

# Universal Dimensions of Inequality: Why Warmth and Competence Matter to Social Work

Susan T. Fiske  
Department of Psychology  
Princeton University

# Only 2 Kinds of People

---

- Friend or foe?
    - With us or against?
    - Part of the problem or the solution
    - Warm, friendly, trustworthy, sincere
-

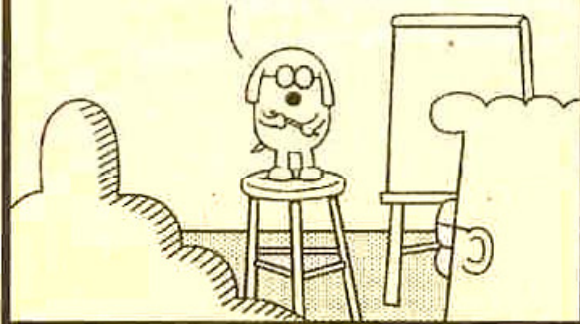
# OK, Maybe 4 Kinds of People

---

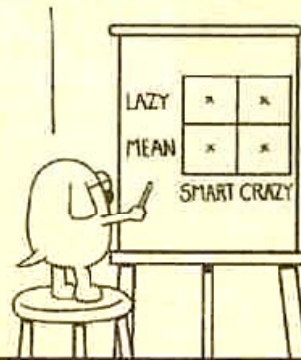
- Friend or foe?
    - Warm, friendly, trustworthy, sincere
  - Able or unable?
    - Competent, able, skillful, capable
  - Warmth x competence → 4 clusters
-

# DILBERT

WELCOME TO MY SEMINAR ON DEALING WITH DIFFICULT COWORKERS.



DIFFICULT COWORKERS GENERALLY FALL INTO ONE OF THESE GROUPS.



THE ONLY WAY TO DEAL WITH THEM IS TO QUIT YOUR JOB AND BECOME PSYCHOLOGICAL RESEARCHERS.



www.dilbert.com scottadams@aol.com

11-21-05 ©2005 Scott Adams, Inc./Dist. by UFS, Inc.

# Case Study: Prejudices

---

- Come in distinct *types*
  - From society & stereotypes in *mind*
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# Distinct Types

---

- Friend or foe? = Warmth
  - Able or unable? = Competence
  - Stereotype Content Model (SCM)
    - Warmth x competence
-

# Stereotype Content Model

(Cuddy, Fiske, & Glick, *Advances*, 2008; Fiske, Cuddy, & Glick, *TiCS*, 2007; Fiske et al., *JSI*, 1999, *JPSP*, 2002)

|           | Lo Competence  | Hi Competence   |
|-----------|----------------|-----------------|
| Hi Warmth |                | Pure favoritism |
| Lo Warmth | Pure antipathy |                 |

# Stereotype Content Model

(Cuddy, Fiske, & Glick, *Advances*, 2008; Fiske, Cuddy, & Glick, *TiCS*, 2007; Fiske et al., *JSI*, 1999, *JPSP*, 2002)

|           | Lo Competence  | Hi Competence   |
|-----------|----------------|-----------------|
| Hi Warmth | Ambivalence    | Pure favoritism |
| Lo Warmth | Pure antipathy | Ambivalence     |



# Stereotype Content Model

|           | Lo Competence                                | Hi Competence |
|-----------|--|---------------|
| Hi Warmth |  |               |
| Lo Warmth | poor, welfare,<br>homeless<br><b>Disgust</b> |               |

# Stereotype Content Model

|           | Lo Competence                                | Hi Competence  |
|-----------|--|--|
| Hi Warmth |  | ingroup, allies,<br>reference groups<br><b>Pride</b> |
| Lo Warmth | poor, welfare,<br>homeless<br><b>Disgust</b> |  |

# Stereotype Content Model

|           | Lo Competence                                | Hi Competence  |
|-----------|--|--|
| Hi Warmth | older, disabled,<br>retarded<br><b>Pity</b>  | ingroup, allies,<br>reference groups<br><b>Pride</b> |
| Lo Warmth | poor, welfare,<br>homeless<br><b>Disgust</b> |  |

# Stereotype Content Model

|           | Lo Competence                                | Hi Competence  |
|-----------|--|--|
| Hi Warmth | older, disabled,<br>retarded<br><b>Pity</b>  | ingroup, allies,<br>reference groups<br><b>Pride</b> |
| Lo Warmth | poor, welfare,<br>homeless<br><b>Disgust</b> | Jews, Asians, rich,<br>professionals<br><b>Envy</b>  |

# Prejudices

---

- Come in distinct *types*
  - From society & stereotypes in *mind*
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# SCM Studies

---

- [American] society's opinions of groups
  - Common groups nominated
  - Rate on
    - Warmth (warm, friendly, sincere)
    - Competence (competent, skillful, capable)
    - Social structure
    - Emotions
    - Behavior
-

# Survey Method: Demographics

(Cuddy, Fiske, & Glick, *JPSP*, 2007)

- N = 571
- Sex: 62% female, 38% male
- Age: 18-85, mean 45
- Region: 20% NE, 24% MidW, 35% S, 21% W
- Edu: 7% HS-, 24% HS, 30% BA-, 39% BA+
- Race: 77% White, 6% Black, 9% Hispanic

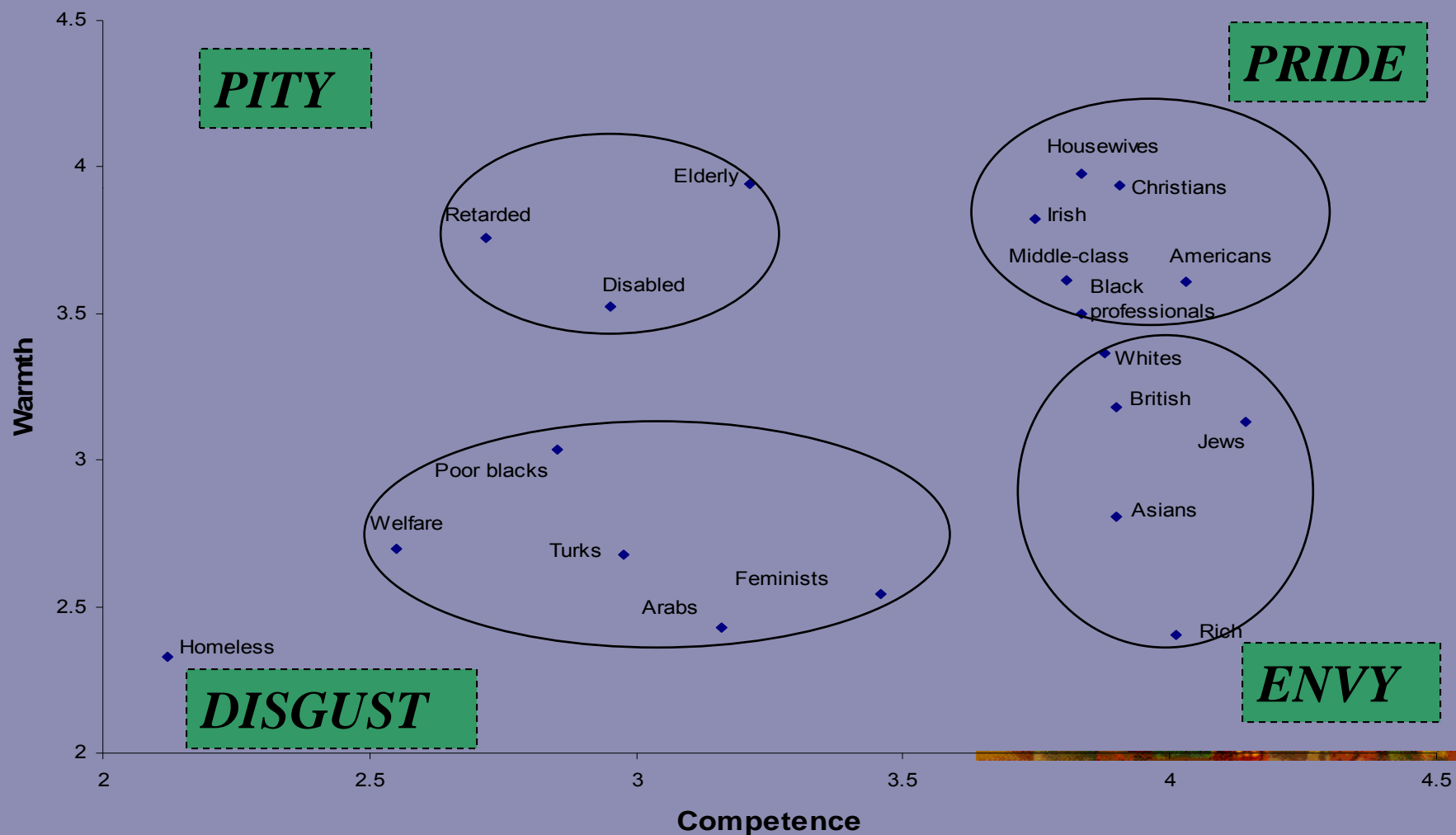
# Scales & Reliabilities

- Competent, capable = .81
- Warm, friendly = .83
- Disgust, contempt = .60
- Admiration, pride = .80
- Pity, sympathy = .71
- Envious, jealous = .82
- Cooperate, associate = .61
- Fight, attack = .59
- Help, protect = .60
- Exclude, demean = .68



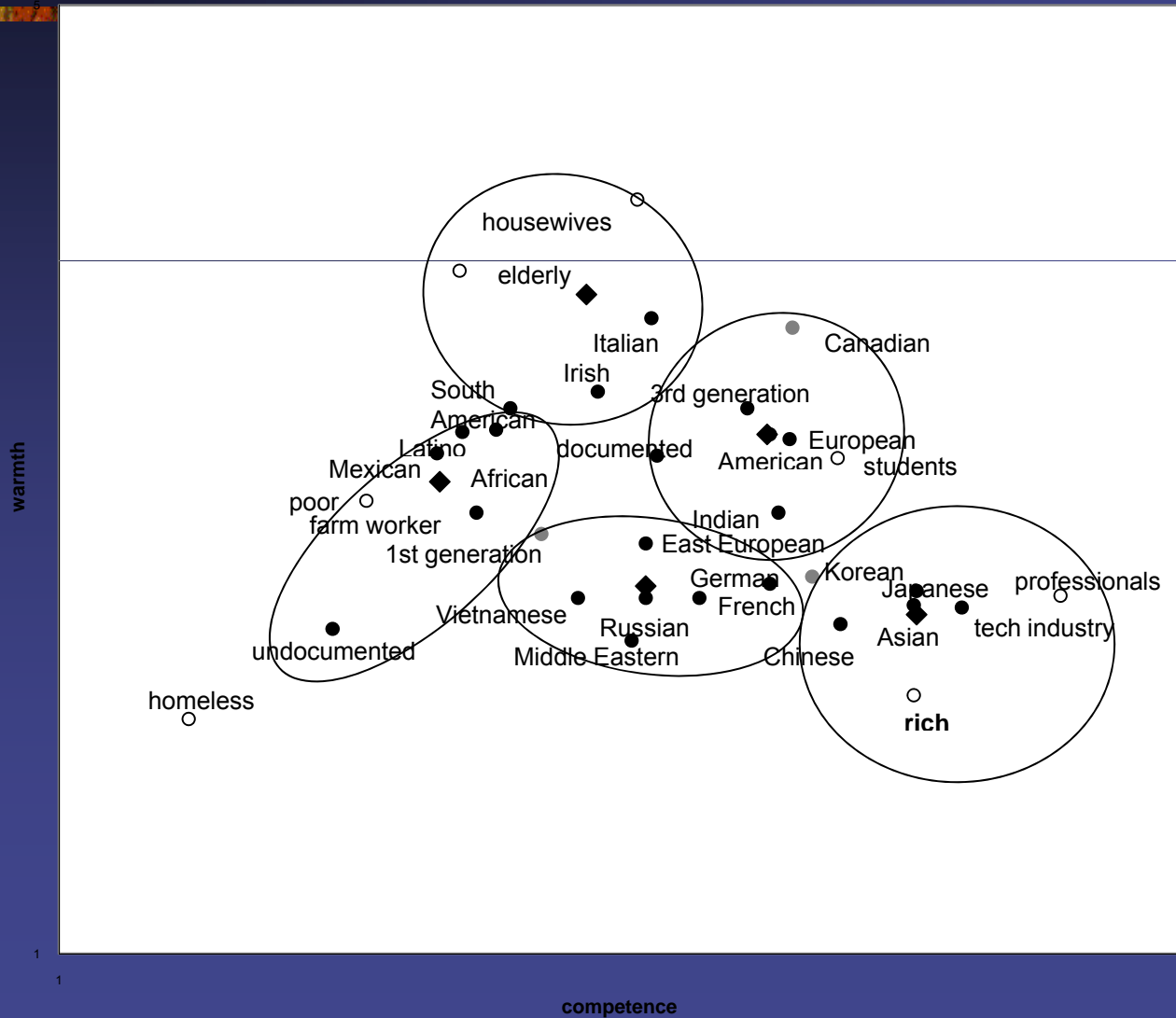
# SCM: US Representative Sample

(Cuddy, Fiske, & Glick, *JPSP*, 2007)



# U.S. Immigrants

(Lee & Fiske, *IJIR*, 2006)



# Prejudices

---

- Come in distinct *types*
  - From society & stereotypes in *mind*
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# Prejudices

---

- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
    - Status → competence
    - Competition → (low) warmth
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# Social Context → Group Stereotype

(Cuddy, Fiske, & Glick, *Adv in Exptl Soc Psy*, 2008)

| <b><i>Correlations</i></b> | Competence              | Warmth |
|----------------------------|-------------------------|--------|
| Status                     | <b>.77</b> (.55 to .87) | .12    |
| Competition                |                         |        |

# Social Context → Group Stereotype

(Cuddy, Fiske, & Glick, *Adv in Exptl Soc Psy*, 2008)

| <b><i>Correlations</i></b> | Competence       | Warmth             |
|----------------------------|------------------|--------------------|
| Status                     | .77 (.55 to .87) | .12                |
| Competition                | .05              | -.25 (.08 to -.48) |

From US, EU, Latino, & Asian samples

# Social Context → Group Stereotype

(Caprariello, Cuddy, & Fiske, *GPIR*, 2009)

| <b>Status</b> | <i>Competition</i> | <b>Competence</b> | <i>Warmth</i> |
|---------------|--------------------|-------------------|---------------|
| <b>High</b>   | <i>High</i>        |                   |               |
| <b>High</b>   | Low                |                   |               |
| <b>Low</b>    | <i>High</i>        |                   |               |
| <b>Low</b>    | Low                |                   |               |

