

Working Toward the Utility of the Future by Understanding and Addressing Bias

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PNWS

May 5, 2016



March 2016

Women's HISTORY Month



Photos courtesy of Library of Congress (top) and Philadelphia Water Department (left)

**Spouse. Co
Month. Wo**

r. AWWA and our members celebrate Women's History Month recognizes the contributions of women who have history within our industry and paved the way for possible space within the world of water.

Facing and addressing bias is the
challenge of our time

I almost named this
presentation:

“Just another sexist woman.”

We are all both the “victims” and “perpetrators” of bias

Our mind does much of its work

Automatically

Unconsciously

Unintentionally

Guess how many bits of information we are exposed to at any moment in time?

- a. 300
- b. 6,000
- c. 8,000
- d. 11,000

Guess how many **bits of information** we are **exposed to** at any moment in time?

a. 300

b. 6,000

c. 8,000

d. **11,000**

Guess how many bits of information we can consciously process at any given time?

- a. 5
- b. 40
- c. 200
- d. 600

Guess how many **bits of information** we can **consciously process** at any given time?

a. 5

b. 40

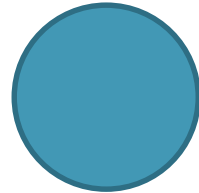
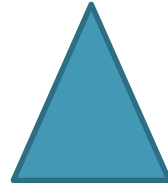
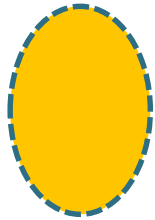
c. 200

d. 600



99.9% of our
information is
processed by
our
unconscious

Our brains create
categories to help us
navigate the world



Implicit Association Test

Developed by Greenwald, Banaji, and Nosek

Tests have been completed by over 14 million people

THE IMPLICIT ASSOCIATION TEST (IAT)

- Flower Names: orchid, daffodil, lilac, rose, tulip, daisy, lily
- Insect Names: flea, centipede, gnat, wasp, roach, moth, weevil
- Pleasant-meaning words: gentle, heaven, cheer, love, enjoy, happy, friend
- Unpleasant-meaning words: damage, vomit, hurt, poison, evil, gloom, ugly

Sources:
Project Implicit

Blind Spot – Hidden Biases of Good People, Mahzarin R. Banaji & Anthony Greenwald

INSECTS

FLOWERS

ROSE

INSECTS

FLOWERS

centipede

INSECTS

FLOWERS

DAFFODIL

pleasant
words

unpleasant
words

NEW
CATEGORY

pleasant
words

unpleasant
words

ugly

pleasant
words

unpleasant
words

LOVE

pleasant
words

unpleasant
words

vomit

READY?

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

ORCHID

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

gentle

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

ROSE

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

heaven

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

FLEA

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

damage

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

DAFFODIL

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

cheer

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

CENTIPEDE

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

vomit

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

GNAT

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

hurt

INSECTS
or pleasant
words

FLOWERS or
unpleasant
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LILAC

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

love

INSECTS
or pleasant
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FLOWERS or
unpleasant
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TULIP

INSECTS
or pleasant
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FLOWERS or
unpleasant
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enjoy

INSECTS
or pleasant
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FLOWERS or
unpleasant
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WASP

INSECTS
or pleasant
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FLOWERS or
unpleasant
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poison

INSECTS
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ROACH

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unpleasant
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evil

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DAISY

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gloom

INSECTS
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FLOWERS or
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MOTH

INSECTS
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FLOWERS or
unpleasant
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ugly

INSECTS
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unpleasant
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WEEVIL

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happy

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FLOWERS or
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LILY

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friend

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happy

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unpleasant
words

WEEVIL

FLOWERS
or pleasant
words

INSECTS or
unpleasant
words

friend

Test 1

FLOWERS
or pleasant
words

INSECTS or
unpleasant
words



Test 2

INSECTS
or pleasant
words

FLOWERS or
unpleasant
words

Most people associate women more strongly with liberal arts and men more strongly with science

Most people associate women more strongly with family and men more strongly with careers

Most white people have an implicit preference for white people over black people; Half of black have a preference for black people

Most people have an implicit preference for young people over older people, regardless of their age.

