

IMPLICIT BIAS & SOCIAL CATEGORIZATION IN MEDICINE PART 1

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Disclosures

No conflicts of interest or relationships to disclose.

ROADMAP

- Mental exercises – psychology basics
- Implicit bias definition
- Implicit bias in the medical field

Ant

Bee

Spider

Wing

Feelers

Bug

Web

Small

Fly

Bite

Poison

Fright

Slimy

Wasp

Crawl

Creepy

Nairobi, Kenya



Seattle, WA

STIMULUS



COGNITIVE
SHORTCUT

**UNDERSTANDING OF
STIMULUS**



ACTION

STIMULUS



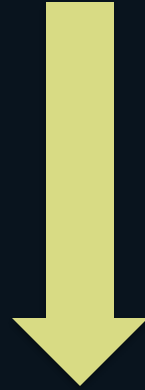
COGNITIVE
SHORTCUT

**UNDERSTANDING OF
STIMULUS**



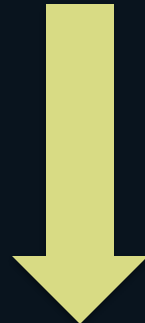
ACTION

STIMULUS



ACTIVE
THINKING

**UNDERSTANDING OF
STIMULUS**



ACTIVE
THINKING

ACTION

Maple	Leaves	Wasp
Ant	Tree	Branch
Poison	Roots	Bee
Insect	Bite	Fly
Stem	Web	Willow
Berry	Bug	Fright
Feelers	Small	Spider
Slimy	Oak	Pine
Birch	Crawl	Creepy
Wing	Acorn	

Maple

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Acorn

IMPLICIT BIAS

“... the introspectively *unidentified* traces of past experiences that mediate judgments of members of social categories.”

Banaji & Greenwald, 1995

The *subconscious* associations made between categories of people and specific attributes or characteristics based on repeated exposure to stereotypes starting at a very young age. These are made without direct evaluation and judgment.

IMPLICIT BIAS

STIMULUS



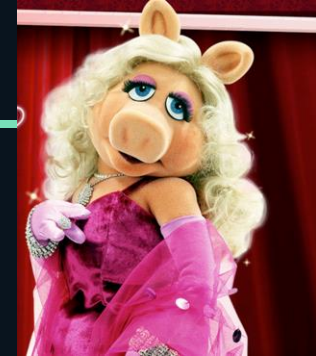
COGNITIVE
SHORTCUT

UNDERSTANDING OF
STIMULUS



ACTION

IMPLICIT BIAS



Rita Porcine

Lady
Pig
Talented
Witty
Romantic
Histrionic

Focused H&P

STIMULUS



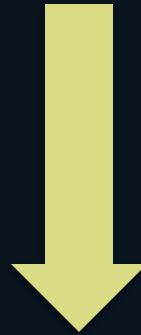
COGNITIVE
SHORTCUT

UNDERSTANDING OF
STIMULUS



ACTION

PATIENT



IMPLICIT
BIAS

CATEGORIZATION OF
PATIENT



ACTION

IMPLICIT BIAS

- How quickly do we judge people?
- Researchers showed 245 undergraduates images of “neutral” faces for 1/10 of a second
 - Asked to judge attractiveness, likeability, competence, trustworthiness and aggressiveness
- Judgments made in 1/10 s correlated highly with those made without time constraints
- Confidence in judgments increased with increased exposure time to face
- Impressions of people are created automatically w minimal information

IMPLICIT BIAS – THE TEST

- www.implicit.harvard.edu

Old – Young

Positive – Negative

Black – White

Weapons – Inanimate objects

- Implicit biases often directly oppose one's explicitly held values

THE IMPACT OF IMPLICIT BIAS IN MEDICINE

Clinical Decision Making

Patient Communication

Teaching & Evaluation

Workforce

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CLINICAL DECISION MAKING

Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients.

- Explicit bias
- Preference for white vs black
- Perceived cooperativeness
- Low explicit bias
- High implicit bias
- Implicit bias →

Less likely to refer black patients for thrombolysis

THE IMPACT OF IMPLICIT BIAS IN MEDICINE

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PATIENT COMMUNICATION

Clinicians' implicit race bias and differences in clinic visit communication & patient ratings of care.