# Social Context → Group Stereotype

(Caprariello, Cuddy, & Fiske, *GPIR*, 2009)

| <b>Status</b> | <i>Competition</i> | <b>Competence</b> | <i>Warmth</i> |
|---------------|--------------------|-------------------|---------------|
| <b>High</b>   | <i>High</i>        | <b>4.58</b>       | <i>3.47</i>   |
| <b>High</b>   | Low                | <b>4.83</b>       | 4.13          |
| <b>Low</b>    | <i>High</i>        | 2.80              | <i>3.35</i>   |
| <b>Low</b>    | Low                | 3.21              | 3.84          |



# Prejudices

---

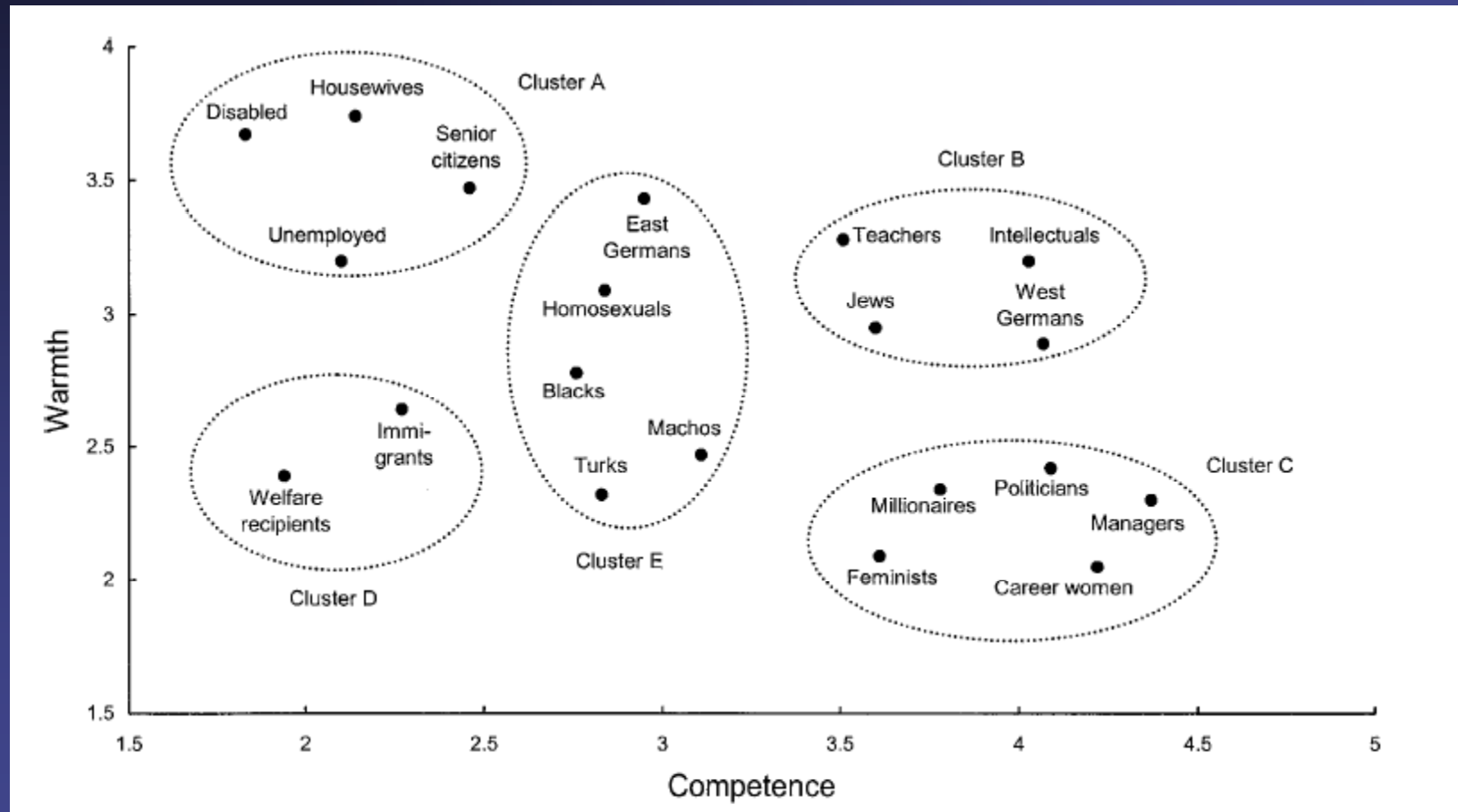
- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
    - Status → competence
    - Competition → (low) warmth
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# Prejudices

---

- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
  - **Universal across culture**
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

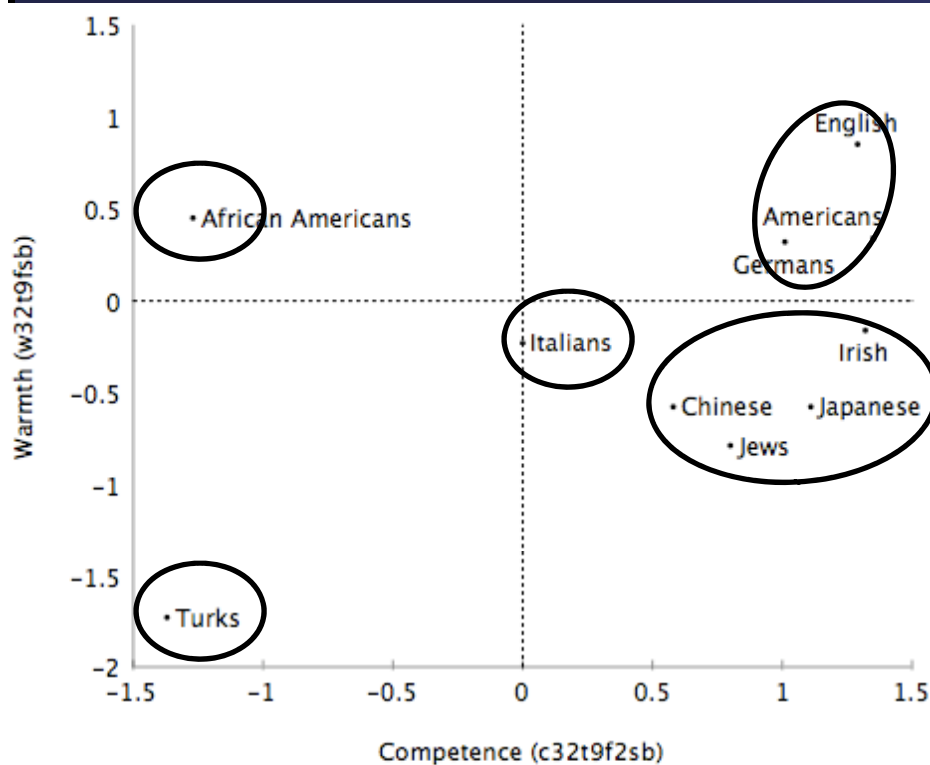
# German Data (Eckes, 2002)



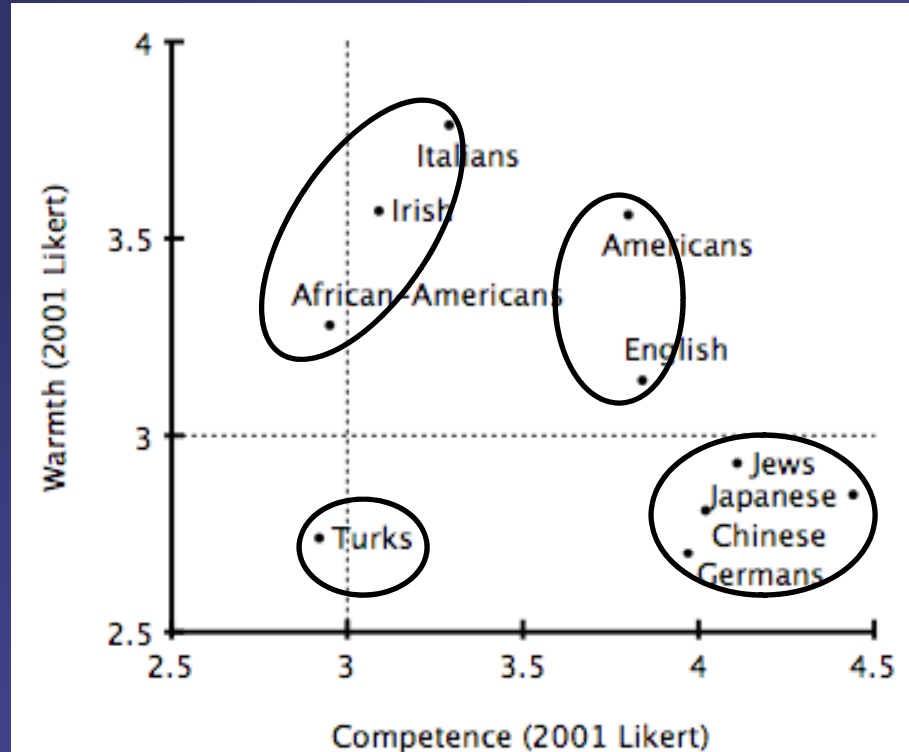
# American Students: 1932-2007

(Bergsiecker, Leslie, Constantine, & Fiske, under review)

1932



2007



# Italian Fascists

(Durante, Volpato, & Fiske, *EJSP*, in press)

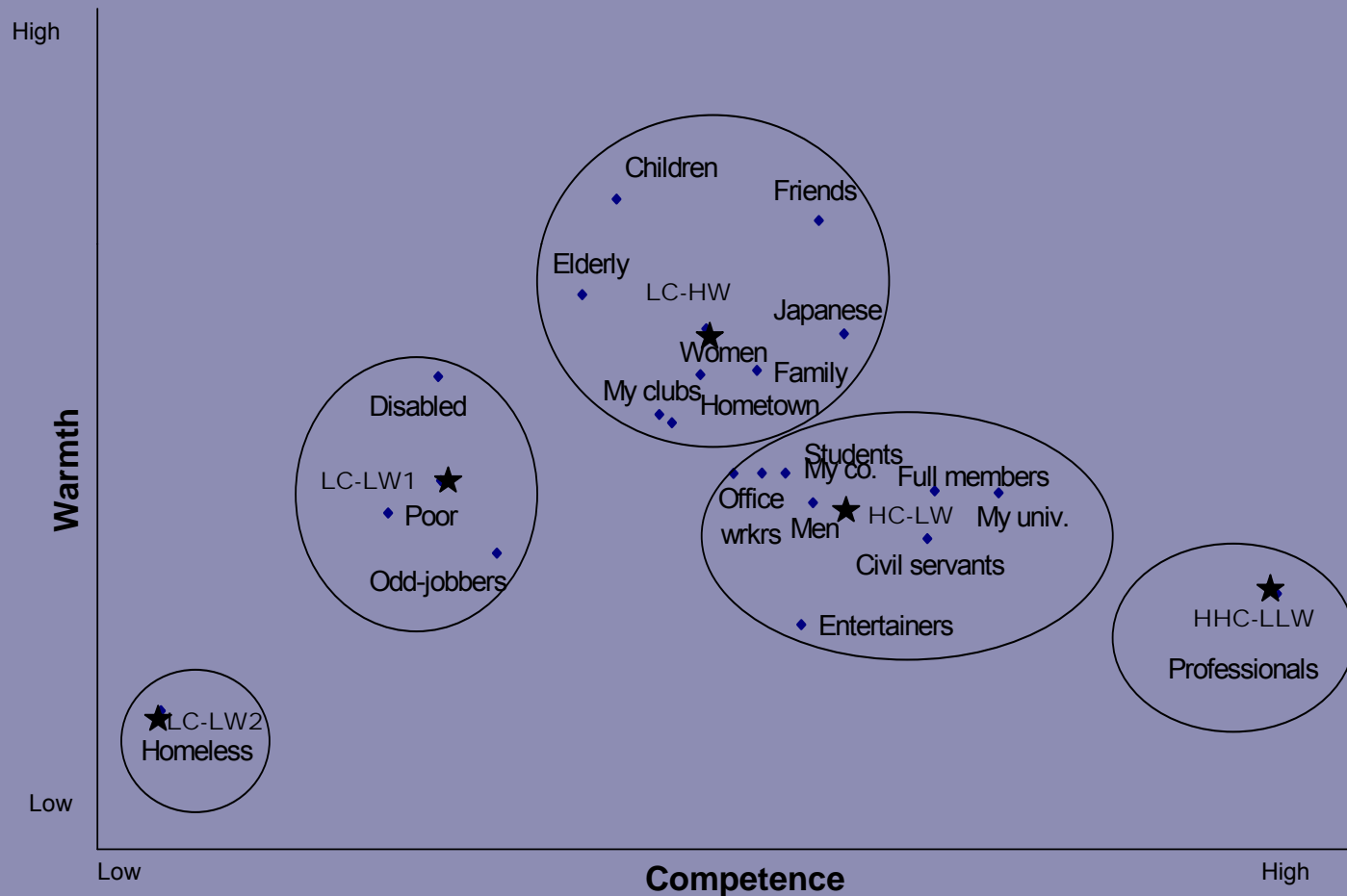
|           | Lo Competence         | Hi Competence      |
|-----------|-----------------------|--------------------|
| Hi Warmth |                       | Italians<br>Aryans |
| Lo Warmth | Blacks<br>Half castes | Jews<br>English    |

