikara
- Rachel Farnsworth
- Lyle Williams
- Gabrielle Moore
- Center for Brain, Mind & Behavior
Outline

• Disgust & moral decision-making
  – Physiological measurement

• Fairness
  – Punishment for norm violations

• Trust & Revenge
  – Punishment for trust violations

• Valuing life
  – Saving & sacrificing lives

• Conclusion
Disgust & Moral Decision Making

• Warm & competence interact to produce distinct affective responses

• Low-low targets induce disgust

• Social cognition/valuation neural region less active for disgust inducing targets

• Since affect influences decision-making, disgust may influence moral decision making

• Harris & Fiske, Psych. Sci., 2006
Measuring Affect

Affect elicits measurable brain & bodily responses
Fairness

Dictator
$1.00

Fair
Share 50 cents
Recipient

Unfair
Share 10 cents
Recipient

Recipient

Participant

Third Party Punishment

Dictator

Transfer Opportunity

Punishment Opportunity
MAN FACES DRUG POSSESSION CHARGES

An Iowa City man was arrested Friday for three counts of drug possession after members of the Johnson County Multi-Agency Drug Task Force allegedly made three controlled drug purchases from him in 2007.

Paul Anthony Porter, 30, of 2250 Taylor Drive, faces three charges of controlled substance violation for the delivery of crack cocaine, each a class C felony punishable by up to 10 years in prison.

According to Iowa City Police complaints:


Each time the purchased crack cocaine was sent to the Iowa Division of Criminal Investigation for testing and returned with positive results that it was the substance.

GOOD SAMARITANS SAVE PIT BULL FOUND STUFFED IN DUMPSTER

Good Samaritans discovered the pit bull on Tuesday stuffed in an alley Dumpster and struggling to breathe.

They said the dog had pieces of Styrofoam in his nose, was deeply cut above the tail and had nerve damage to a back leg.

Veterinarians performed emergency surgery but said the damage to the dog’s back leg may be irreversible.

"Who would have put him in a Dumpster, and not only put him in a Dumpster, but closed the top? He didn't even have fresh air coming in," said Jacquelyn Johnson of Faktura Projects, an organization that is caring for the dog.

Officials said cases of abuse are becoming too common. In the last year, rescue workers at Faktura Projects said they have saved more than 60 dogs.
Punishment amount when dictator is...  

Punishment amount when recipient is...  

Harris, Hosey, Fehr, Phelps, in prep.
Third Party Punishment

• Disgust-inducing dictators are punished more harshly
• Disgust-inducing recipients are restored less
• Increased physiological disgust when hero behaves unfairly
• Increased physiological disgust when addict behaves & is treated fairly
Trustee → Investor/Subject

Second Party Punishment

Trustee → Investor/Subject

Transfer Opportunity

Punishment Opportunity

Trustee → Investor/Subject

Share $1.00

Keep $1.00

Trustee $3.00

Trustee $3.00

Trustee $1.50

Investor $1.00

Investor $1.00

Investor $1.00
George Leland was born in 1977 in Scranton, Pennsylvania. After graduating from Western Pennsylvania High School, he entered Columbia University, where he earned his bachelor’s degree in Sociology. He then enrolled in the Law School at the University of Pittsburgh and graduated a year before being diagnosed with schizophrenia. He stayed shortly at the Pennsylvania Hospital after a schizophrenic breakdown, but now essentially lives in temporary housing or on the street.

His experience is described in the Pittsburgh Post:

George Leland, a graduate of Columbia college and the University of Pennsylvania School of Law, is one of many homeless people interviewed for this report on the lives of those afflicted with sudden tragedy.

After law school, Leland worked as a legal clerk. However after only a few months, he was involved in a scandal that rocked his company. Apparently, his boss was swindling clients out of money, and unbeknownst to Leland, set him up to take the fall. He was terminated from his position.

According to Leland, his wife became increasing frustrated by the media attention surrounding his unemployment, and turned to anxiety pills to ease her own frustration. She eventually left him to live with her own parents.

Leland lived in their small house by himself, but an accidental fire, confirmed by city fire reports, occurred a few months after his wife left. Having given up the financial burden of paying house insurance, Leland was left homeless, and stayed in the Pennsylvania Hospital briefly after his accident to be treated for minor burns.

He now lives in-and-out of temporary shelters or on the streets.
Derek Stevens was born in 1980 in South Brunswick, New Jersey. After graduating from New Brunswick High School in 1997, he entered the Rutgers University, where he earned a bachelor’s degree in English. He then enrolled in a graduate program in Literature at the University of Pennsylvania, where he earned his masters degree in Print Media. He worked as a copywriter to earn a living while writing his book. The book writing effort was modestly successful when he engaged in an incident of drunk driving.

His recent experience, as described in The Philadelphia Enquirer:

Former U. Penn student Derek Stevens was in a drunk driving accident in the early hours of Tuesday night in Patterson, N.J. Stevens had been to a party and according to police, had a high blood alcohol level.

According to friends, the party was held to celebrate the fact that Stevens’ book had been signed to a publisher.

Stevens, driving alone, drove into a tree, and fortunately narrowly missed a couple walking on the street. Witnesses say that the car was swerving recklessly, and the couple ran out of harms way.

Stevens’ spine was crushed in the accident and he was taken to the University of Pennsylvania hospital, where doctors realized he would never walk again. Stevens will have to use a wheelchair for the rest of his life.

Steven was released from the hospital yesterday, and will appear in court in one week. His book publisher has declined to comment.
Keep Decisions

Trustworthy Ratings

Target

\[ F(1, 8) = 2.71, \quad p = 0.14 \]

Harris, Molicki, Fehr, Phelps, in prep.
\[ F(1, 8) = 5.78, \ p < 0.04 \]

Harris, Molicki, Fehr, Phelps, in prep.

\[ F(1, 8) = 3.01, \ p = 0.12 \]
Trust Game & Second Party Punishment

- P’s trust disgust-inducing targets less
- P’s punish disgust-inducing targets more harshly
- P’s punish responsible targets more harshly
- Increased physiological disgust to homeless & targets at fault

- Negative relationship with levator & other-motives
- Positive relationship with levator & self-motives
Valuing Life

Sacrificed: $F(1,12) = 6.53, p < .05$, partial $\eta^2 = .35$

Saved: $F(1,12) = 7.50, p < .05$, partial $\eta^2 = .36$

Cikara, Farnsworth, Harris, & Fiske, under re-review
Social & Cognitive Control Regions

Areas engaged when participants reported it was morally acceptable to sacrifice extreme outgroup targets to save the ingroup.

Cikara, Farnsworth, Harris, & Fiske, under re-review
Trolley Dilemma

- P’s find it more acceptable to sacrifice disgust-inducing targets
- P’s find it more acceptable to save in-groups
- Social cognition & cognitive control neural regions engage to sacrifice disgust-inducing to save in-groups
Summary

• Low warmth, low competence targets induce disgust
• Disgust-inducing targets...
  – Are not judged by the same fairness rules
  – Are not trusted
  – Are treated the same as those responsible for negative life outcomes
  – Lives are not valued
• Extreme outgroups are not evaluated by same moral criteria