- Preference for white vs black
- Perceived compliance
- High implicit bias →

“Verbal dominance”

Medical jargon

Lower patient trust and confidence in MD



THE IMPACT OF IMPLICIT BIAS IN MEDICINE

Clinical Decision Making

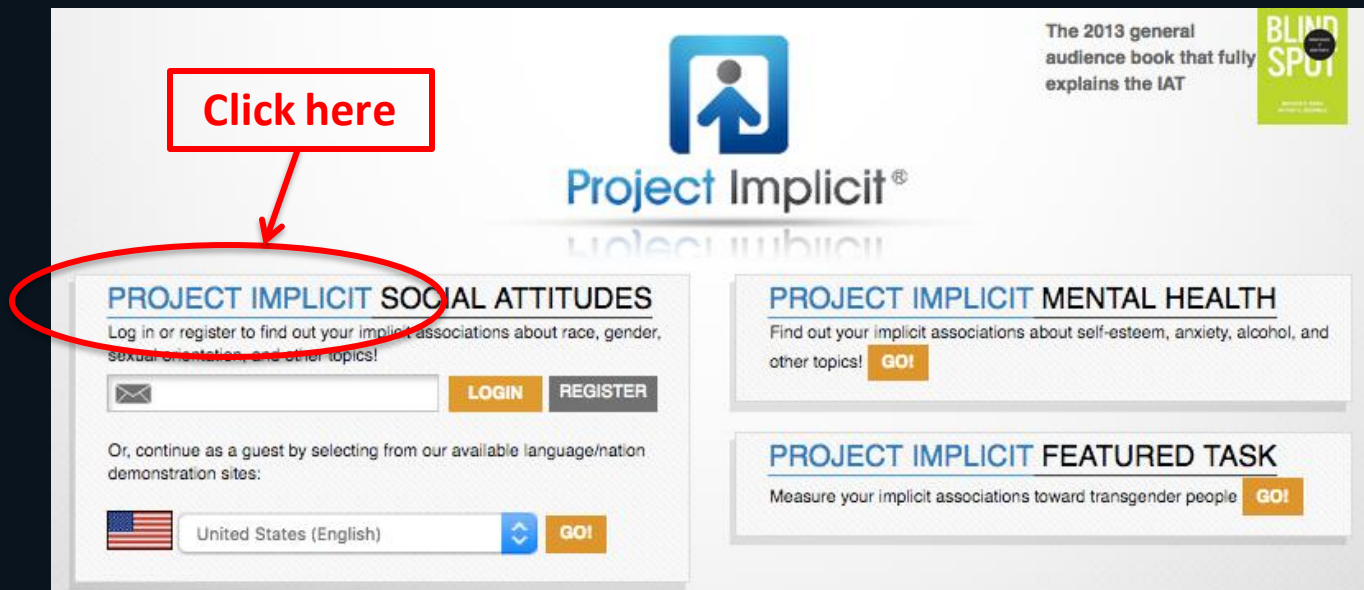
Patient Communication

Teaching & Evaluation

Workforce

FOR NEXT WEEK

- Take an implicit association test:
implicit.harvard.edu



The screenshot shows the Project Implicit website interface. At the top center is the Project Implicit logo, which consists of a blue square containing a white stylized human figure. To the right of the logo is the text "Project Implicit®". In the top right corner, there is a promotional banner for the book "BLIND SPOT" with the text "The 2013 general audience book that fully explains the IAT".

Below the logo, there are three main sections:

- PROJECT IMPLICIT SOCIAL ATTITUDES**: This section is circled in red. It contains the text "Log in or register to find out your implicit associations about race, gender, sexual orientation, and other topics!". Below this text is a white input field with an envelope icon on the left, followed by orange "LOGIN" and grey "REGISTER" buttons.
- PROJECT IMPLICIT MENTAL HEALTH**: This section contains the text "Find out your implicit associations about self-esteem, anxiety, alcohol, and other topics!" followed by an orange "GO!" button.
- PROJECT IMPLICIT FEATURED TASK**: This section contains the text "Measure your implicit associations toward transgender people" followed by an orange "GO!" button.

At the bottom of the "PROJECT IMPLICIT SOCIAL ATTITUDES" section, there is a note: "Or, continue as a guest by selecting from our available language/nation demonstration sites:". Below this note is a dropdown menu showing the United States flag and the text "United States (English)", with a blue "GO!" button to its right.

A red box with the text "Click here" and a red arrow points to the "PROJECT IMPLICIT SOCIAL ATTITUDES" section.

- Take the "Race IAT"

COMING UP NEXT WEEK

- More on how implicit bias alters clinical thinking
- Food for thought on the use of “race” in medicine
- How to combat the negative effects of bias as a clinician, teacher and leader