# SCM: Universal or Culture-Bound?

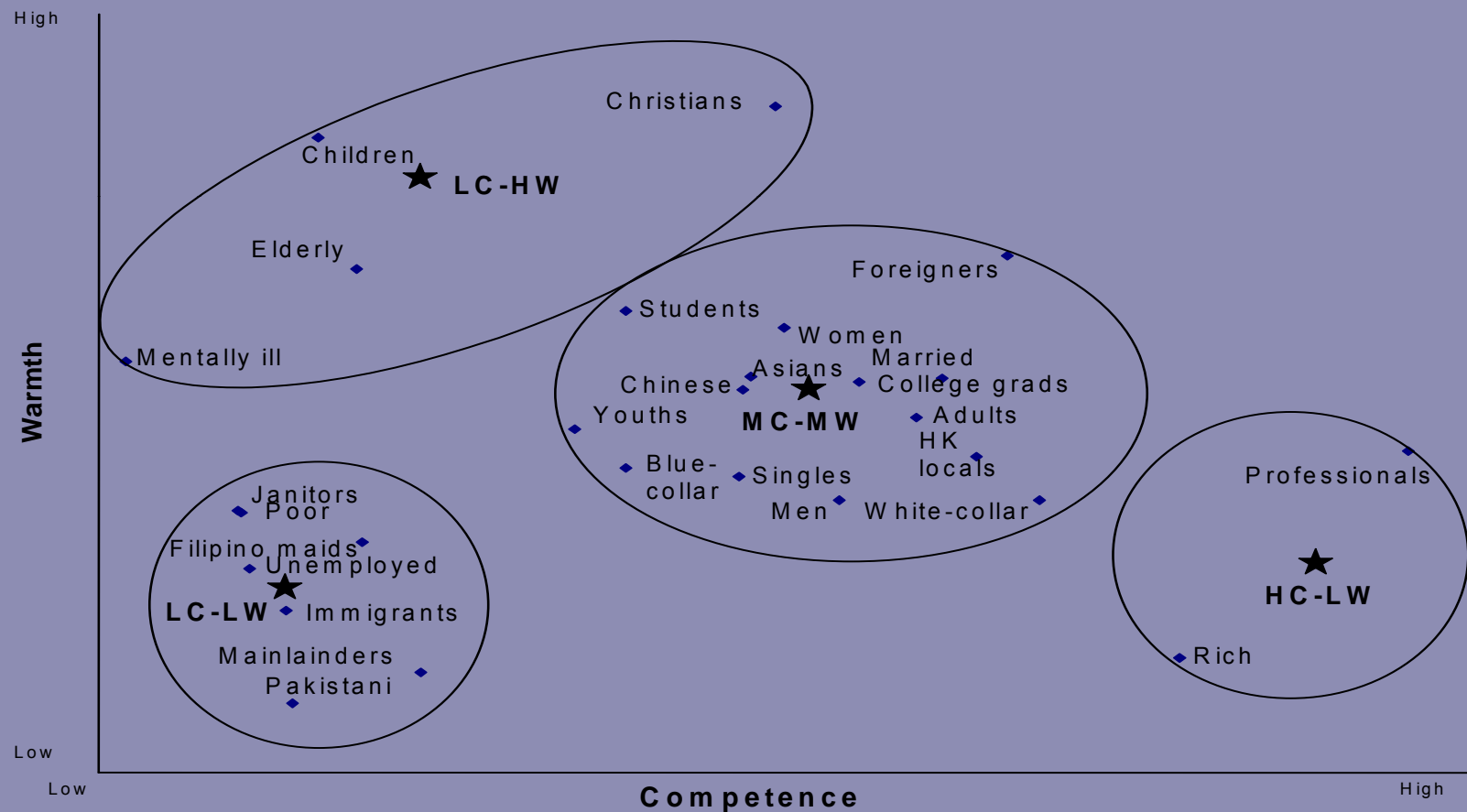
(Cuddy, Fiske, Kwan, Glick, et al., *BJSP*, 2009)

- Warmth x competence map
  - Collective warmth (harmony) > (individual) competence?
- Many groups mixed
  - Result of multi-cultural, egalitarian values?
  - Unnecessary in homogeneous, hierarchical cultures?
- Ingroup favoritism → outgroup derogation
  - No ingroup love prejudice?

# SCM: Japanese data (Cuddy et al., *BJSP*, 2009)

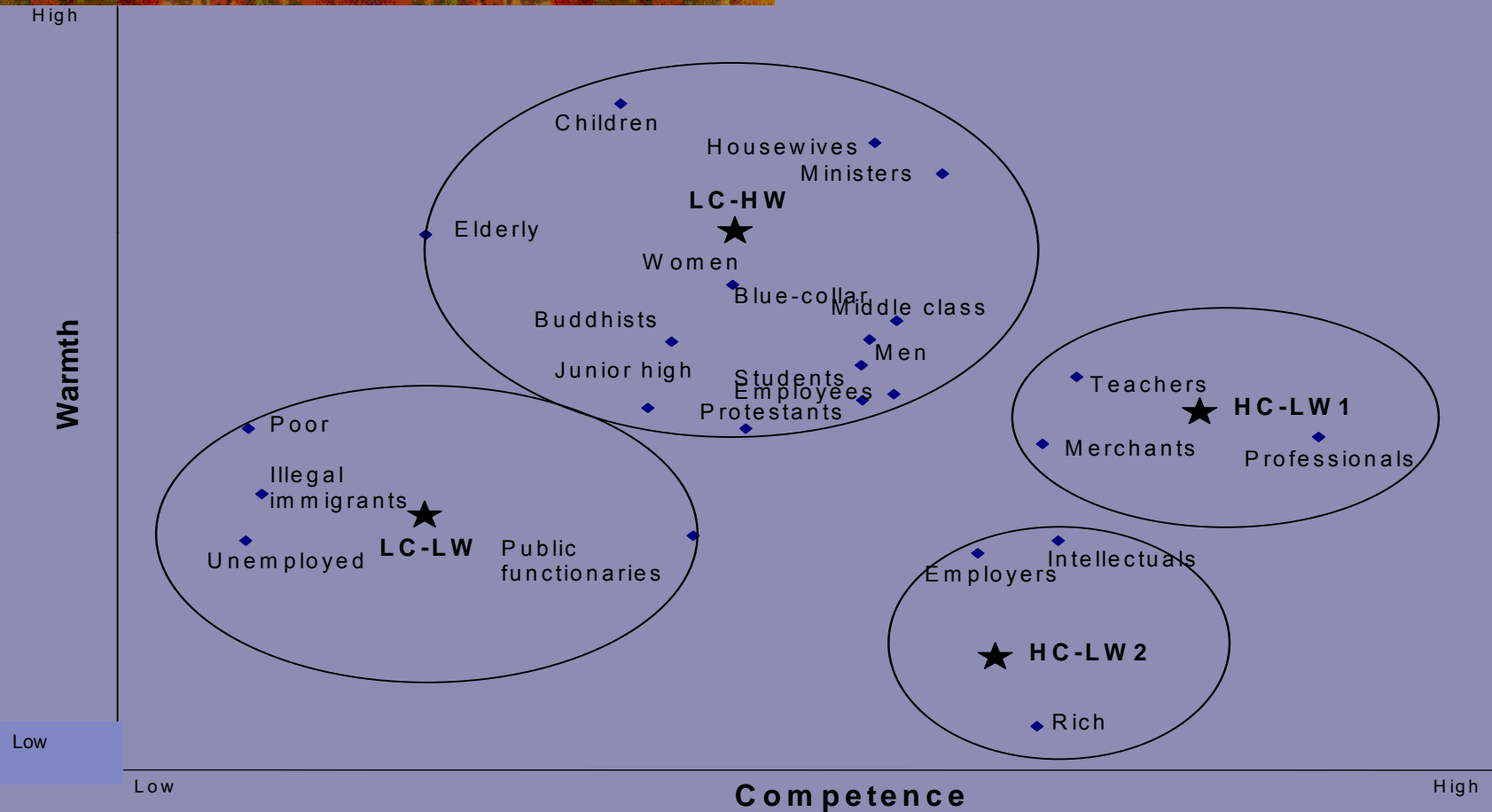


# SCM: Hong Kong data (Cuddy et al., 2009)





# SCM: South Korean data (Cuddy et al., 2009)



# Ingroup Favoritism

(Cuddy, Fiske, & Glick, *Adv in Exptl Soc Psy*, 2008)

| Sample                             | Positivity |
|------------------------------------|------------|
| Western (2 U.S., Belgium)          | .29 - .49  |
| Asian (Japan, Hong Kong, S. Korea) | .02 - .18  |

Positivity averages across warmth & competence, which show same patterns.

# Prejudices

---

- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
  - **Universal across culture**
    - *But outgroup prejudices without ingroup favoritism*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# Prejudices

---

- Come in distinct *types*
  - From society & stereotypes in *mind*
  - Universal across *culture*
  - **Happen for *individuals***
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# Intergroup Perception → Person Perception (Russell & Fiske, *EJSP*, 2008)

---

- Individual competition & status → individual warmth & competence
-

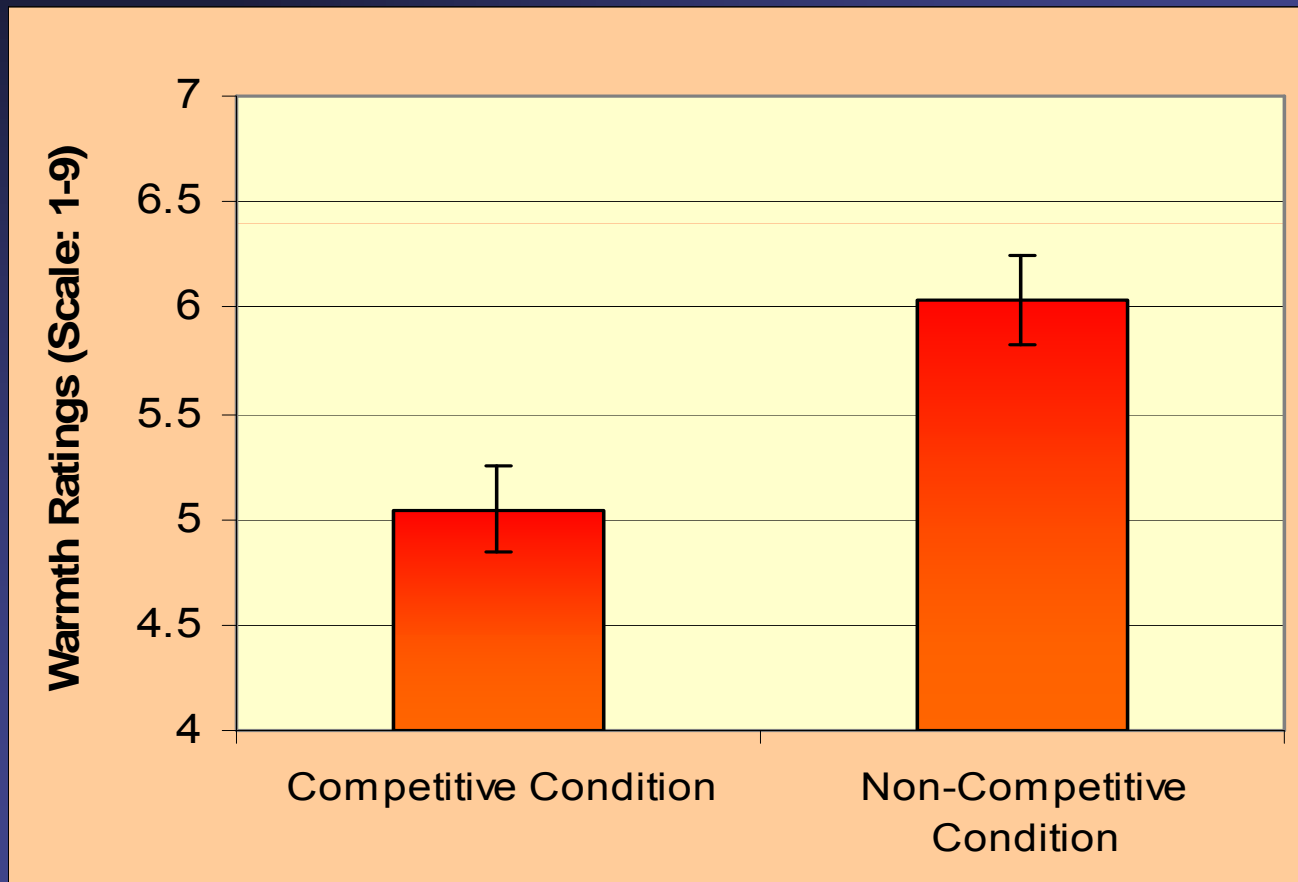
# Methods

---

- **Participants:** Princeton Undergrads (n=46)
  - **Cover: National** Impression Formation Study on how synthesize info from different sources
    - Interact & form impression of another student
    - Background (status)
    - “Subliminal” info
    - Game (competition)
    - Rate warmth & competence
  - 2 (status) x 2 (competition)
-

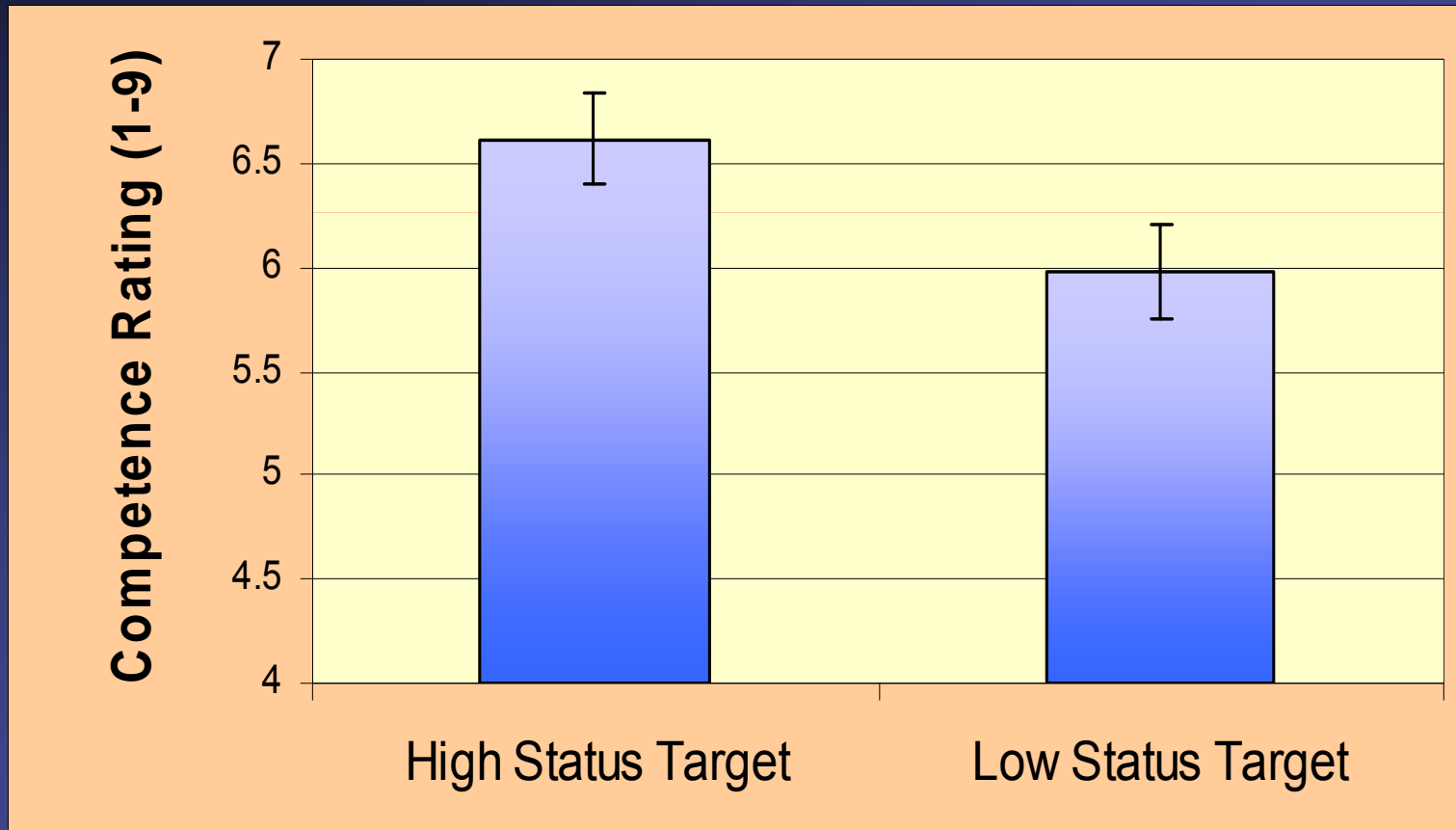
# Competition → Perceived Warmth

(Russell & Fiske, *EJSP*, 2008)