“I am aware of the possibility of encountering interpretations of my IAT test performance with which I may not agree.”

It's true.

A glowing blue brain is shown against a black background. The brain's surface is covered in intricate, swirling patterns of light blue and white, giving it a dynamic, almost ethereal appearance. Two large white arrows are superimposed on the brain. One arrow points from the center towards the left side of the image, and the other points from the center towards the right side. Each arrow has a rectangular box at its base containing text.

Conscious

Unconscious

So how does this affect our organizations?



Bias at Work



Source: CDO Insights, August 2008,
Volume 2, Issue 5,
diversitybestpractices.com

What happened?

Now **imagine if** the Sally-John dynamic occurred in the way we:

- Recruit
- Make hiring decisions
- Listen to people's ideas
- Select our leaders

Number of resumes submitted to get
equivalent number of interviews



Source: Booth, Alison L. and Leigh, Andrew and Varganova, Elena,
Does Racial and Ethnic Discrimination Vary Across Minority Groups?
Evidence from a Field Experiment (December 9, 2009)

Why does
it **matter**?



- Forbes Insight Study found diversity is a key driver of innovation
- McKinsey – companies with diverse executive board have significantly higher earnings
- PwC's 18th Annual CEO Survey – 85% of CEOs who have a diversity and inclusiveness strategy say it has enhanced business performance



What **can we do?**



1

We can actually **change**
our subconscious biases



Walk boldly toward our biases



**RBC
Diversity
Blueprint™**

**Simply having diversity
is interesting.**

**Doing something
with it is powerful.™**

We believe diversity creates better value, delivers superior client experiences and develops innovative solutions for the markets and communities we serve. And we believe a diverse workforce in an inclusive and collaborative work environment brings out the full talents of all employees.

To find out more about diversity at RBC, please visit us online at www.rbc.com/diversity.

For more information on RBC's commitment to building inclusive communities, please visit us at: www.rbc.com/community-sustainability

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Think Differently: Make a conscious effort to seek out people with different backgrounds

Learn Differently: Seek opportunities to immerse yourself in environment outside your comfort zone

Act Differently: Take deliberate actions to disrupt normal processes

2

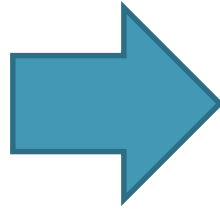
Transform

subconscious → conscious

Be aware



(2004) White referees called fouls at a greater rate against black players than white players and the same was true for black referees.



(2007) The study had attracted widespread media attention and the bias virtually disappeared

What could you do to be aware?

Example: Review a presentation on bias before interviewing a candidate



**Reduce the opportunity
for bias**

Orchestras went from <12% female in the 1980s to 37% in 2009
A key factor was instituting blind auditions



What could you do to reduce the opportunity for bias?

Example: Remove names during resume screenings

What is one thing
you will do?

Resources

- **Blind Spot – Hidden Biases of Good People** (Mahzarin R. Banaji and Anthony Greenwald)
- **Everyday Bias – Identifying and Navigating Unconscious Judgments in Our Daily Lives** (Howard J. Ross)
- **Project Implicit** (<https://implicit.harvard.edu>)
- **Outsmarting our Brains – Overcoming hidden biases to harness diversity's true potential** (Ernst & Young and RBC)
- **Hidden Bias: How Unconscious Attitudes on Diversity Undermine Organizations and What to do about it** (Gerald J. Holder)

Resources (continued)

- **Outsmart your own biases** (Harvard Business Review, May 2015)
- **Yassmin Abdel-Magied: What does my headscarf mean to you?** Ted Talk
<https://www.youtube.com/watch?v=18zvlz5CxPE>
- Women at Work series, New York Times, Dec. 6, 2014; January 12, 2015; February 6, 2015
- **How to recognize (and overcome) your unconscious biases in hiring** (Fast Company, Heidi Grant Halvorson, Mar. 4, 2015)
- **You're more biased than you think** (Jane Porter, Oct. 6, 2014)