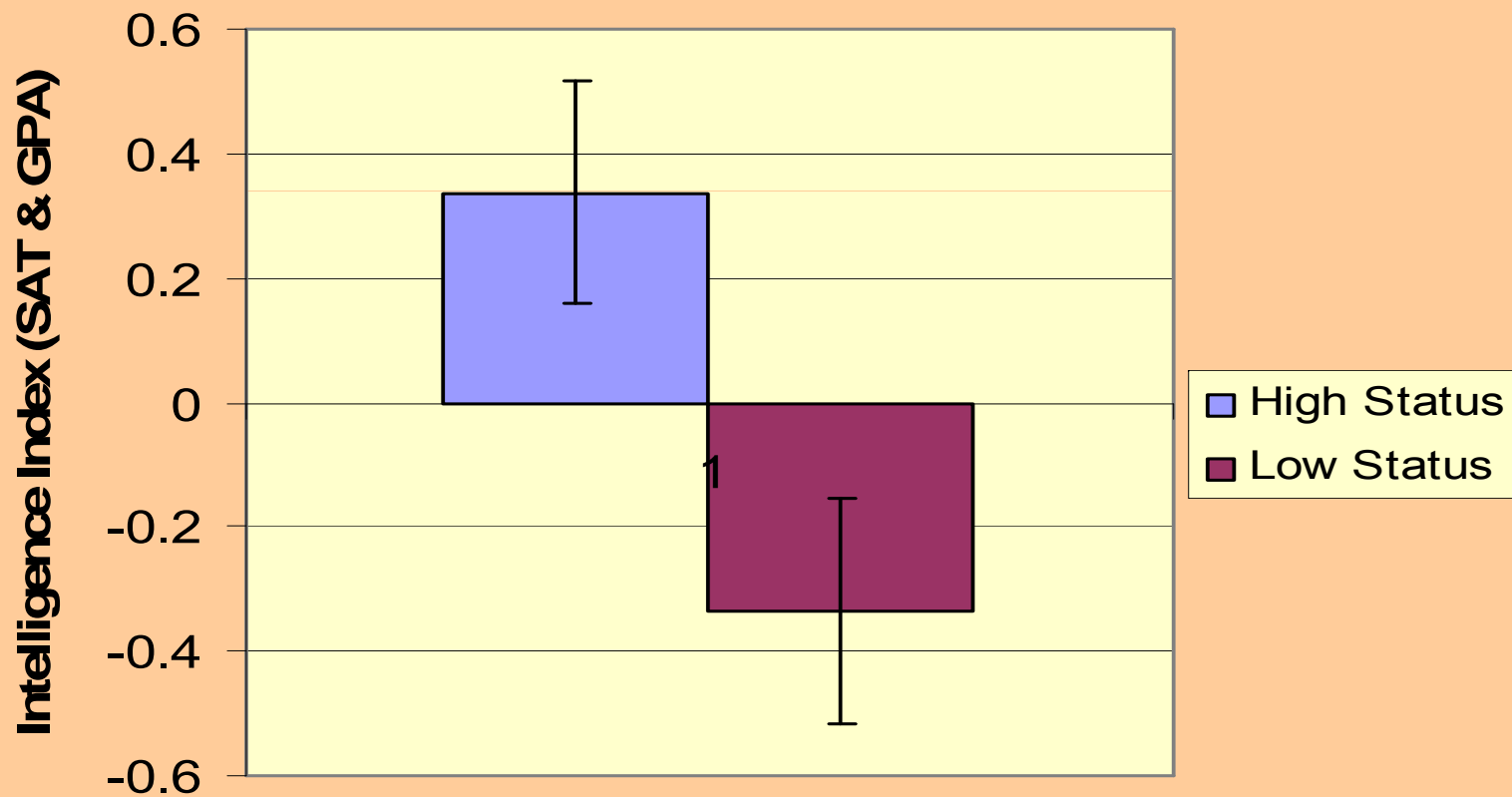
# Status → Perceived Competence

(Russell & Fiske, *EJSP*, 2008)





# Status → Competence on Intelligence Index (SAT, GPA)



# Prejudices

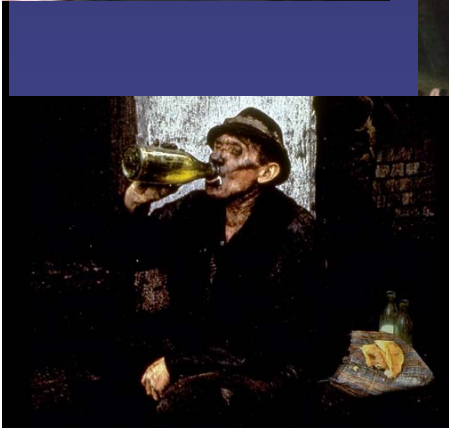
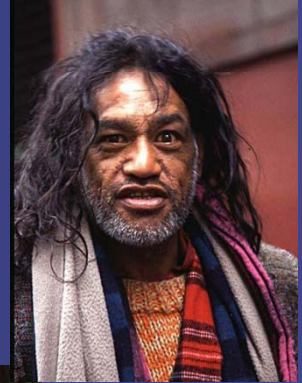
---

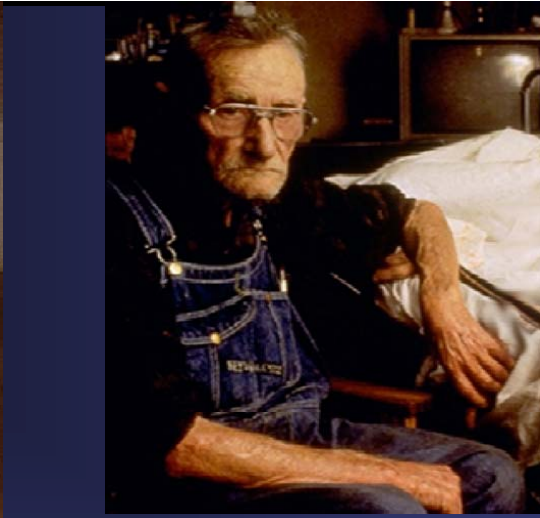
- Come in distinct *types*
  - From society & stereotypes in *mind*
  - Universal across *culture*
  - **Happen for *individuals***
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

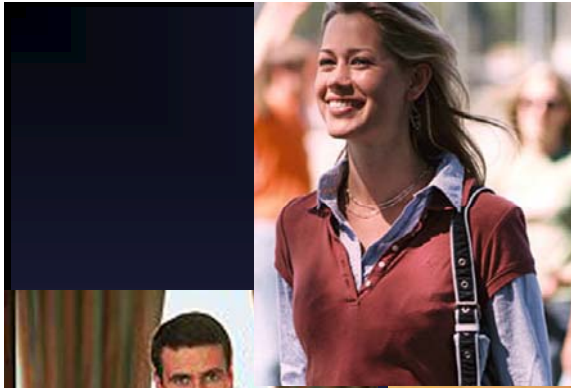
# Prejudices

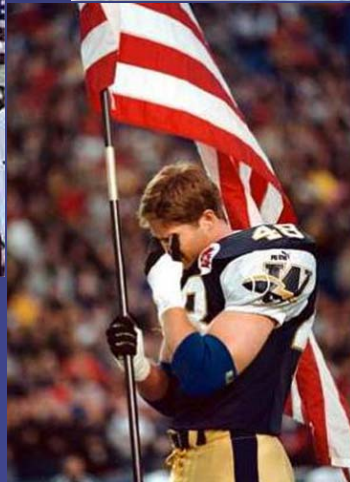
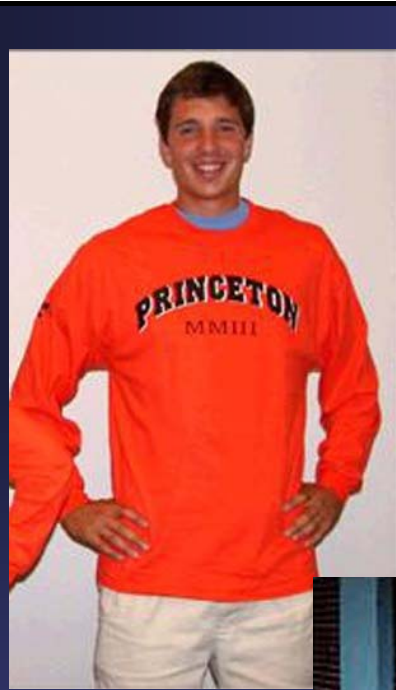
---

- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
  - Universal across *culture*
  - Happen for *individuals*
  - **In distinct regions of *brain***
  - Predict distinct patterns of *discrimination*
-













+

+



Pride

1

Envy

2

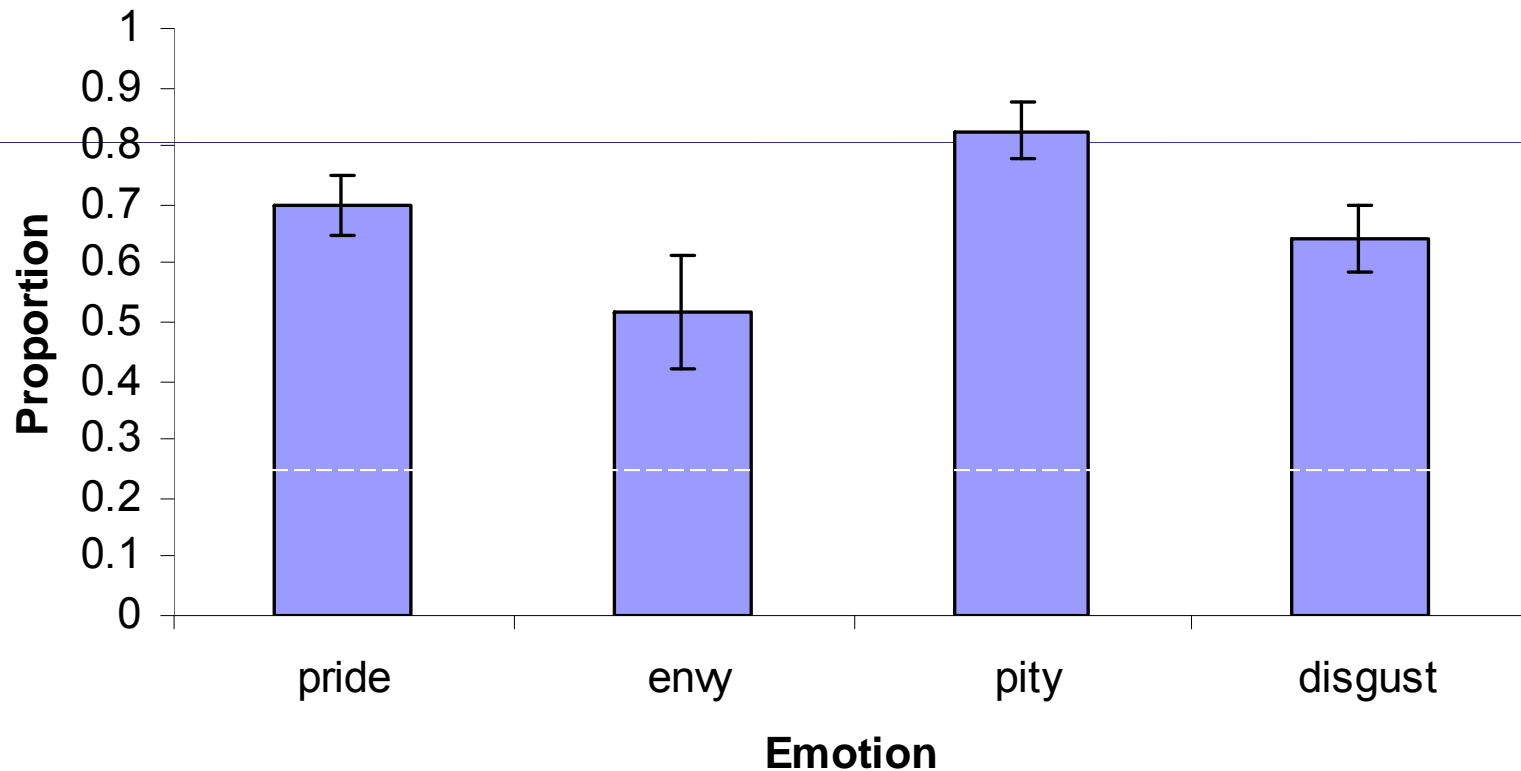
Pity

3

Disgust

4

# Emotion Ratings in Scanner (Harris & Fiske, *Psych Science*, 2006)



# SCAN 101

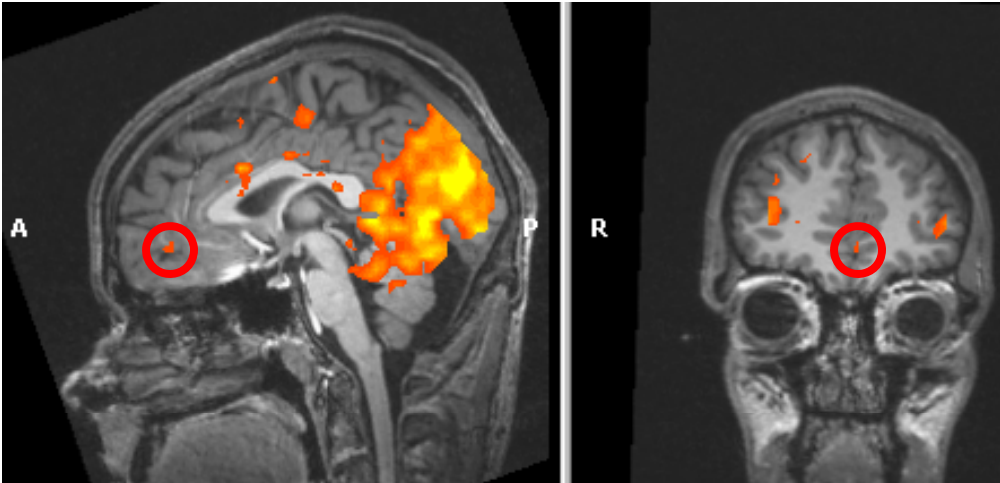
---

- Medial Prefrontal Cortex
    - Social cognition, theory of mind, social affect
  - Dispositional attributions about people  
(Harris, Todorov, & Fiske, *NeuroImage*, 2006)
    - Not ambiguous attributions
    - Not objects doing same actions  
(Harris & Fiske, *Social Cognition*, 2008)
  - “Social valuation”
-

# MPFC: Social Cognition

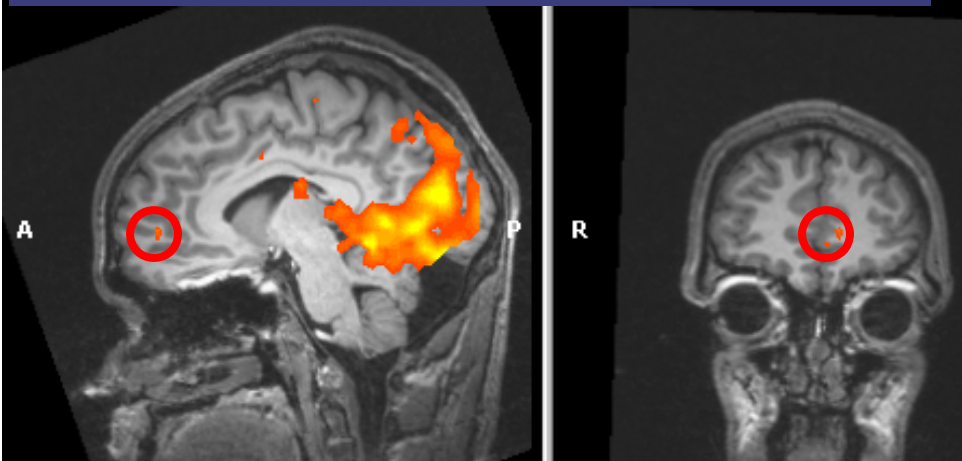
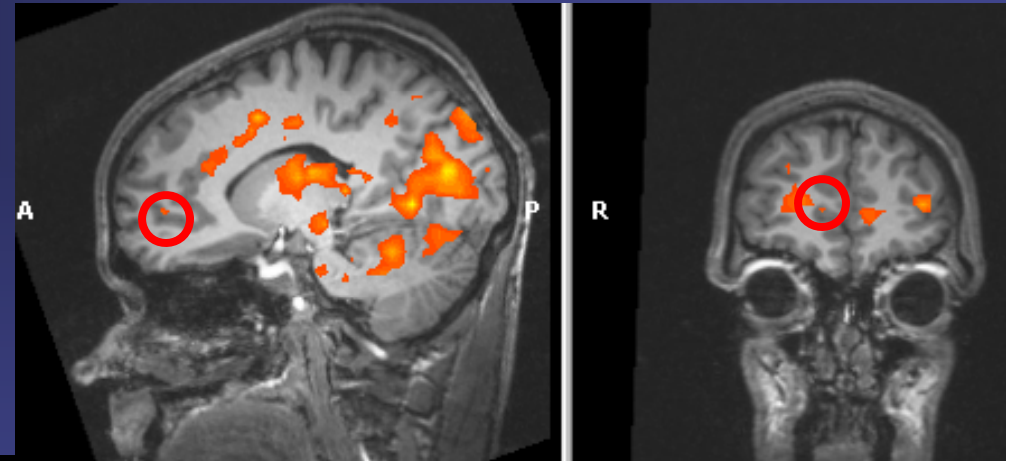
Pride

Y: 55



Envy

Y: 14

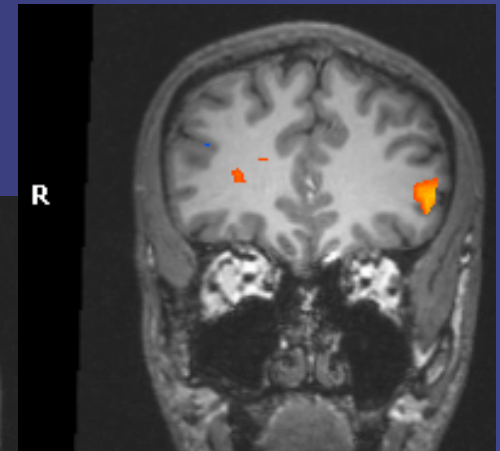


Pity

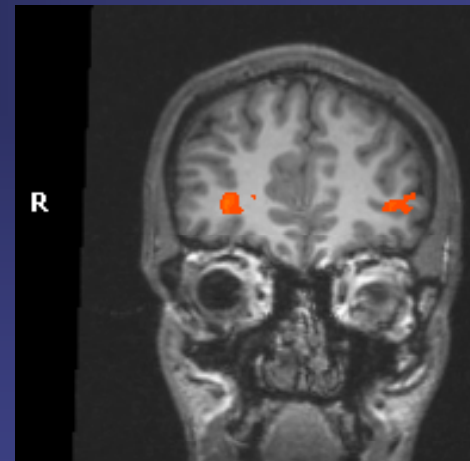
Y: -19

# Disgust: No MPFC, not Social

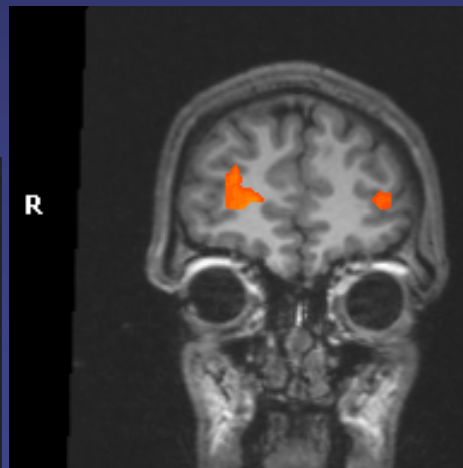
Y: 32



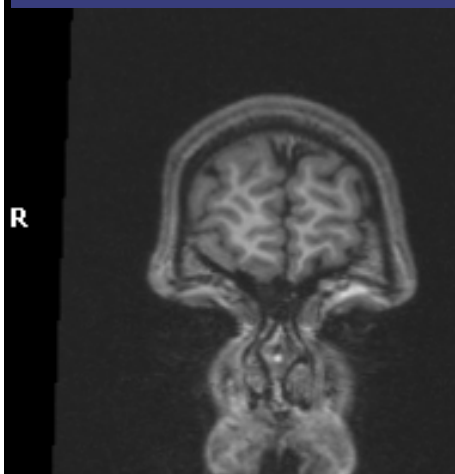
Y: 42



Y: 52



Y: 62





# Disclaimer & Digression

---

- What I said:
    - Differentiated prejudices → distinct activations
  - What I did NOT say:
    - Prejudice is inevitable, wired in
  - Brief empirical digression:
    - Neural activation depends on social context
-

# Goal Study Hypotheses

---

- Nonsocial goal → no MPFC
  - Individuating goal → MPFC
  - Categorization goal → amygdala, MPFC
-

# Instructions

(Harris & Fiske, *SCAN*, 2007)

---

Shown for 2 sec. at the beginning of each block of 12 faces

dot?

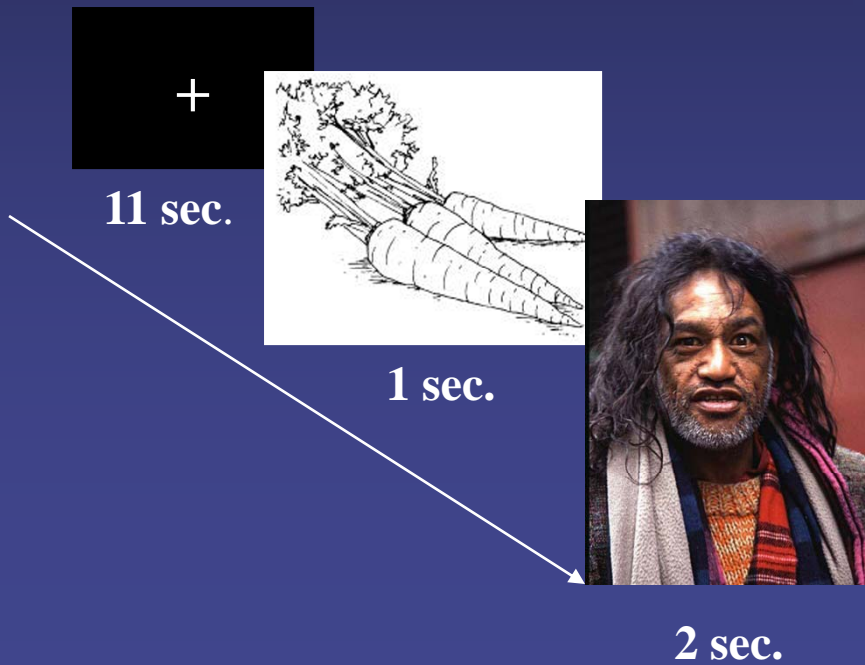
over 21?

vegetable?

---

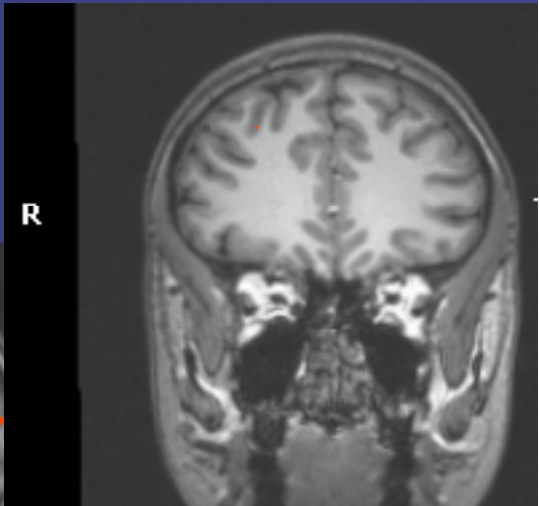
# Stimuli & Design

(Harris & Fiske, *SCAN*, 2007)

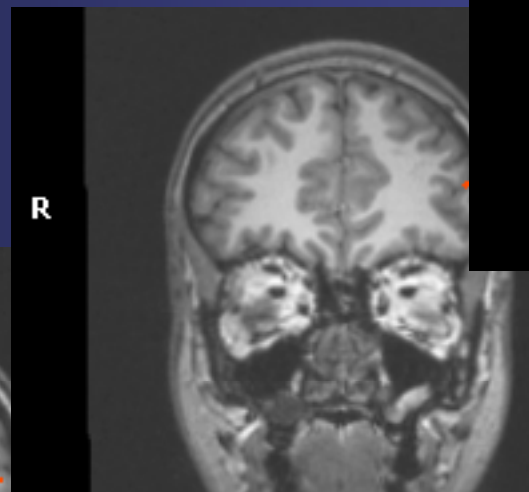


# Dot: No MPFC, not Social

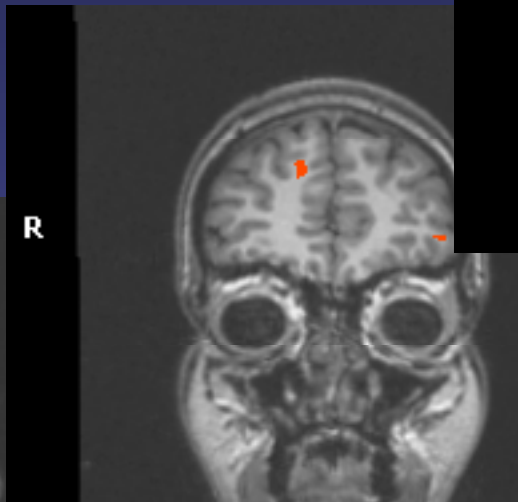
y: 32



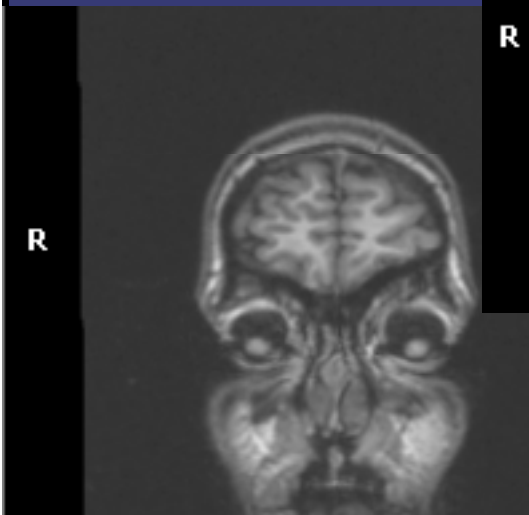
y: 42



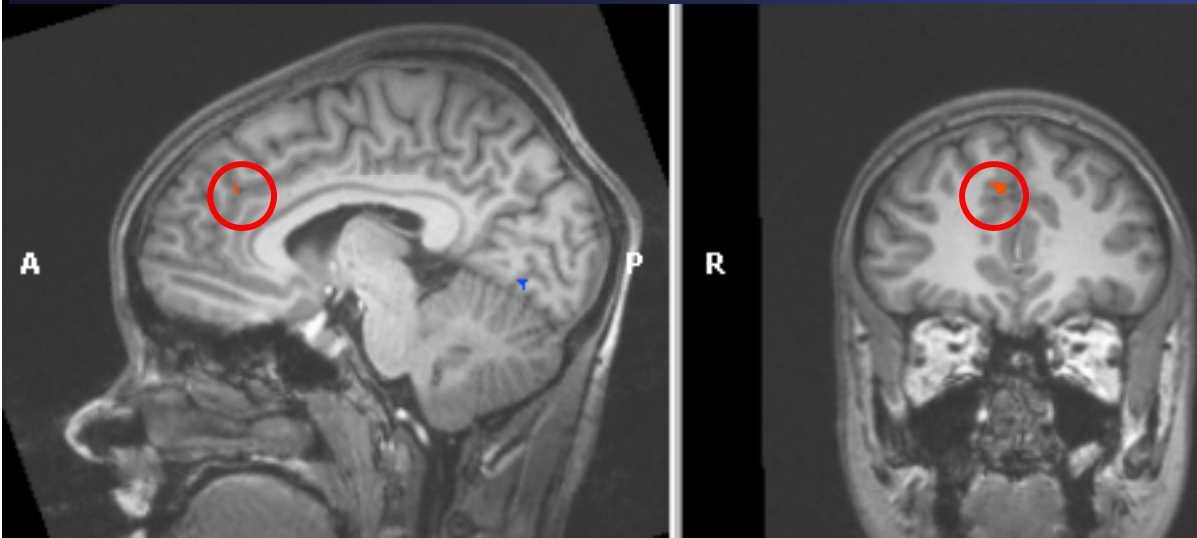
y: 52



y: 62



# MPFC Activation: Social Cognition

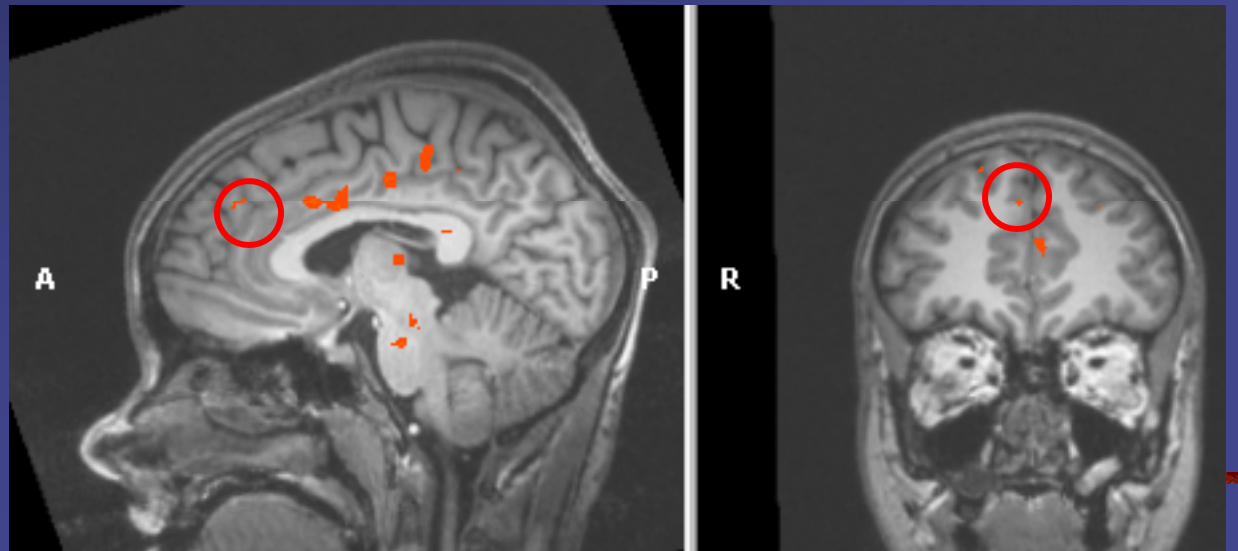


Vegetable task

x: 8, y: 38, z: 32

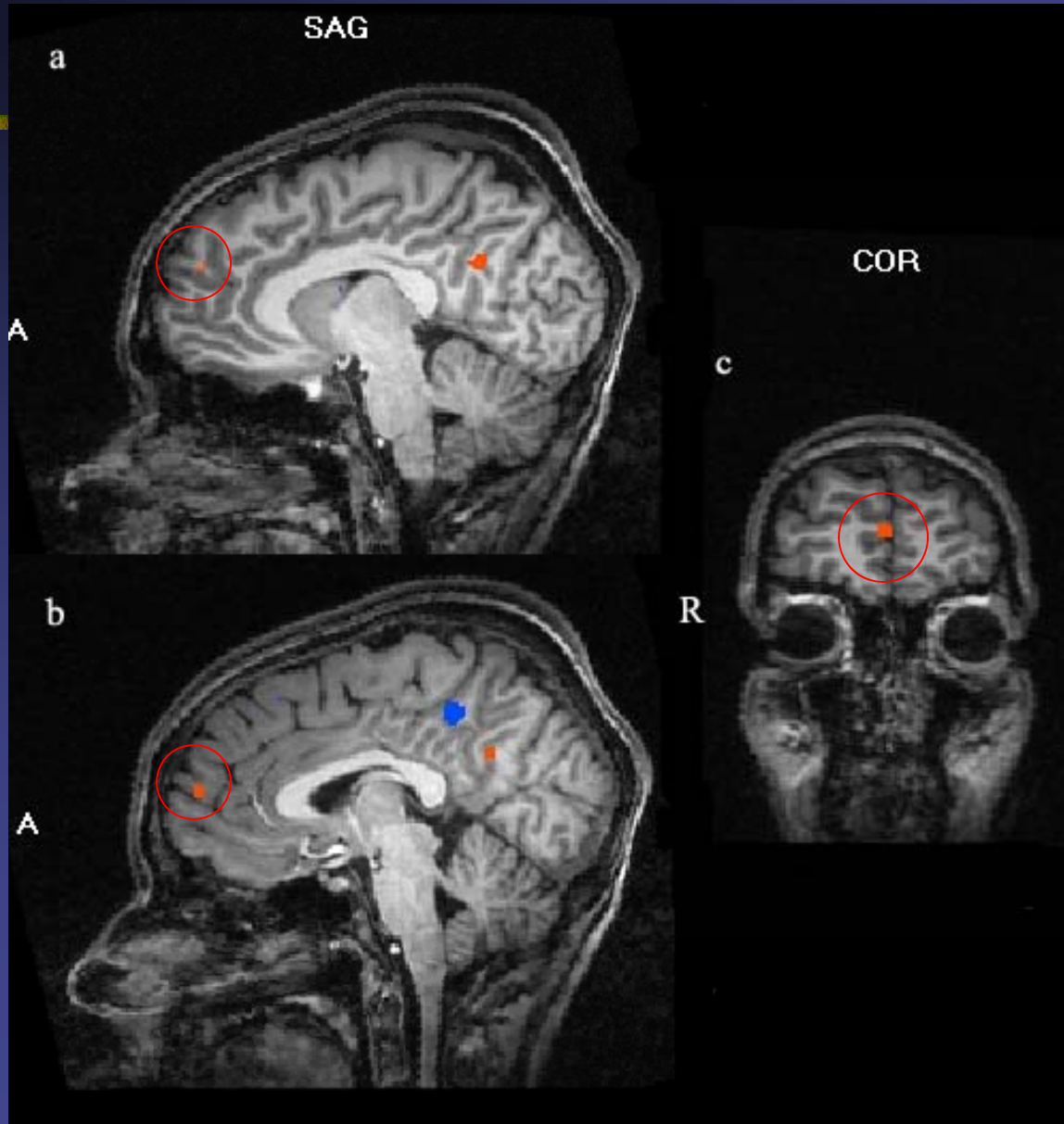
Age task

x: 5, y: 42, z: 30

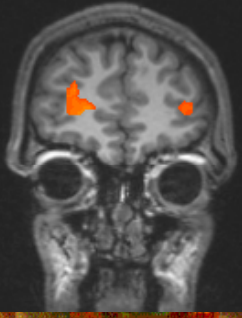


# “Rehumanization” (Harris & Fiske, SCAN, 2007)

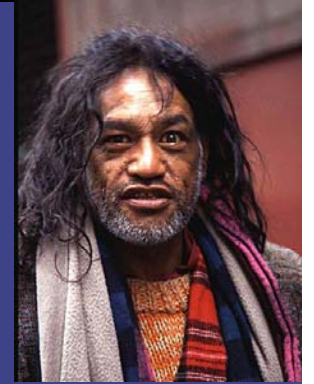
Dehuman.  
Targets



Human.  
Targets



# Dehumanization: Denying a Mind to Others

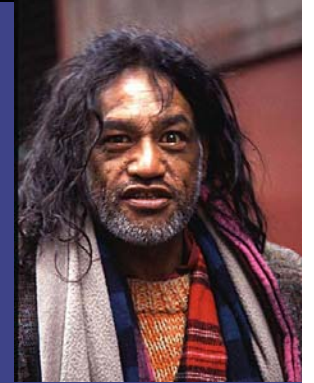


| <u>Prejudices</u> | <u>MPFC<br/>activation</u> |  |  |
|-------------------|----------------------------|--|--|
| Pride             | <i>.47</i>                 |  |  |
| Envy              | <i>.57</i>                 |  |  |
| Pity              | <i>.52</i>                 |  |  |
| Disgust           | <i>.34</i>                 |  |  |





# Dehumanization: Denying a Mind to Others



| <u>Prejudices</u> | <u>MPFC<br/>activation</u> | <u>Attributed<br/>mind</u> | <u>Likely<br/>interaction</u> |
|-------------------|----------------------------|----------------------------|-------------------------------|
| Pride             | <b>.47</b>                 | <b>.78</b>                 | .27                           |
| Envy              | <b>.57</b>                 | <b>.66</b>                 | .14                           |
| Pity              | <b>.52</b>                 | <b>.35</b>                 | -.24                          |
| Disgust           | .34                        | .26                        | <b>-.43</b>                   |

Disgusting groups also less articulate, intelligent, less typically human

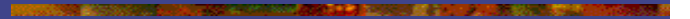
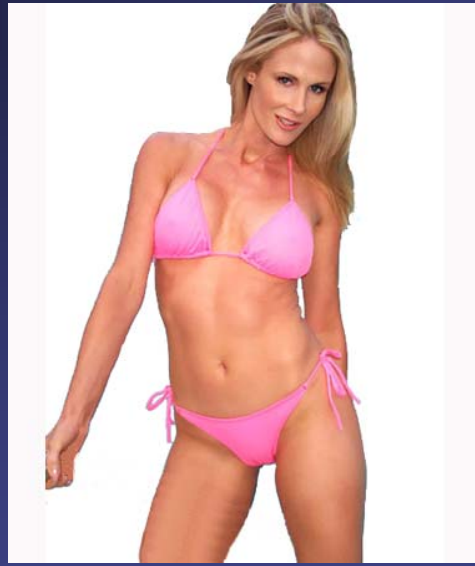
(Harris & Fiske, 2006 & under review)

# Other Kinds of Dehumanization?

---

## Dehumanization Theory (Haslam):

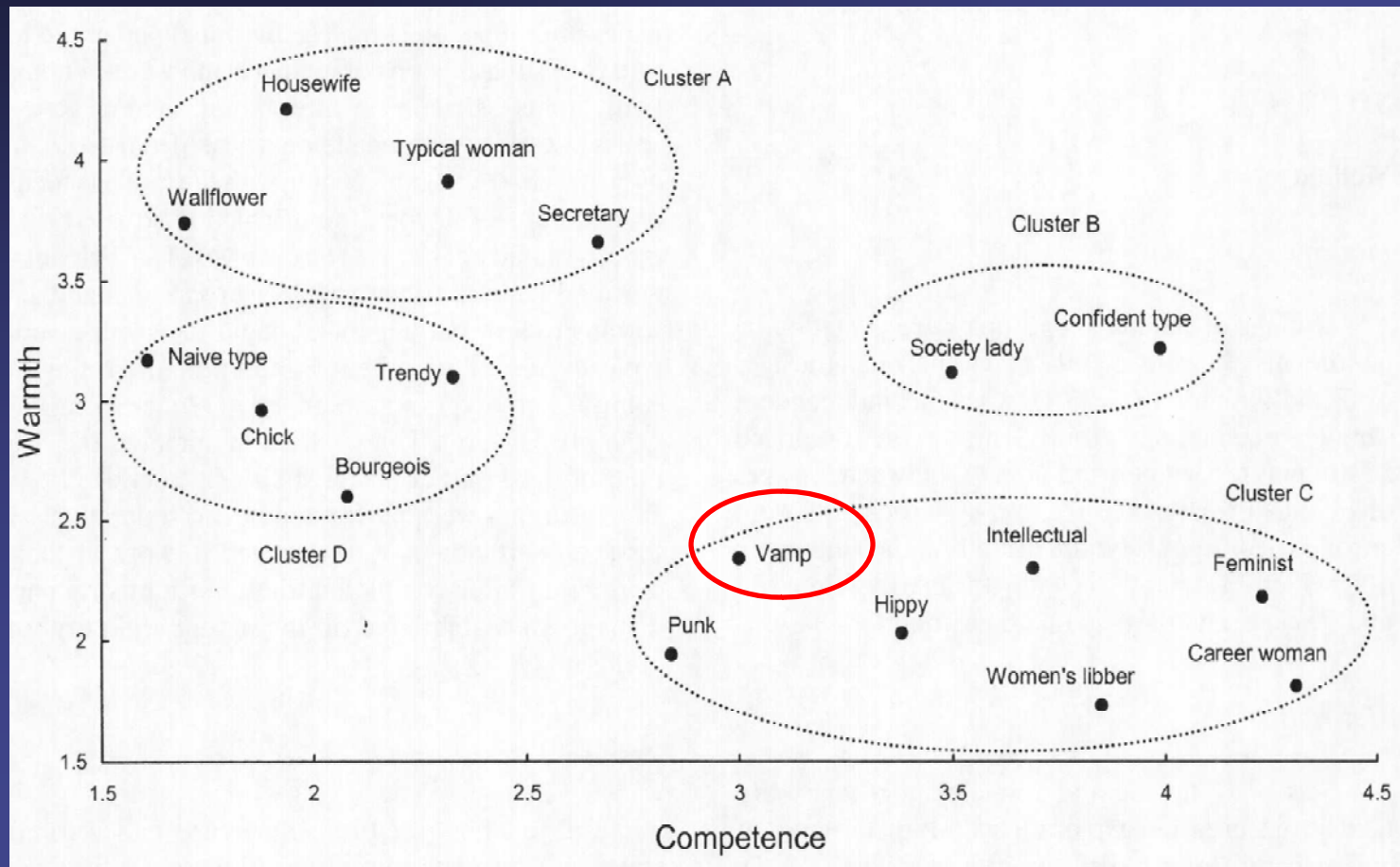
- Dehumanization as disgusting animals (e.g., vermin such as rodents, insects)
  - Dehumanization as objects (e.g., tools, machines, robots)
-



# Stereotype Content Model

|                    | <u>Low Competence</u>  | <u>High Competence</u>  |
|--------------------|--|---|
| <u>High Warmth</u> | older, disabled,<br>retarded<br><br>Pity                         | ingroup, allies,<br>reference groups<br><br>Pride                           |
| <u>Low Warmth</u>  | poor, welfare,<br><b>homeless</b><br><br><b>Disgust (Vermin)</b> | Jews, Asians, rich,<br>feminists, <b>vamps</b><br><br><b>Envy (Objects)</b> |

# Female Subtypes (Eckes, 2002)



# Hypotheses

(Cikara, Eberhardt, & Fiske, under review)

For heterosexual men, sexualized women have instrumental value, so they will:

- Recognize bodies of sexualized women
  - Not faces
- Deactivate social cognition network
  - Correlated with hostile sexism

# Participants & Design (Cikara et al.)

---

- 21 heterosexual male students

## Independent variables:

- 2 (bikini/clothed) X 2 (female/male target)

## Dependent variables:

- BOLD response
  - Surprise face & body recognition
  - Hostile Sexism (Glick & Fiske, 1996)
-

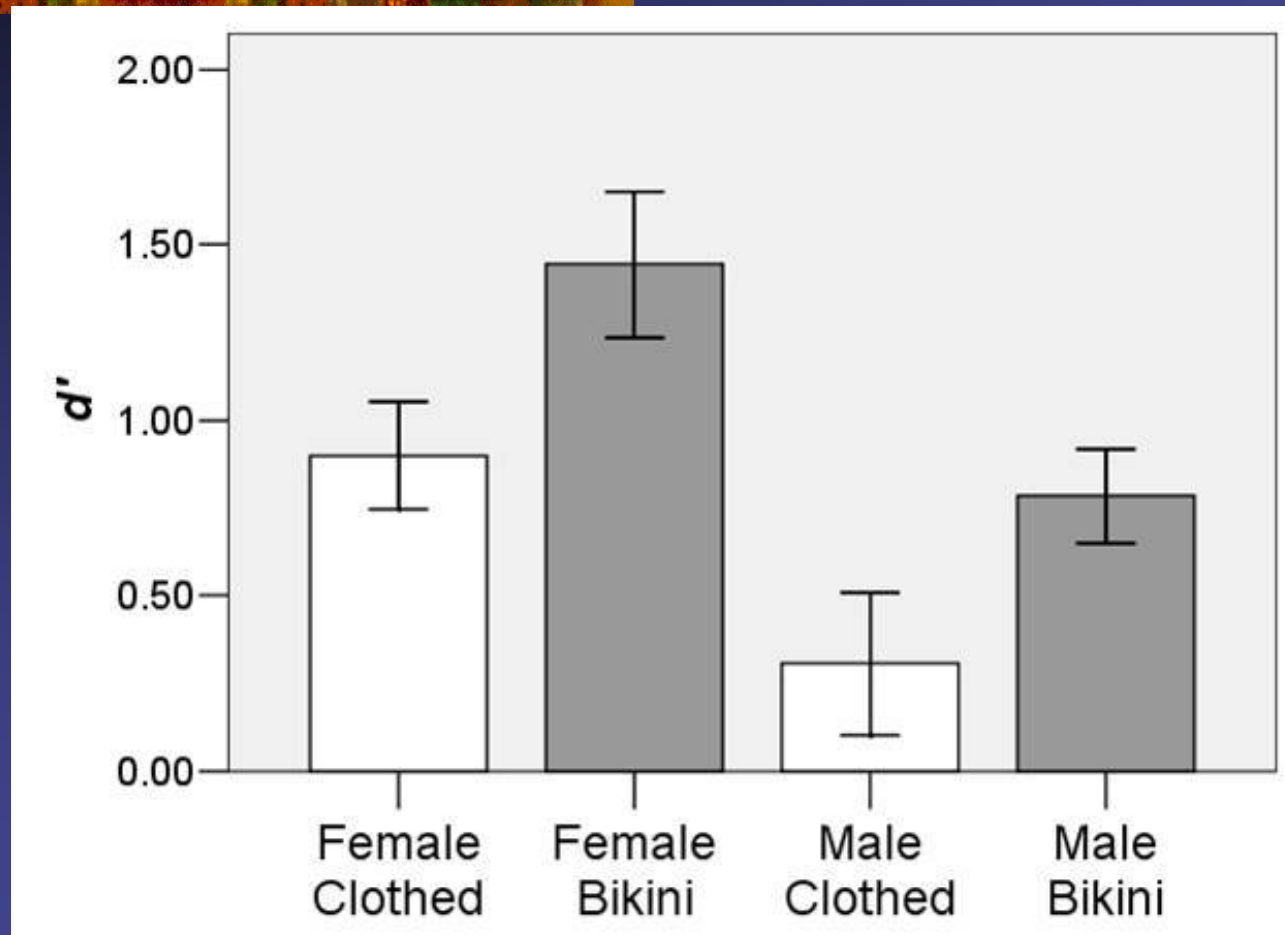
# Sample Stimuli



20 each, 10 folds



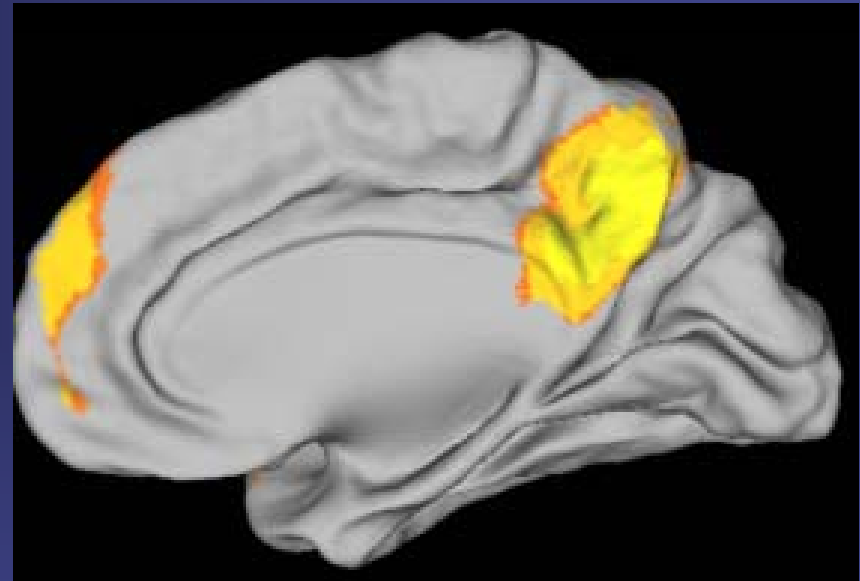
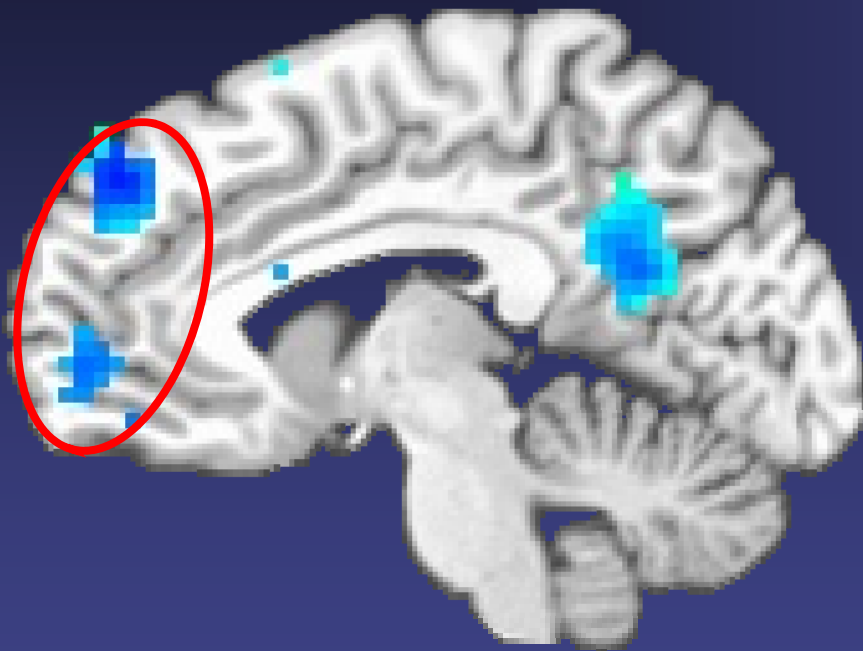
# Body Recognition



$F_{\text{gender}}(1,20) = 17.78, p < .001, \eta_p^2 = .47$ ;  $F_{\text{clothing}}(1,20) = 11.33, p < .005, \eta_p^2 = .36$

# Hostile Sexism & Whole Brain:

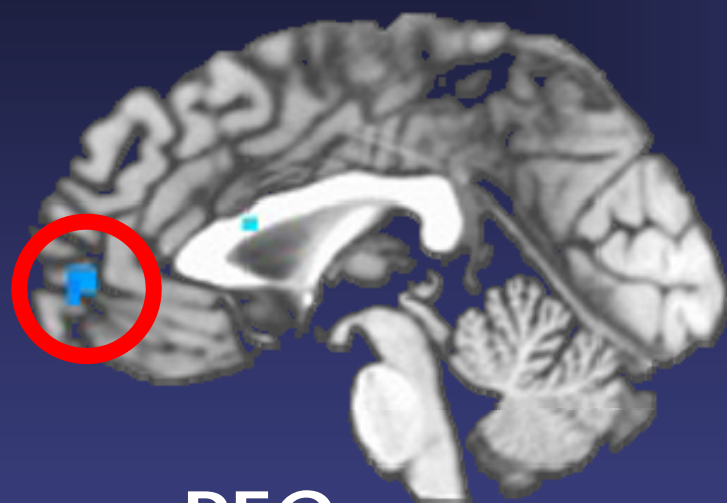
*Deactivation of Social Cognition Network*



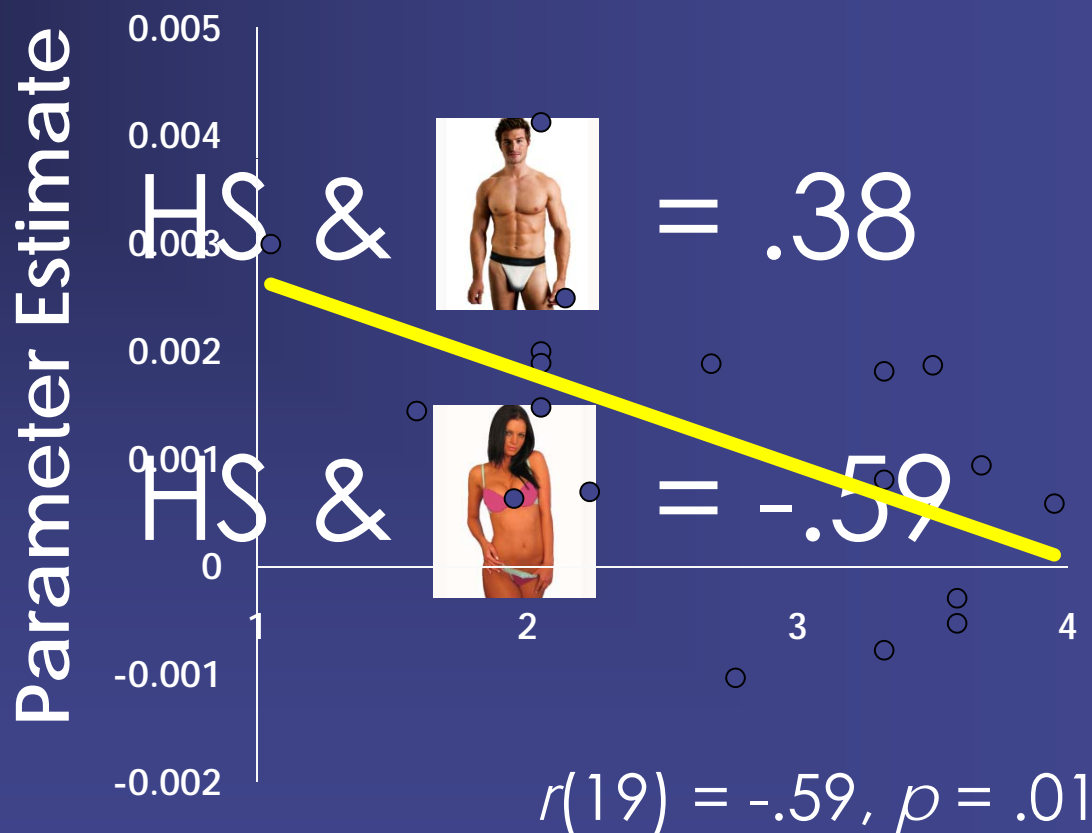
Mitchell, 2008

William's test  $t(19) = 2.9, p < .005$ , one-tailed

# HS Correlation within mPFC



mPFC  
BA 10  
33 voxels



# First v. Third Person Verb IAT

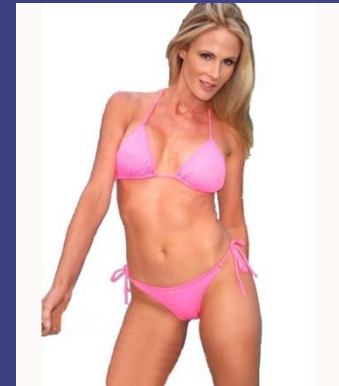
## First Person Verbs

- use
- push
- pull
- squeeze
- turn
- fold
- grasp



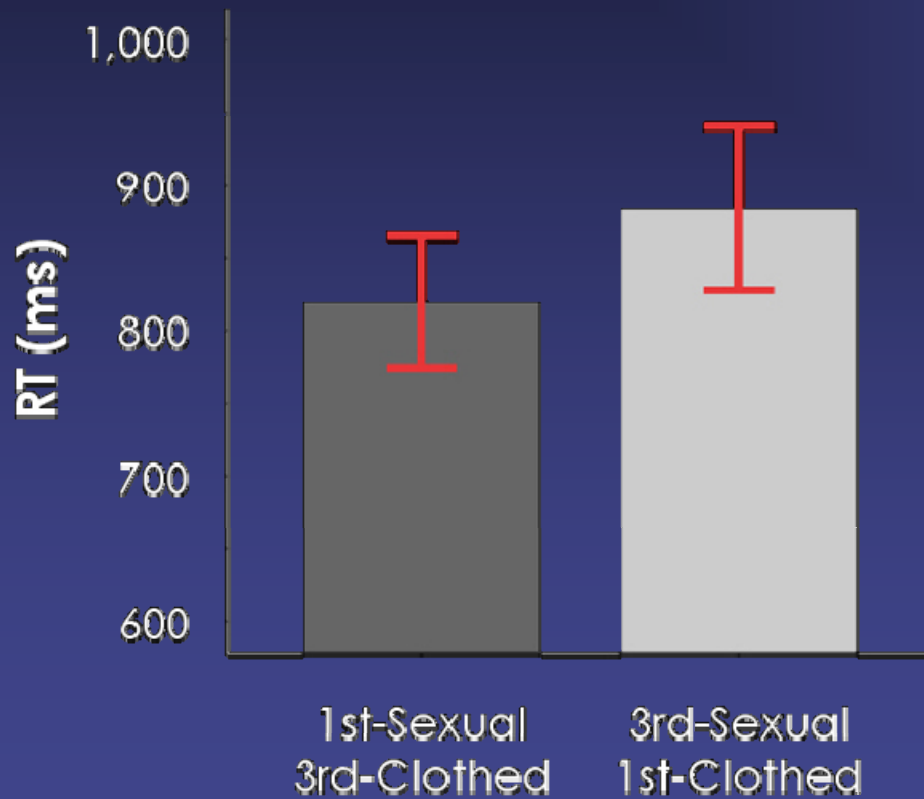
## Third Person Verbs

- uses
- pushes
- pulls
- squeezes
- turns
- folds
- grasps

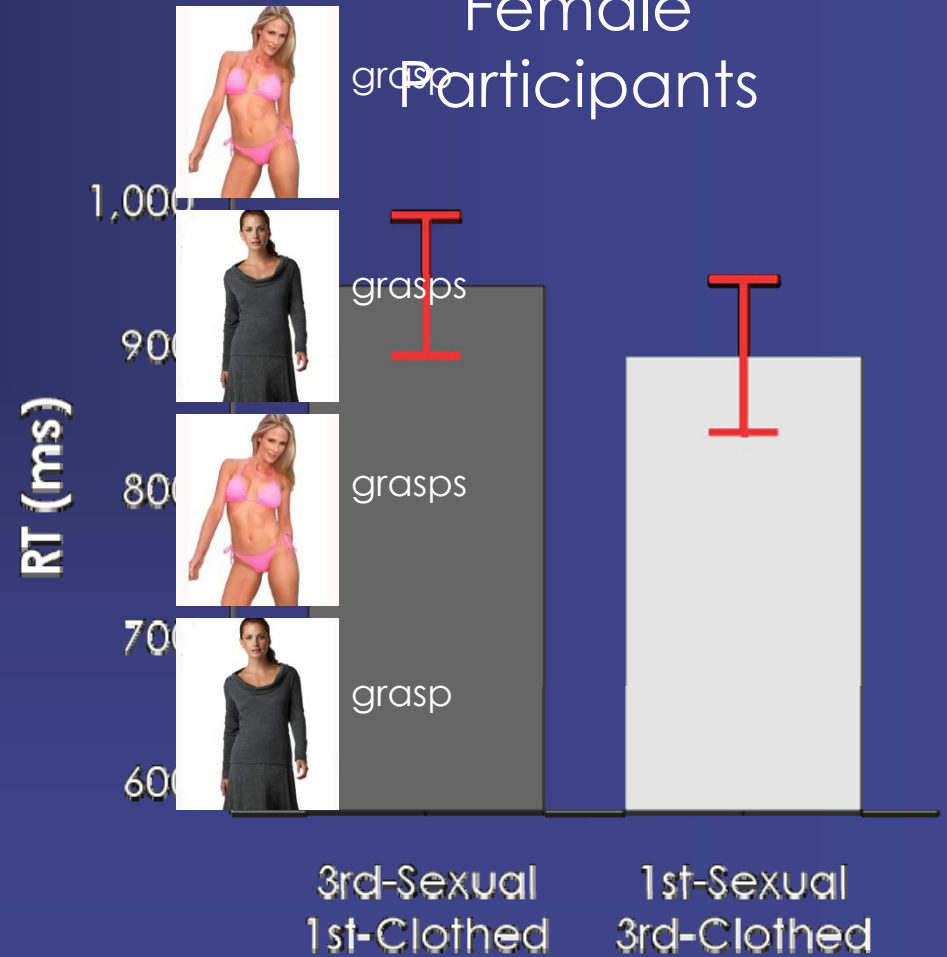


# IAT Results

## Male Participants



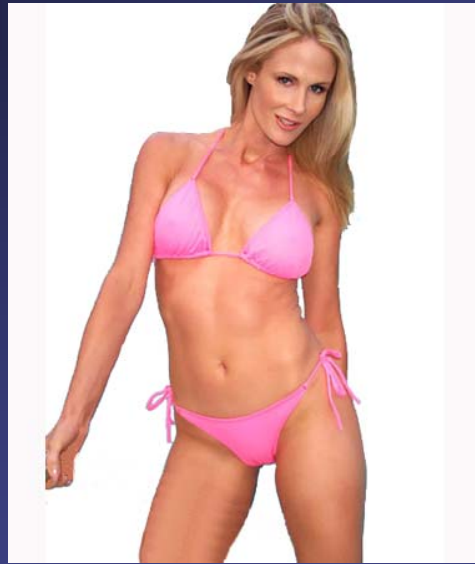
## Female Participants



# Sexualized Female Bodies

(Cikara et al., under review)

- Remembered best
- Associated with first-person actions
- Sexism *de*-activates mPFC
  - Social cognition network
- Possible neural signatures for unique prejudices



# Prejudices

---

- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
    - *But depends on social goals*
  - Predict distinct patterns of *discrimination*
-

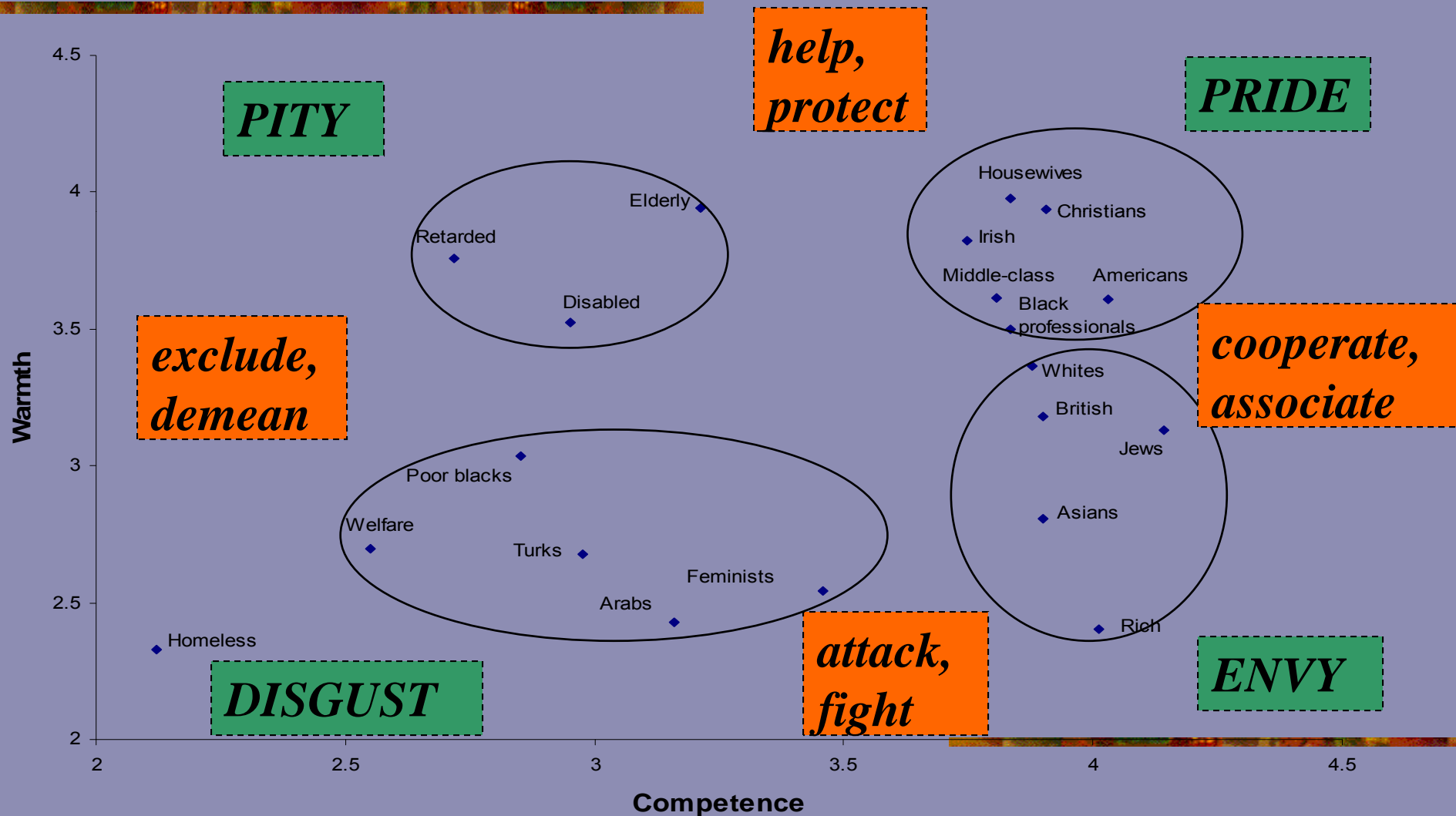


# Prejudices

---

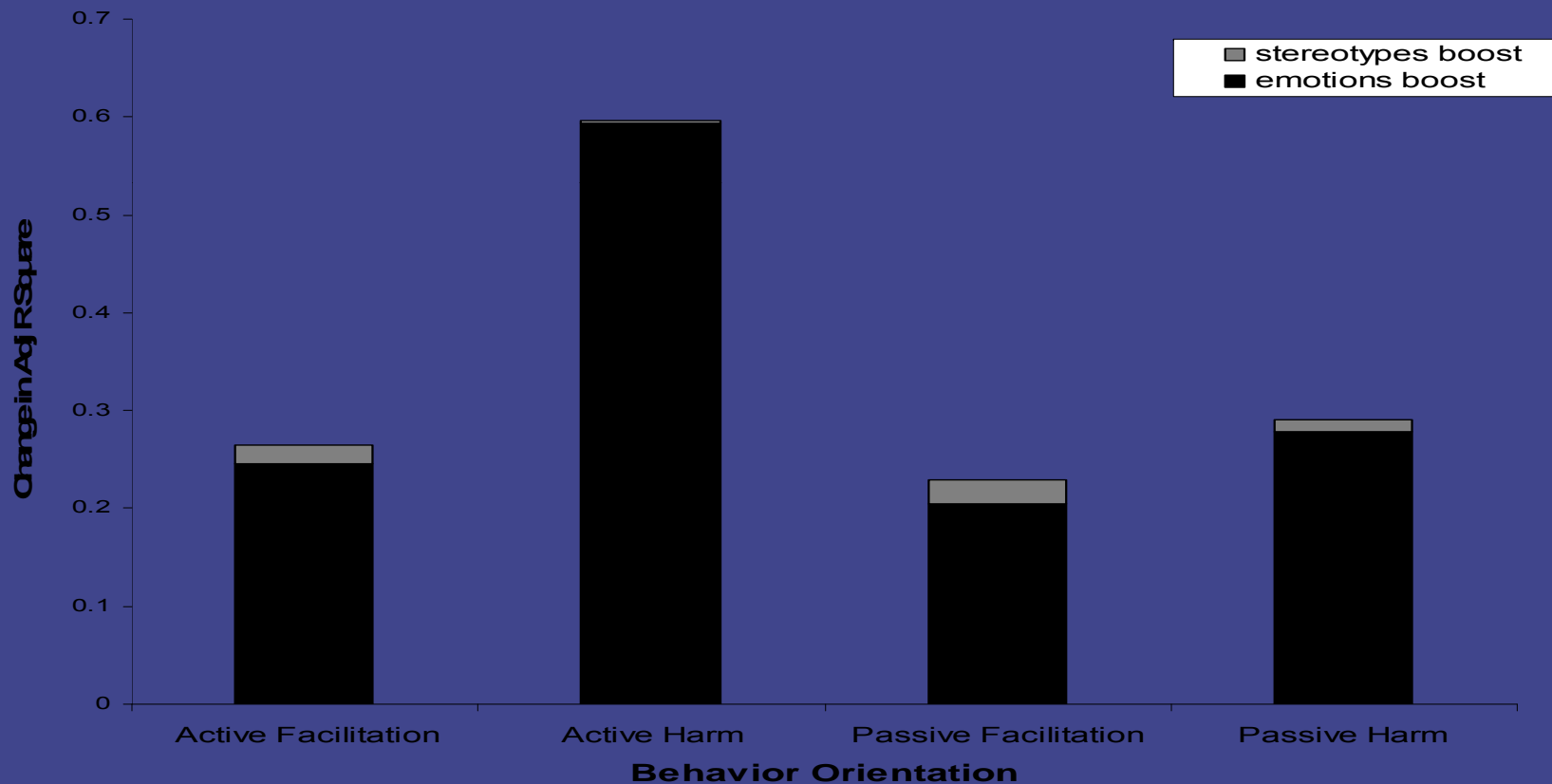
- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# SCM: US Representative Sample (Cuddy et al., *JPSP*, 2007)



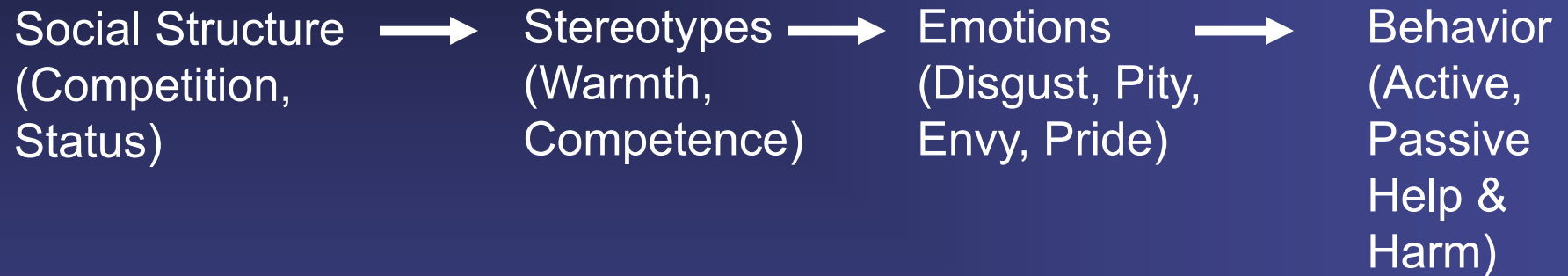
# Predicting Discrimination: US Survey

(Cuddy et al., *JPSP*, 2007)



# Overall Causal Model

---



# Prejudices

---

- Come in distinct *types*
  - From ideas of society & stereotypes in *mind*
  - Universal across *culture*
  - Happen for *individuals*
  - In distinct regions of *brain*
  - Predict distinct patterns of *discrimination*
-

# Implications

---

- **Not all biases are equivalent**
    - Most stereotypes are ambivalent
    - Most prejudices create mixed emotions
    - Most discrimination includes both help & harm
  - **People don't know this**
    - Automatic = unconscious
    - Ambiguous = hard to detect
    - Ambivalent = mixed
  - **Monitor overall patterns**
-

# U.S. Collaborators

---

- Tiane Lee, Ann Marie Russell, Mina Cikara, Princeton
  - Lasana Harris, New York University
  - Amy Cuddy, Harvard Business School
  - Cara Talaska, Eastern Michigan University
  - Peter Caprariello, University of Rochester
  - Virginia Kwan, Alex Todorov, Princeton University
  - Peter Glick, Lawrence University
  - Jennifer Eberhardt, Stanford University
  - Shelly Chaiken, Berkeley CA
-

# International Collaborators

- Britain: J. Oldmeadow
- Belgium: S. Demoulin, J-Ph. Leyens, V. Yzerbyt
- Bulgaria: K. Petkova & V. Todorov
- China: V. Kwan & M. Bond
- Costa Rica: V. Smith-Castro & R. Perez
- France: J-C. Croizet
- Germany: R. Ziegler
- Israel: N. Rouhana
- Italy: F. Durante, D. Capozza, C. Volpato
- Japan: M. Yamamoto & T. T. Htun
- Korea: H-J. Kim
- Netherlands: E. Sleebos & N. Ellemers
- Norway: J. Perry
- Portugal: J. Vala
- South Africa: A. Akande
- Spain: R. Rodriguez Bailon, E. Morales, & M. Moya
- Wales: G. Maio





Thank you



# RSF Project:

## *Envy Up & Scorn Down*

- Envy & scorn divide us
- What?
- Who?
- Where?
- Why?
  - (comparison informs, identifies, & protects)
- When?
- How to harness for good